EXPLANATORY STATEMENT

Issued by the authority of the Assistant Minister for Climate Change and Energy

Greenhouse and Energy Minimum Standards Act 2012

Greenhouse and Energy Minimum Standards (Refrigerated Cabinets) Determination 2024

Purpose and Operation

The *Greenhouse and Energy Minimum Standards (Refrigerated Cabinets) Determination 2024* (the Determination) establishes minimum energy efficiency requirements, and associated requirements for conducting tests for refrigerated display cabinets, refrigerated storage cabinets, ice cream freezers and refrigerated display scooping cabinets for gelato.

The details of the Determination are similar to the *Greenhouse and Energy Minimum Standards (Refrigerated Cabinets) Determination 2020* (the 2020 Determination).

The Determination revokes and replaces the 2020 Determination.

Refrigerated cabinets are used to display and store food in retail and commercial premises. They run continuously, resulting in significant energy use, running costs, and greenhouse gas emissions. In 2015, Australian businesses owned around 845,000 refrigerated cabinets. By 2035, sales of refrigerated cabinets are projected to increase by over 40 percent and energy use will increase to over 9,000GWh per year.

The Determination makes the following changes to requirements compared to the 2020 Determination:

- Incorporates the most up to date international standards. While the Determination has been updated to incorporate these newer standards, the Determination also contains a transitional provision that allows manufacturers to continue to comply with the standards incorporated in the 2020 Determination (and others).
- Clearly states that chiller-freezer products are not in scope of the Determination. This inclusion is due to the fact that under the 2020 Determination, there is no independent product class for Chiller-Freezer products which resulted in the requirement for them to be registered twice (as a chiller and as a freezer). Additionally, they were unable to demonstrate compliance, as the appropriate coefficients for these specific combination products, necessary for calculating the Energy Efficiency Index, are yet to be determined.
- Clearly states that pozzetto scooping cabinets are not in scope of the Determination. This is included for clarity due to the fact that pozzetto scooping cabinets are described in the more recent EN 16838:2019 standard but were not defined in the EN 16838:2016 standard.

Further details of the Determination are outlined in Attachment A.

Background

The *Greenhouse and Energy Minimum Standards Act 2012* (the Act) established a national framework for regulating the energy efficiency of products supplied or used within Australia, replacing individual state and territory legislative frameworks. The Act implemented the then-Council of Australian Governments' (COAG) commitment to establish national legislation to regulate energy efficiency and labelling standards for appliances and other products.

The Act permits the Australian Government to set mandatory minimum efficiency requirements, which drive greater energy efficiency for regulated products and exclude the poorest performing products from the market. These are referred in the Determination as greenhouse and energy minimum standards (GEMS) level requirements, and are generally known as minimum energy performance standards (MEPS).

The Act also allows the Australian Government to set nationally-consistent labelling requirements, to increase Australian consumers' awareness of options to improve energy efficiency and reduce energy consumption, costs, and greenhouse gas emissions.

Other regulatory requirements possible under the Act include requirements relating to product performance, and the impact of the product on the environment or the health of human beings.

Subsections 44(1) and 54(1) of the *Legislation Act 2003* (Legislation Act) provide that an instrument is not subject to disallowance and sunsetting where the enabling legislation facilitates the establishment or operation of an intergovernmental body or scheme involving the Commonwealth and one or more states. The Act underpins and facilitates the operation of an intergovernmental scheme for product energy efficiency, giving effect to the Inter-governmental Agreement for the GEMS Legislative Scheme. Consequently, the Determination is not subject to disallowance or sunsetting. Further details are provided at Attachment B.

Authority

Under subsection 23(1) of the Act the Minister may, by legislative instrument, make a determination (a GEMS determination) that specifies one or more classes of products if the products in those classes use energy or affect the amount of energy used by other products. A GEMS determination is the vehicle by which energy efficiency requirements (GEMS level requirements), energy labelling requirements (GEMS labelling requirements) and other requirements for a product class are established.

Section 35 of the Act allows a Minister to make replacement determinations through revoking the previous determination and making a new determination to replace the revoked determination. The new determination can specify the new requirements and retain any relevant existing requirements from the revoked determination. The revoked determination ceases to be in force immediately before the replacement determination comes into force.

Under section 36 of the Act, a replacement determination must specify whether it affects the registration of models of GEMS products that were covered by the 2020 Determination. Under subsection 36(2) of the Act, if a replacement determination specifies that it does not affect a model's registration, the model is taken to be registered against the replacement determination. Section 19 of the Determination specifies that it does not affect the registration of any model registered against the 2020 Determination.

Under section 25 of the Act, the GEMS level requirements specified in a GEMS determination may be:

- requirements relating to one or more of the following:
    - the amount of energy used in operating products in relevant product classes;
    - the amount of greenhouse gases resulting from operating products in the relevant product class;
    - the effect of those products on the amount of energy used by operating other products; and
- requirements for conducting tests in relation to products in the relevant product class in order to determine whether the products meet the specified requirements.

Under section 26 of the Act, the GEMS labelling requirements specified in a GEMS determination may be:

- requirements relating to the information that must be communicated in connection with supplying or offering to supply products in the relevant product class;
- requirements relating to the manner in which that information must be communicated; and
- requirements for conducting tests in relation to products in the relevant product class in order to determine whether the products meet the specified requirements.

Under section 27 of the Act, other requirements that may be specified in a GEMS determination are:

- requirements relating to the performance of products in the relevant product class;
- requirements relating to the impact of products in that product class on the environment or on the health of human beings;
- requirements for conducting tests in relation to products in the relevant product class in order to determine whether the products meet the specified requirements; and
- requirements of a kind specified in the regulations for the purposes of this paragraph.

Incorporated material and copyright

The Determination references ISO and European Standard (EN) test standards. Requirements for marking plates are referenced from an Australian/New Zealand adoption of an International Electrotechnical Commission (IEC) standard. A list of standards incorporated by reference is included in section 6 of the Determination.

The Australian/New Zealand standard and the ISO standards can be purchased from Standards Australia at https://store.standards.org.au or the relevant distribution partners identified at https://standards.org.au/access-standards/buy-standards. The relevant distribution partners at the time the determination was made were Intertek Inform and Accuris. EN standards are available for purchase through a range of sources including the British Standards Institution at https://shop.bsigroup.com. Commercial users who have ascertained that they are likely to be covered by the Determination (which is possible from reading the Determination in isolation) would be expected to purchase the referenced standards in order to comply with the Determination.

Non-commercial users can access standards incorporated in this Determination on a limited, no-fee basis through Standards Australia's on-line Reader Room facility. The Reader Room provides non-commercial access to Australian Standards for personal, domestic or household use.

This Determination contains a copyright notice that acknowledges the inclusion of material that is copyrighted to the European Committee for Standardisation (CEN) and ISO. There is only limited copyright material included in the Determination. This includes material in Schedule 3 of the Determination which relates to M-package temperature classes and material in Schedule 4 relating to test room climate classes.

The copyright notice clarifies the permitted use of the Determination by those seeking to comply with their obligations under it.

Consultation

The Determination has minor changes when compared to the 2020 Determination.

The Determination was prepared in response to questions raised by industry stakeholders about whether chiller-freezer products were in scope of the legislation and how they were able to be registered. The 2020 Determination was not intended to capture chiller-freezers or set GEMS Level requirements for that product class. As a result, the Determination specifies that this product class is out of scope. This is consistent with the original intent of consultation on the *Greenhouse and Energy Minimum Standards (Refrigerated Cabinets) Determination 2019* (2019 Determination) (which was replaced by the 2020 Determination to facilitate a change in the commencement date of the legislation).

During this same period industry stakeholders raised that three of the standards referenced in the Determination had been superseded. In addition, updated versions of the ISO 23953-1 and -2 were published in December 2023. After reviewing the replacement standards, it was considered reasonable to include these new standards and to retain the old standards as alternate standards for the purposes of demonstrating compliance.

The Determination references updated marking plate requirements (see section 35) set out in clause 7 of *Australian/New Zealand Standard 60335.2.89:2020, Household and similar*

appliances – Safety. Part 2.89: Particular requirements for commercial refrigerating appliances with an incorporated or remote refrigerant condensing unit or compressor. This updated version replaced the 2010 version and was deemed to be equivalent or better.

In the development of the 2019 Determination, Australian and New Zealand businesses were consulted on four separate occasions between 2016 and 2018 including participation in an 18-month technical working group process to ensure international test standards were fit for adaptation locally. Industry stakeholders were also consulted on the other provisions of this Determination.

A Consultation Regulation Impact Statement (Consultation RIS) was released to industry in July 2016. Four public consultation sessions were held in August 2016 in Melbourne Sydney, Brisbane and Auckland. Twenty written submissions were received from a variety of manufacturers, industry groups, individuals and academics.

Following feedback from the Consultation RIS, a Technical Working Group (TWG) was convened, made up of industry representatives, regulators and independent experts who were primarily tasked with reviewing the international standards' suitability for the Australasian market and considering any potential technical alterations to the standards proposed to be adopted. The TWG made provisional technical findings and recommendations available to industry stakeholders for feedback from April to September 2017. Only two submissions were received. One did not support regulation of the sector and the other supported the introduction of an alternative approach to labelling which aligns with the European requirements rather than the Energy Rating Label requirements that are in place in Australia.

Extensive consultation was undertaken with state, territory and NZ government agencies. The draft Determination was amended to reflect the outcome of these consultations including assessment of compatibility with existing state run incentive schemes.

A draft of the 2019 Determination was developed with input from industry and other stakeholders. Feedback was sought on an implementation update paper in May 2018. Four submissions were received. One raised concerns over timing, two sought clarification of technical issues. Again one submission supported the introduction of an alternative approach to labelling.

On 16 November 2018, an exposure draft of the 2019 Determination was released for public comment over a four-week period. Four responses were received, seeking confirmation on the coverage of the Determination. No change to the draft 2019 Determination was required from this process.

On 5 August 2020, the 2019 Determination was revoked (prior to commencement) in response to representations from industry stakeholders regarding the impact of COVID-19 on their circumstances. Further consultation was undertaken with a number of those stakeholders to seek additional information about the range and severity of the impacts, in order to develop a response appropriate for the industry as a whole.

The 2020 Determination commenced on 1 May 2021 and replaced the *Greenhouse and Energy Minimum Standards (Refrigerated Display Cabinets) Determination 2012* (the 2012 Determination).

Regulatory Impact

A comprehensive COAG Decision RIS which took into account stakeholder feedback was prepared as part of the process of developing the 2019 Determination, which applies equally to this Determination given the substantive content has not changed. On 18 February 2019, COAG Energy Council Ministers agreed to the preferred option in the Decision RIS. The Office of Best Practice Regulation assessed the RIS for the 2019 Determination as meeting the Council of Australian Government's best practice regulation requirements.

The Office of Best Practice Regulation (now named the Office of Impact Analysis) advised that a RIS is not required for the Determination (OBPR Ref 44620).

Statement of Compatibility with Human Rights

In accordance with subsection 15J(2) of the Legislation Act, as the Determination is not a disallowable instrument, a statement of compatibility prepared under subsection 9(1) of the *Human Rights (Parliamentary Scrutiny) Act 2011* is not required.

Attachment A

Details of the *Greenhouse and Energy Minimum Standards (Refrigerated Cabinets) Determination 2024*

PART 1 – PRELIMINARY

Section 1 – Name

This section specifies the name of the Determination as the *Greenhouse and Energy Minimum Standards (Refrigerated Cabinets) Determination 2024.*

Section 2 – Commencement

This section provides that the Determination commences and comes into force on the day after it is registered.

Section 3 – Authority

This section sets out the provision of the Act under which the Determination is made. Section 3 sets out that the Determination is made under the authority of sections 23 and 35 of the *Greenhouse and Energy Minimum Standards Act 2012*. Section 23 gives the Minister the power to make determinations and section 35 gives the Minister the power to revoke and replace a determination.

Section 4 – Schedule 6

This section empowers Schedule 6, which repeals the instrument being replaced.

Section 5 – This instrument revokes and replaces the old determination

This section provides that the Determination revokes and replaces the 2020 Determination, in accordance with section 35 of the Act.

Section 6 – Definitions—standards referred to in this instrument

This section defines the test standards referred to in the Determination.

The definition of ***test standard*** in section 7 provides which standard a type of refrigerated cabinet must be tested against.

The Determination makes variations to several standards to make them fit for purpose in the domestic market. Variations are set out in Schedule 2 to the Determination and summarised in the table below:

Test standard incorporated by reference	Shortened name	Variation to standard	Applicable refrigerated cabinet type
European Standard 16825:2016 Refrigerated storage cabinets and counters for professional use - Classification, requirements and test condition	EN 16825	Yes	Refrigerated storage cabinet (RSC)
European Standard 16838:2016 Refrigerated display scooping cabinets for gelato - Classification, requirements and test conditions	EN 16838:2016	No	Scooping cabinet
European Standard 16838:2019 Refrigerated display scooping cabinets and pozetto for gelato - Classification, requirements, performance and energy consumption testing	EN16838:2019	No	Scooping cabinet
European Standard 16901:2016 Ice cream freezers - Classification, requirements and test conditions	EN 16901	Yes	Ice cream freezer cabinet
Australian/New Zealand Standard 60335.2.89:2010, Household and similar appliances – Safety. Part 2.89: Particular requirements for commercial refrigerating appliances with an incorporated or remote refrigerant condensing unit or compressor	IEC 60335:2010	No	RSC
Australian/New Zealand Standard 60335.2.89:2020, Household and similar appliances – Safety. Part 2.89: Particular requirements for commercial refrigerating appliances with an incorporated or remote refrigerant condensing unit or compressor	IEC 60335:2020	No	RSC
International Organisation for Standardisation Standard	ISO 22041	Yes	RSC

Test standard incorporated by reference	Shortened name	Variation to standard	Applicable refrigerated cabinet type
22041:2019, Refrigerated storage cabinets and counters for professional use – Performance and energy consumption			
International Organisation for Standardisation Standard 22043:2020, Ice-cream freezers – Classification, requirements and test conditions	ISO 22043	No	Ice cream freezer cabinet
International Organisation for Standardisation Standard 23953-1:2015, Refrigerated display cabinets – Part 1: Vocabulary	ISO 23953-1:2015	No	Refrigerated display cabinet (RDC)
International Organisation for Standardisation Standard 23953-2:2015, Refrigerated display cabinets – Part 2: Classification, requirements and test conditions	ISO 23953-2:2015	Yes	RDC; Low sales volume RSC
International Organisation for Standardisation Standard 23953-1:2023, Refrigerated display cabinets – Part 1: Vocabulary	ISO 23953-1:2023	No	Refrigerated display cabinet (RDC)
International Organisation for Standardisation Standard 23953-2:2023, Refrigerated display cabinets – Part 2: Classification, requirements and test conditions	ISO 23953-2:2023	Yes	RDC; Low sales volume RSC

The applicable version of each standard referenced in the Determination is the version that existed at the date the Determination was made (see subsection 14(2) of the Determination).

The use of these standards is consistent with the Australian Government's policy of harmonisation with international standards where appropriate.

Section 7 – Definitions—other expressions used in this instrument

Section 7 sets out definitions and meanings of other terms and expressions used in the Determination. Most of these are signpost definitions, but some terms and expressions (such as ***net volume***, ***test standard*** and ***total display area***) are given their full definition.

Section 8 – Meaning of *refrigerated cabinet*

Section 8 defines a ***refrigerated cabinet*** to be a device that:

- consists of an insulated cabinet with an opening (whether or not the opening has a lid or a door);
- is capable of attaining and maintaining a specified temperature within the insulated cabinet within a range that overlaps the range -18°C to + 10°C; and
- is designed primarily for storage, display, or both storage and display, of chilled or frozen foodstuffs.

There are five categories of refrigerated cabinet, which are defined in section 10.

Section 9 – Meaning of *integral* and *remote*

Section 9 defines the terms ***integral*** and ***remote*** with respect to refrigerated cabinets. A refrigerated cabinet is 'integral' if its refrigerating system is incorporated within, or directly attached to the cabinet. If it is not integral, the refrigerated cabinet is 'remote'. Practically, these definitions mean that the location of the condensing unit of a refrigerated cabinet determines whether the cabinet is considered integral and remote.

Section 10 – Types of refrigerated cabinets

The types of refrigerated cabinet covered by the Determination, as defined in section 10, are:

- ***ice cream freezer cabinet***;
- ***RDC*** or ***refrigerated display cabinet***;
- ***refrigerated drinks cabinet***;
- ***RSC*** or ***refrigerated storage cabinet***; and
- ***scooping cabinet***.

Section 10 defines an ***ice cream freezer cabinet*** as a refrigerated cabinet that is designed for storing, displaying and accessing pre-packaged frozen ice cream, is integral, can be accessed by opening a lid, has static air cooling with a skin evaporator, and meets the specified volume requirements.

A ***refrigerated display cabinet*** is a refrigerated cabinet designed for storing, displaying and accessing chilled or frozen items in retail settings, but is not a scooping cabinet or an ice cream freezer cabinet.

A ***refrigerated drinks cabinet*** is a refrigerated display cabinet that is designed only for non-perishable drinks and is integral.

A ***refrigerated storage cabinet*** is a refrigerated cabinet that is integral and is not an RDC, scooping cabinet or ice cream freezer cabinet.

A ***scooping cabinet*** is a refrigerated cabinet that is designed to store, display and scoop frozen gelato or ice cream in containers and is integral.

Section 11 – Meaning of *horizontal* and *vertical*

Section 11 defines the meaning of ***horizontal*** and ***vertical*** refrigerated display and storage cabinets. A horizontal RDC has an access opening only from the top of the cabinet, whether or not the opening can be closed by a door or lid. A horizontal RSC is no taller than 1,050 mm when determined in accordance with ISO 22041 (or EN 16825, under the transitional arrangements set out in Part 6: see section 35). If an RDC or RSC is not horizontal, it is vertical.

Section 12 – M-package temperature classes

Section 12 sets out the meaning of, and details when a cabinet is considered to meet the requirements of, the M-package temperature classification for RDCs, RSCs, scooping cabinets and ice cream freezers.

An M-package temperature class is a way of grouping refrigerated cabinets based on their storage temperatures. The M-package temperature classes are set out in Schedule 3 and requirements relating to the temperature class are in section 33.

Section 13 – Meaning of *light duty*, *normal duty* and *heavy duty*

Section 13 sets out how to determine if an RSC is considered ***light duty***, ***normal duty*** or ***heavy duty***. Under section 24, the GEMS level requirements for heavy duty RSCs differ from those of light or normal duty RSCs.

Section 14 – Meaning of *E24h* and *energy consumption*

Energy consumption, also referred to as E24h, is the energy consumption of a refrigerated cabinet over a 24 hour period. Section 14 sets out how to determine the energy consumption of a refrigerated cabinet, including which test standard is to be used.

The applicable test standard also requires testing to be conducted at a specific climate class. A climate class specifies a range of climatic conditions (e.g. humidity) that a cabinet must be tested at to ensure the performance and energy consumption recorded is representative of the conditions likely to be experienced in operation. This Determination includes this level of specificity due to Australian climatic conditions being different to those typically experienced in Europe. The relevant climate classes, being ‘test room climate classes’, are set out at clause 1 of Schedule 4 to the Determination.

Section 15 – Meaning of *low sales volume* and *oversize*

Section 15 defines the meaning of ***low sales volume*** and ***oversize*** cabinets. Under this Determination, the annual energy consumption (AEC) and reference annual energy consumption (RAEC), and hence the energy efficiency index (EEI), of 'low sales volume' and/or 'oversize' RDCs, and of 'low sales volume' RSCs, are calculated differently from other RDCs and RSCs (see sections 25 and 26). There is also additional testing requirements for certain 'low sales volume' RDCs and RSCs (see section 28).

An RSC or RDC is 'low sales volume' at a particular date if no more than 25 units of the models within a family of models are sold in a calendar year that includes that date, or for models that are not part of a family of models, no more than 10 units are sold in a calendar year that includes that date. Ice cream freezers and scooping cabinets cannot be 'low sales volume'.

Only RDCs can be classified as 'oversize'. Ice cream freezer cabinets, scooping cabinets and RSCs cannot be 'oversize'. If at the time of applying to register, or vary a registration, there is no National Association of Testing Authorities (NATA) approved laboratory that can test the cabinet to the relevant test standard (ISO 23953 2) due to its size, the RDC is 'oversize'.

For an RDC, if at some time after registration, its annual sales exceed the threshold sales volumes, unless models of the product are also 'oversize', they will need to comply with the requirements of this Determination that apply to RDCs generally.

For an RSC, if at some time after registration, its annual sales exceed the threshold sales volumes, models of the product will need to comply with the requirements of this determination that apply to RSCs generally.

Section 16 – Families of models

Section 28 of the Act provides that a GEMS determination must specify, for each product class covered by the determination, the circumstances in which two or more models in that product class are in the same family of models. The circumstances in which a model may be considered to be in the same family has been widened when compared to the 2012 Determination.

Section 16 of the Determination specifies that for two or more models to be in the same family of models, they must be in the same product class, and the 'worst' performing model, as determined by the criteria listed in subsection 16(2), must be identified as the parent model. Other models belonging to that same family of models must meet the requirement of the same or warmer M-package temperature class as the parent model. Specific requirements are set out for families of models of each type of refrigerated cabinet under subsections 16(4) to 16(7).

Subsection 16(8) provides that 25 is the maximum number of models in a family.

Subsection 16(9) outlines how to calculate a refrigerated cabinet's specific energy consumption which is used to determine the parent model of a family.

Subsection 16(10) outlines how to calculate 'the amount SEC' for the purposes of paragraph 16(9)(b).

Section 17 – Product category

Section 29 of the Act requires that a GEMS determination specify whether the products it covers are category A or category B products. Category B products are subject to higher penalties than category A products for certain offences under the Act, on the basis that category B products have a high impact on energy use or greenhouse gas production.

Section 17 specifies that the products covered by the Determination are category A products. This is unchanged from previous determinations.

Section 18 – Registrations affected by this Determination

Section 36 of the Act requires that a GEMS replacement determination must specify whether it affects the registration of all models, specified models, or no models, of GEMS products that were covered by the revoked Determination. A registration is affected if the product, or products, covered by it cannot meet the GEMS level requirements imposed by this Determination.

Section 18 provides that the registration of models made under the 2020 Determination are not affected.

PART 2 – PRODUCTS COVERED BY THIS INSTRUMENT

Section 19 – Purpose of Part

This Part specifies the classes of products that are covered by the Determination and those that are not, for the purposes of subsections 23(1) and (2) of the Act.

Section 20 – Classes of products that are covered by this instrument

This section specifies that product classes covered by the Determination are those listed in Schedule 1. Classification is based on cabinet type (see section 10), whether the cabinet is integral (see section 9), whether the cabinet is horizontal or vertical (see section 11) and whether the cabinet is a chiller or freezer.

Products covered by the Determination include refrigerated cabinets, which are defined in section 8 as devices that:

- consist of an insulated cabinet with an opening (whether or not the opening has a lid or a door);
- are capable of attaining and maintaining a specified temperature within the insulated cabinet within a range that overlaps the range -18°C to +10°C; and
- are designed primarily for storage, display, or both storage and display, of chilled or frozen foodstuffs.

The Determination covers products in the product classes listed in Schedule 1 irrespective of the context in which they are used, such as an industrial, commercial or domestic context. For example, refrigerated drinks cabinets designed for a commercial application that are being used in a domestic application are covered by the Determination.

Section 21 – Classes of products that are not covered by this instrument

Subsection 21(1) sets out product classes that are not covered by the Determination. These classes of products include:

- refrigerated vending machines;
- icemakers;
- chiller-freezers;
- cabinets designed for both processing and storage (e.g. bakery cabinets that chill, heat and humidify; open top tables and saladettes for food preparation; storage cabinets designed to operate at temperatures outside the scope of this Determination (e.g. for storing fresh meat, fresh fish, wine);
- refrigerated cabinets with liquid cooled condensers;
- products covered by the *Greenhouse and Energy Minimum Standards (Household Refrigerating Appliances) Determination 2019*;
- refrigerated storage cabinets that are built-in cabinets (within the meaning of EN 16825 or ISO 22041);
- refrigerated storage cabinets that are roll-in cabinets (within the meaning of EN 16825 or ISO 22041);
- refrigerated storage cabinets that are pass through cabinets (within the meaning of EN 16825 or ISO 22041);
- appliances for short term or intermittent normal operation during the full day;
- RDCs that are low sales volume, oversize or both, and have an indirect refrigeration-type system within the meaning of ISO 23953-2:2023;
- RSCs that are not light duty, normal duty, or heavy duty; and
- pozzetto.

Subsection 21(2) provides definitions of terms that are used in this section, namely chiller-freezer, icemaker, pozzetto, refrigerated vending machine and liquid cooled condenser. The definition of ***chiller-freezer*** ensures that it does not include products designed to be configured either for all compartments to operate at chilled operating temperatures or for all compartments to operate at frozen operating temperatures (hybrid products). Where hybrid products are covered by the determination they must register in both product classes.

The definition of ***pozzetto*** has been included for clarity due to the new reference to pozzetto included in EN 16838:2019.

PART 3 – GEMS LEVEL REQUIREMENTS

Division 1 – Preliminary

Section 22 – Purpose of Part

This Part specifies, in accordance with section 25 of the Act, the GEMS level requirements for energy use for refrigerated cabinets covered by the Determination, including requirements for conducting tests in order to demonstrate compliance and how to determine the Energy Efficiency Index (EEI) for all types of cabinets and low sales volume and oversize refrigerated cabinets, for the purposes of paragraphs 24(1)(a) and 25(b) of the Act.

Section 23 – Definitions

Section 23 defines the low-efficiency terms that are used in this Part, including the ***reference low-efficiency version***, ***low-efficiency reference set*** and ***relevant component*** of RDCs or RSCs. Section 25 uses the components defined in this section to calculate the EEI for these types of cabinets.

Division 2 – GEMS level requirements

Section 24 – GEMS level requirements

This section specifies GEMS level requirements for energy use for refrigerated cabinets covered by the Determination, in terms of the EEI. The following types of cabinet are grouped in relation to their maximum EEI levels:

- RDCs (other than low sales volume or oversize cabinets), scooping cabinets and ice cream freezer cabinets;
- RSCs that are heavy duty;
- RSCs that are light duty or normal duty.

The notes to section 24 clarify the applicable product classes for each item in the table to this section, and directs readers to section 20 and Schedule 1 of the Determination, which set out the product classes.

Section 25 – Calculation of *energy efficiency index* or *EEI*

This section specifies the formula for calculating the EEI using AEC (annual energy consumption) and RAEC (reference annual energy consumption).

Section 26 – Calculation of annual energy consumption (*AEC*) and reference annual energy consumption (*RAEC*)

This section specifies the method of calculating the AEC and the RAEC for each type of refrigerated cabinet covered by the Determination. Similar cabinet types are grouped into product classes to reduce compliance complexity and enable comparability.

AEC is the annualised total of electricity used by a refrigerated cabinet. It is derived from the measured 24 hour electricity consumption of the cabinet as provided by the specified test method described in the appropriate test standard.

RAEC is the reference AEC. The RAEC is a calculated value used to relate the measured electricity consumption of the cabinet (the AEC) to the product class the cabinet is covered by under the Determination.

The RAEC is calculated from co-efficients (specified in the table to clause 1 of Schedule 1) which are unique to cabinet types specified in a given product class. The co-efficients are combined with the cabinet's total display area (TDA) or net volume (Vn) to calculate the RAEC.

The AEC and RAEC are the inputs used to establish a cabinet's EEI, which is calculated by dividing the AEC by the RAEC and then multiplying that result by 100 (see section 25).

Division 3 – Conducting tests

Section 27 – Testing requirements—general

This section specifies the requirement that testing of refrigerated cabinets covered by the Determination must be conducted in accordance with the relevant test standards as cited in the definition of ***test standard*** in section 7 of this Determination.

The alternate test standard (see section 35) for refrigerated display cabinets (including those used in domestic applications), ISO 23953-2:2015, has been varied as set out in clause 5 of Schedule 2 to this Determination to reduce the door opening and lighting system test requirements to reflect current Australian practice.

Section 28 – Additional testing requirements—integral, low sales volume RDC that is not oversize and low volume RSCs

This section provides that for integral, low sales volume refrigerated display cabinets that are not oversize, and for low sales volume refrigerated storage cabinets, the total energy consumption of the cabinet as a whole must be measured directly by testing in accordance with ISO 23953-2:2023. The alternate test standard, ISO 23953-2:2015, has been varied as set out in clause 5 of Schedule 2 to this Determination to reduce the door opening and lighting system test requirements to reflect current Australian practice.

PART 4 – GEMS LABELLING REQUIREMENTS

Section 29 – Purpose of Part

Section 29 states that this Part, in accordance with section 26 of the Act, specifies the GEMS labelling requirements for the product classes covered by the Determination for the purposes of paragraph 24(1)(b) of the Act.

Section 30 – Use of star ratings

Refrigerated cabinets covered by this Determination do not need to be labelled. This section sets out a method of calculating star ratings for suppliers who wish to communicate the

energy efficiency of a refrigerated cabinet in terms of stars. If a product's energy efficiency is described in terms of one or more stars, for example in on-line advertising, the rating must be calculated in accordance with Schedule 5 to this Determination.

Section 31 – Impact of replacement determination

Section 31 provides a mechanism, in the event that this Determination is replaced in the future, to allow a transitional labelling provision to be specified in that replacement determination (the new determination) with the effect that complying with its requirements will be taken to be compliance with the labelling requirements of this Determination. This is to prevent the situation arising, in circumstances where a registrant chooses to register to the new determination between the time it is made and when it comes into force (as allowed by section 44 of the Act), of a product needing to comply with the labelling requirements of both determinations.

PART 5 – OTHER REQUIREMENTS

Section 32 – Purpose of Part

This Part specifies other requirements in accordance with section 27 of the Act, for the purposes of subsection 24(2) of the Act.

Section 33 – Requirement relating to M-Package temperature class

This section specifies the M-package temperature class that products covered by the Determination must meet. The requirements do not apply to oversize RDCs. Section 12 of this Determination sets out definitions in relation to M-Package temperature classes.

Test standards require testing to be conducted at specific climatic conditions (e.g. humidity). This ensures performance and energy consumption recorded is representative of the conditions likely to be experienced in operation. As Australian conditions are different to those typically experienced in Europe, the applicable test room climate classes representing Australian conditions are set out in this section. The parameters for each test room climate class are set out in the table to clause 1 of Schedule 4 to this Determination. Schedule 2 to this Determination sets out variations to the relevant test standards.

Section 34 – Marking Plates

This section provides that marking plates are required to be permanently affixed to all types of refrigerated cabinets covered by the Determination by requiring products to comply with specified standards. This section specifies the marking plate requirements by identifying the clause of the relevant standards that must be complied with. Information included on marking plates is specific to the type of refrigerated cabinet, but typically includes:

- the model and serial number of the cabinet including the condensing unit;
- all information relating to the power supply of the cabinet; and
- the type and mass of the refrigerant used.

Section 36 sets out specific transitional arrangements in relation to this section.

PART 6 – TRANSITIONAL ARRANGEMENTS

Section 35 – Alternative standards for various types of refrigerated cabinets

This section sets out alternative standards (including previous versions of standards) that may be met for the various types of regrigerated cabinets affected by the Determination, that is, ice cream freezer cabinets, RDCs (including refrigerated drinks cabinets), RSCs and scooping cabinets. The purpose of this section is to give manufacturers the option to comply with these alternative standards (or, in the case of previous versions of standards, continue to comply with the previous versions) instead of the standards mentioned throughout the rest of the Determination.

The table to each subsection sets out alternative standards for each type of refrigerated cabinet. Column 1 of the table lists each provison of the Determination that refers to a standard (in relation to the relevant type of refrigerated cabinet). Column 2 of the table sets out the standard (and, in many cases, the specific provision(s) of the standard) that can be complied with instead of the one actually mentioned in the provision.

For example, the reference to clause 6.1 of ISO 22041 in paragraph (b) of the definition of ***net volume*** in section 7 can alternatively be read as a reference to clause 6.1 of EN 16825 (see item 1 of the table to subsection 36(1)).

Some of the alternative standards are varied by Schedule 2.

Section 36 – Transitional arrangements for marking plates

This section sets out specific transitional arrangements for marking plates. It is intended to apply instead of section 34 where the test report for a product was carried out before the Determination came into force.

In relation to an RSC the test report for which was carried out before the Determination came into force, subsection 36(3) allows that RSC to comply with either clause 7 of IEC 60335:2020 or clause 7 of IEC 60335:2010. This essentially modifies the effect of subsection 34(1) so that such an RSC can continue to comply with clause 7 of IEC 60335:2010 (which is an older version of IEC 60335:2020).

In relation to any other product the test report for which was carried out before the Determination came into force, subsection 36(4) allows that other product to comply with either clause 7 of IEC 60335:2020 or the applicable standard listed under paragraph (4)(b). This essentially modifies the effect of subsection 34(2) so that such a product can comply with *either* clause 7 of IEC 60335:2020 *or* the other applicable standard listed under paragraph (b), as opposed to *both* clause 7 of IEC 60335:2020 and the applicable other standard.

SCHEDULE 1 – PRODUCT CLASSES

Section 20 of the Determination provides that product classes covered by this instrument are the ones set out in this Schedule.

This schedule specifies the product classes, and also the product class descriptions, the sub-class codes and the specific coefficients required to calculate the RAEC for refrigerated chiller and freezer cabinets covered by this instrument.

The note to the table explains the meaning of the letters in the codes in parentheses (e.g. 'IRH', 'SFV', 'GSC') in the table.

SCHEDULE 2 – VARIATIONS TO STANDARDS

This schedule lists all variations that are taken to have been made to the standards listed in section 6 that specify the test methods and requirements for testing refrigerated cabinets covered in the Determination.

Many of these changes to the test standards are intended to address Australian climatic conditions being different to those typically experienced in Europe. The variations also reflect current practice in the Australian market around door opening test procedures, lighting systems and alternative test packages.

SCHEDULE 3 – M-PACKAGE TEMPERATURE CLASSES

This schedule lists the M-package temperature class and corresponding highest and lowest M-package temperatures for refrigerated cabinets covered by the Determination. Section 12 sets out definitions in relation to M-package temperature classes.

SCHEDULE 4 – TEST ROOM CLIMATE CLASSES

This schedule lists the range of climate classes that are applicable to refrigerated cabinets covered by the Determination. The term ***test room climate class*** is defined in section 7.

SCHEDULE 5 – STAR RATINGS

This schedule lists the EEI range and the corresponding number of stars for refrigerated cabinets covered by the Determination. Section 31 sets out the requirements in relation to using star ratings.

SCHEDULE 6 – REPEALS

This schedule is empowered by section 4. It repeals the 2020 Determination, which is being replaced by this instrument.

Attachment B

Details of the exemptions from disallowance and sunsetting in the *Legislation Act 2003*

Source of exemptions

Legislative instruments made under the *Greenhouse and Energy Minimum Standards Act 2012* (the GEMS Act) (excluding regulations) are exempt from disallowance under subsection 44(1) of the *Legislation Act 2003* (the Legislation Act), and from sunsetting under subsection 54(1) of the Legislation Act.

Subsections 44(1) and 54(1) of the Legislation Act relevantly provide that instruments are not subject to disallowance and sunsetting where the enabling legislation (not being the *Corporations Act 2001*) facilitates the establishment or operation of an intergovernmental scheme involving the Commonwealth and one or more states and territories, and authorises the instrument to be made for the purposes of that scheme.

The GEMS Act creates a national framework for product energy efficiency in Australia (the GEMS Scheme) and underpins the Equipment Energy Efficiency (E3) Program. The E3 Program is an initiative of the governments of the Commonwealth, the states and territories, and New Zealand. The GEMS Scheme is an intergovernmental scheme, given that:

- it is governed by the Inter-Governmental Agreement for the Greenhouse and Energy Minimum Standards (GEMS) Legislative Scheme
- it is jointly funded, and
- key legislative instruments under the GEMS Scheme require consent from participating jurisdictions before they can be made or revoked (see sections 33 and 35 of the GEMS Act).

Legislative instruments made under the GEMS Act are made for the purposes of this intergovernmental scheme. Therefore, such legislative instruments are exempt from sunsetting and disallowance.

Justification for exemptions

Through the E3 Program, the Australian Government works with states and self-governing territories and the New Zealand Government:

- to identify appliances and other products which are appropriate for regulation
- to consult with industry stakeholders and agree requirements based on technical and product-specific considerations, and
- to set mandatory minimum energy efficiency requirements for these products, as well as consistent labelling and other requirements.

In this context, the exemptions from disallowance and sunsetting have the effect that, where it has been agreed, in accordance with the intergovernmental scheme, to introduce specific regulatory

requirements (including with participating jurisdictions' consent to the key requirements of GEMS determinations), the Commonwealth Parliament cannot then override that agreement. The exemptions therefore promote confidence in the E3 program and encourage ongoing, cooperative participation from jurisdictions.

As well as implementing an intergovernmental scheme, these exemptions are justified on the bases that:

- instruments made under the GEMS Act:
    - are based on technical and scientific evidence about products' energy use and appropriate test standards, and
    - affect commercial certainty where manufacturers and importers need to adapt to new regulatory requirements, and
- the objects of the GEMS Act include to give effect to certain obligations that Australia has under particular international conventions.

In view of their detailed scientific and technical content, GEMS determinations and associated legislative instruments are confined in the matters that they deal with, and so do not deal with broad matters of policy or with politically contentious issues. The exemptions ensure that the Commonwealth Parliament cannot override the consideration given to these matters through expert and stakeholder consultation, and the collaborative E3 Program.