

Compliance & Market Surveillance in non-domestic refrigeration

November 2009

Today

- Key components to improving compliance
- How it works for refrigerated display cabinets
- How the 10 year strategy addresses compliance for refrigerated cabinets

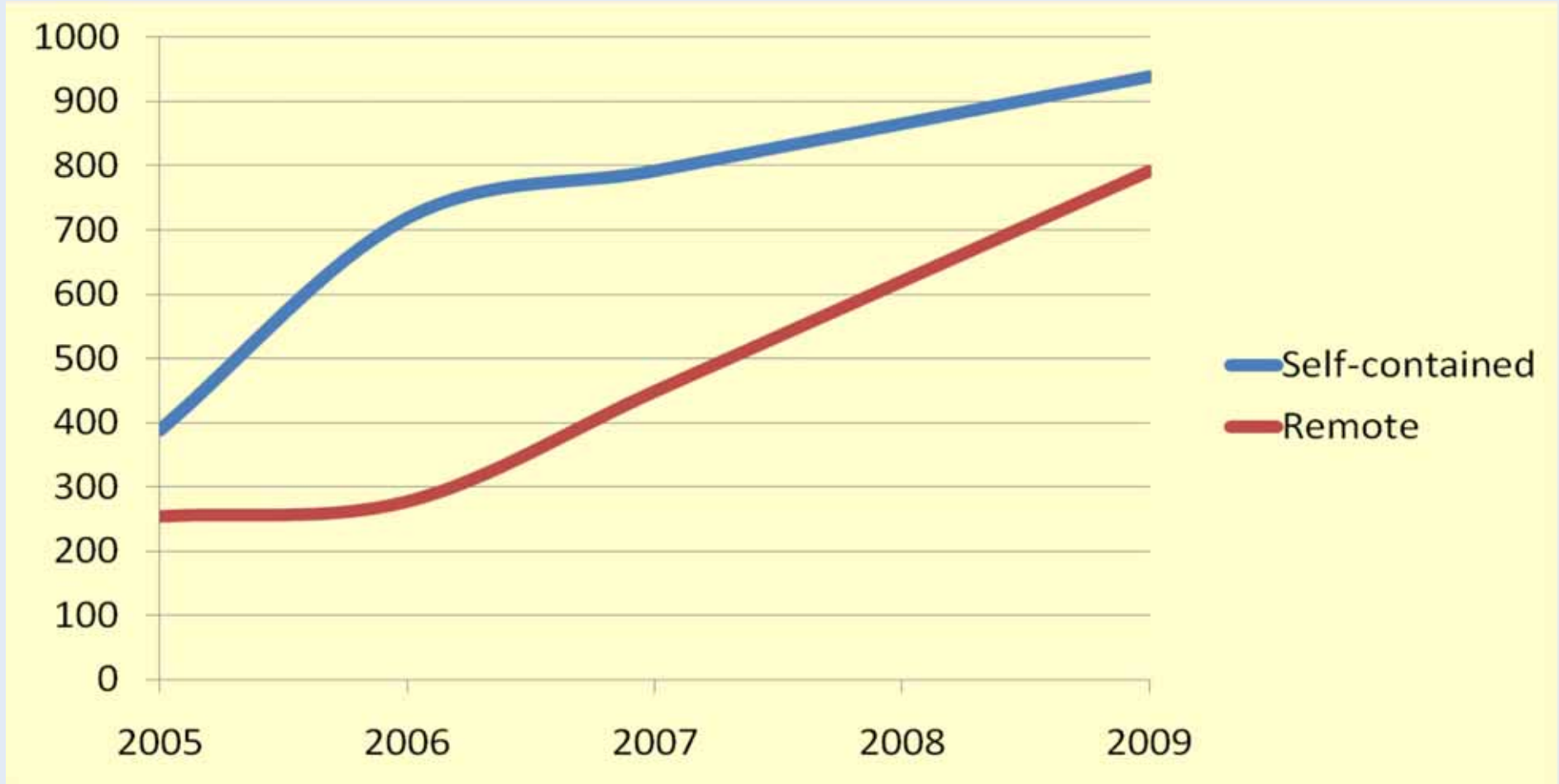
Key components to better compliance

- **Designing** policies so they can be complied with easily
- **Facilitating** compliance
 - through prior warning, promotion, training & capacity building
- **Monitoring** compliance
 - market surveillance & check testing
- **Responding** to non-compliance with appropriate enforcement measures
 - Deregistration, naming, on the spot fines, ACCC action

Refrigerated display cabinets (MEPS)

- Registration
 - made easier online
 - Self-declaration (not test results)
 - Technical staff to assist suppliers and industry
- *registrations growing steadily*
 - *More products?*
 - *Retired products not removed?*

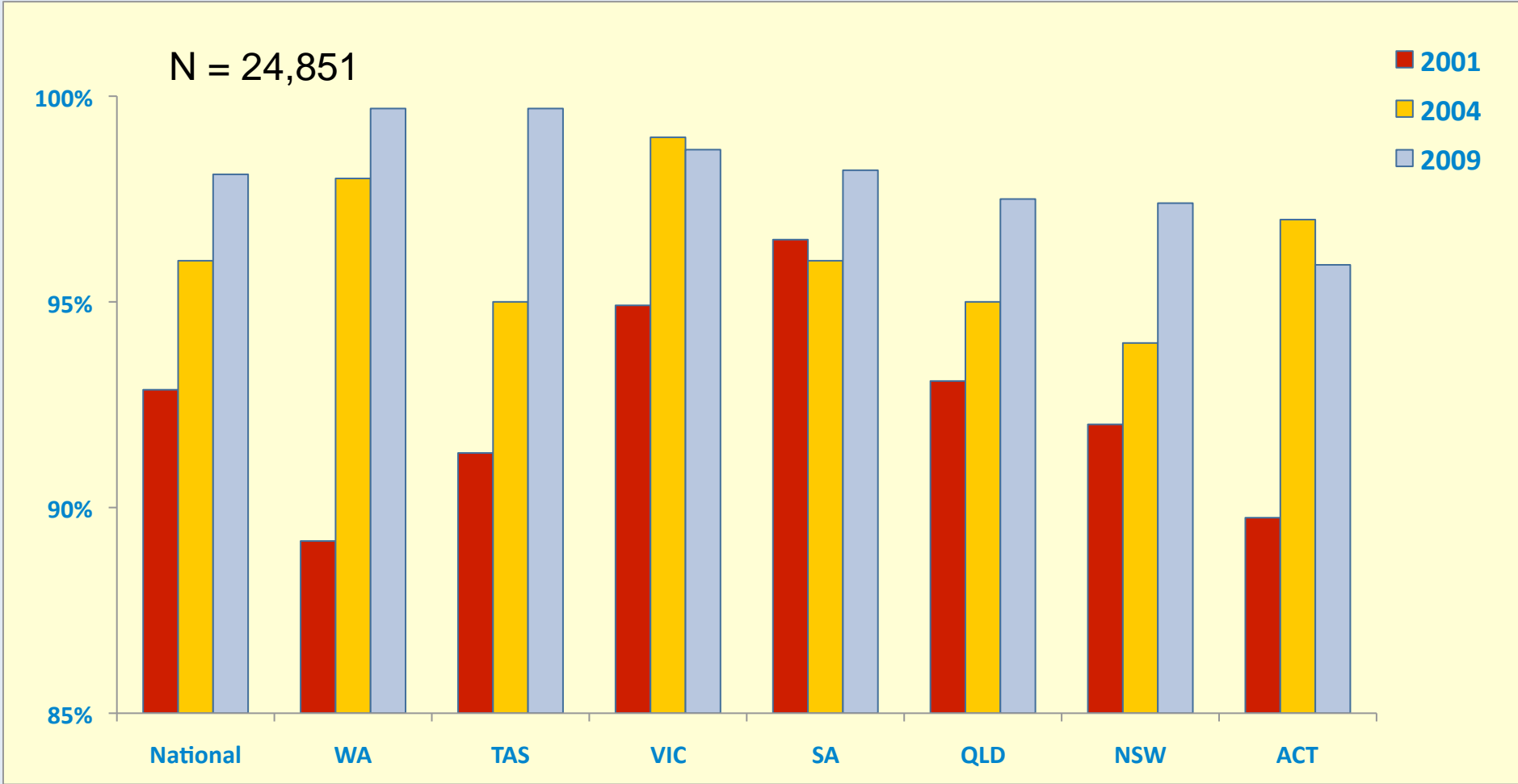
Registrations



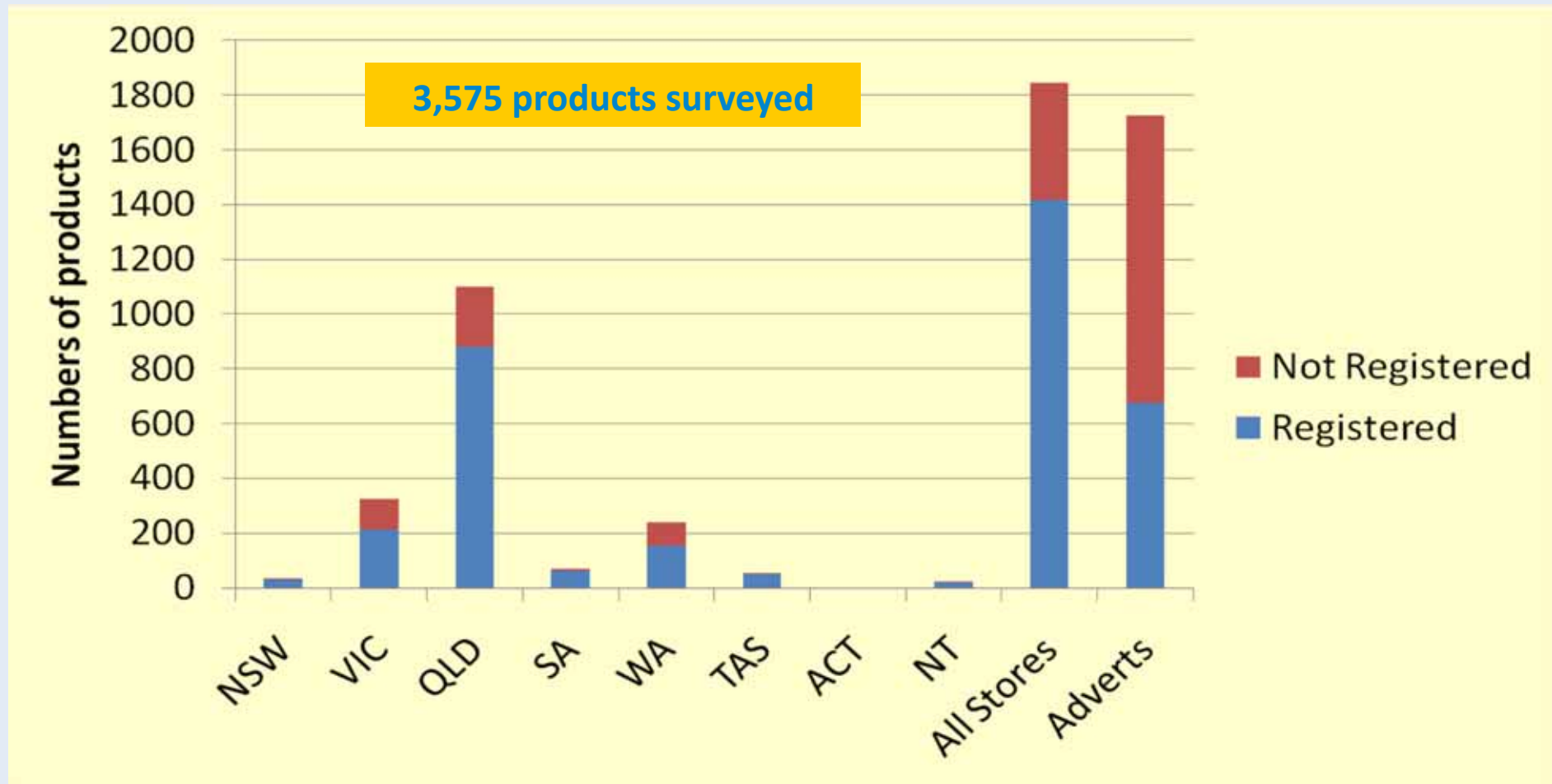
New market surveillance capacity

- The Australian Refrigeration Council Ltd (ARC) appointed in 2009 to undertake market surveillance activities throughout Australia.
- ARC is well as a licensing body administering the air conditioning and refrigeration regulations under the *Ozone Protection and Synthetic Greenhouse Gas Management Act 1989*.
- 12 trained investigators operating in the field
- In 2009:
 - Whitegoods (labelling and registration)
 - Air conditioners (labelling and registration)
 - Commercial refrigerated display cabinets (registration)

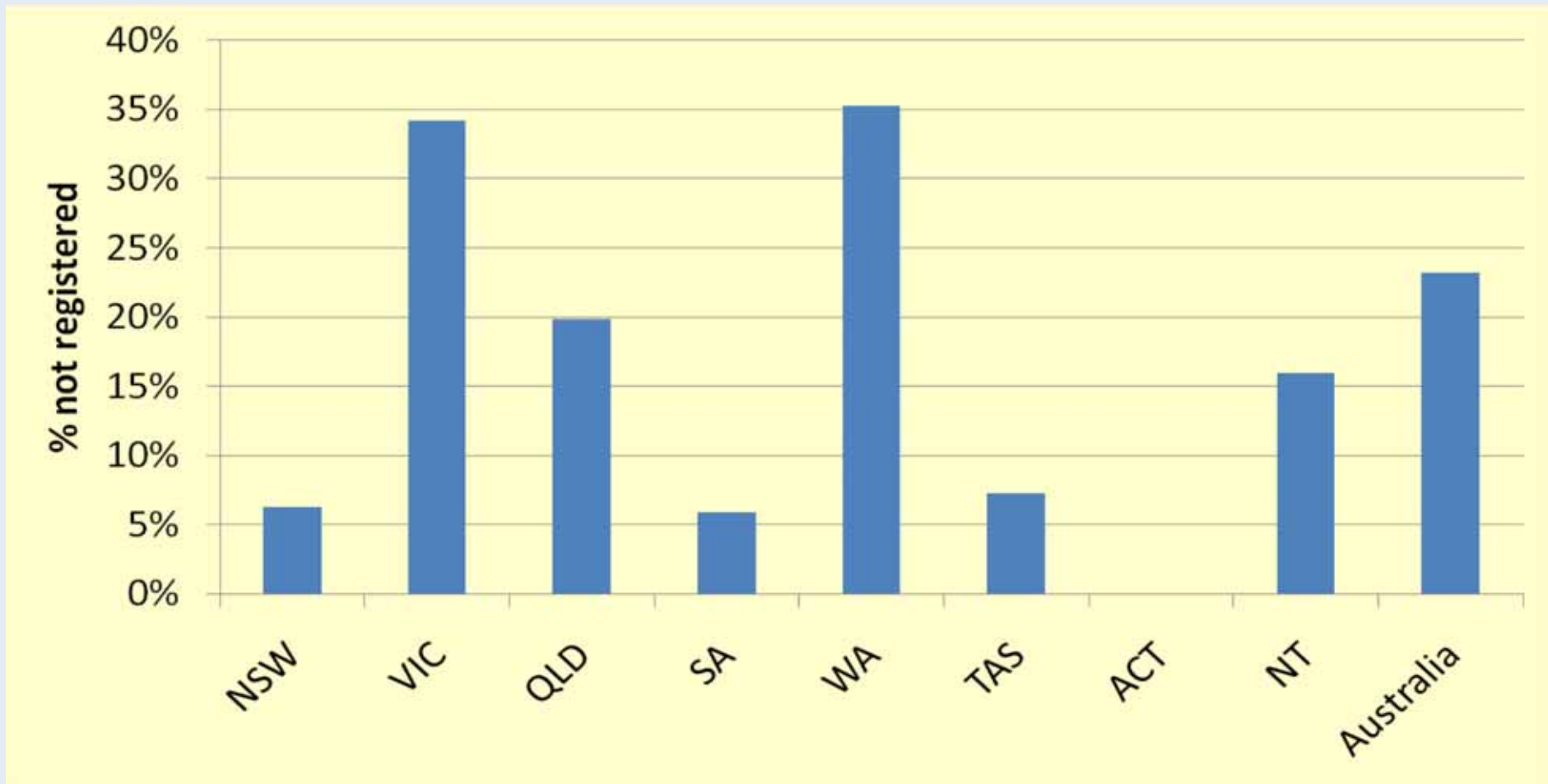
Results of whitegoods labelling survey



Refrigerated display cabinet survey



Not registered by store location



Issues from the survey

- How sure are we that these results are accurate?
 - Training
 - Will be followed up by regulators
- How to cope with catalogue sales?
 - chillers and close control Acs may be offered for sale un-registered if they carry a disclaimer

- Any offer to sell or supply either of these product types in the absence of an existing approved registration (or listing in the case of New Zealand) must be accompanied with the following written disclaimer.
- ** Sale of this final manufactured product is subject to approval for minimum energy performance standards as defined in AS/NZS 4776.2:2008 or AS/NZS 4965.2:2008 as applicable.*

Check testing to verify compliance with
energy performance requirements

Developing Standards & Capacity – case study

Refrigerated Display Cabinets: MEPS 2004

In Early 2002 AU began upgrading AS 1731-2000 in preparation for MEPS regulations in 2004

The Hurdles

- *Lack of experience in independent test facilities in AU*
- *ISO filler packs very expensive*
- *ISO M packs from OS deteriorate*
- *ISO M packs not certified*
- *No suppliers of suitable door closers*
- *Levels of reproducibility unknown*
- *Appropriate MEPS levels undetermined*

M Packs – After 9 Months



Developing Standards & Capacity – case study

Test Rooms Developed



Test Packs Developed
Filler and Measurement



Developing Standards & Capacity – case study

Comparative Study Undertaken on Test Packs

Australian Packs

11.43kWh (-1.4%)

ISO Packs

11.59kWh



Figure 3.3 Mechlab Test Packs Loaded in Refrigerated Display Cabinet



Figure 3.4 German Test Packs Loaded in Refrigerated Display Cabinet

Developing Standards & Capacity – case study

Door Closer mechanisms and software

```
No. of door openings: Door 1: 0      Door 2: 0      Door 3: 0
                    Door 4: 0      Door 5: 0      Door 6: 0
```

```
MECHLAB © UNSW REFRIGERATED CABINET DOOR CONTROL PROGRAM
```

```
Licenced to: MECHLAB © UNSW
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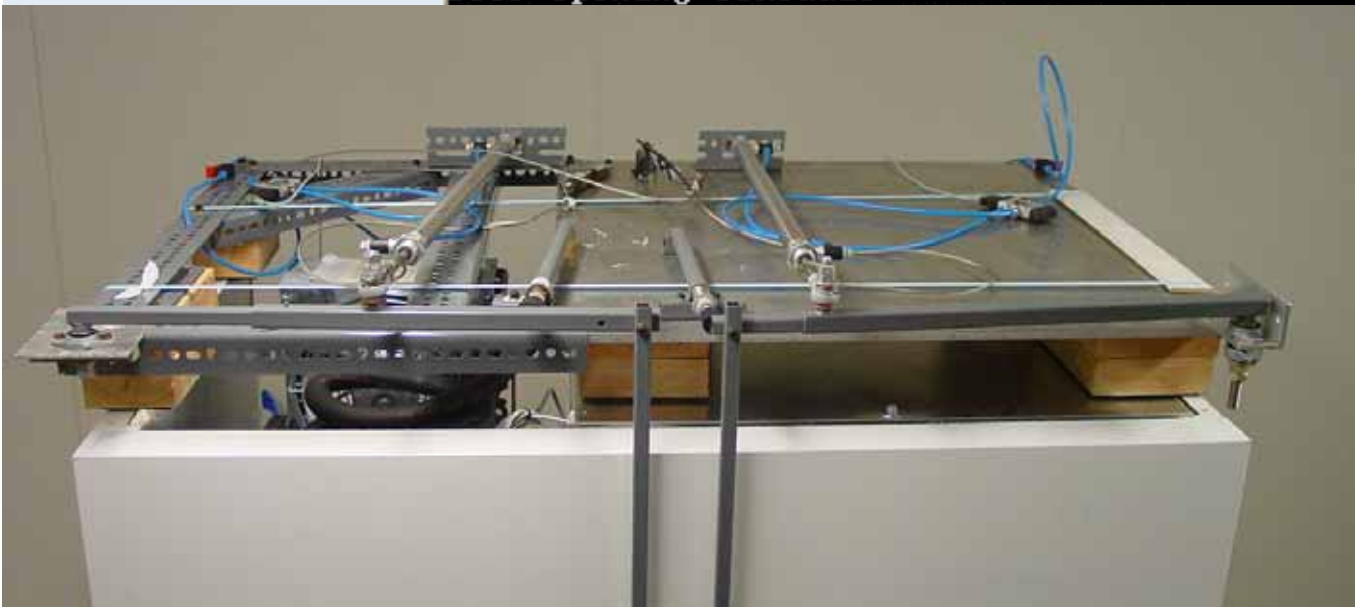
```
17:02:27
```

```
Shop closed! Door 1: Closed   Door 2: Closed   Door 3: Closed
              Door 4: Closed   Door 5: Closed   Door 6: Closed
```

```
Door opening schedule:
```

```
Cycle period: 20 minutes
```

```
  4      5      6
  1      1      1
  0      0      0
  5      5      5
```



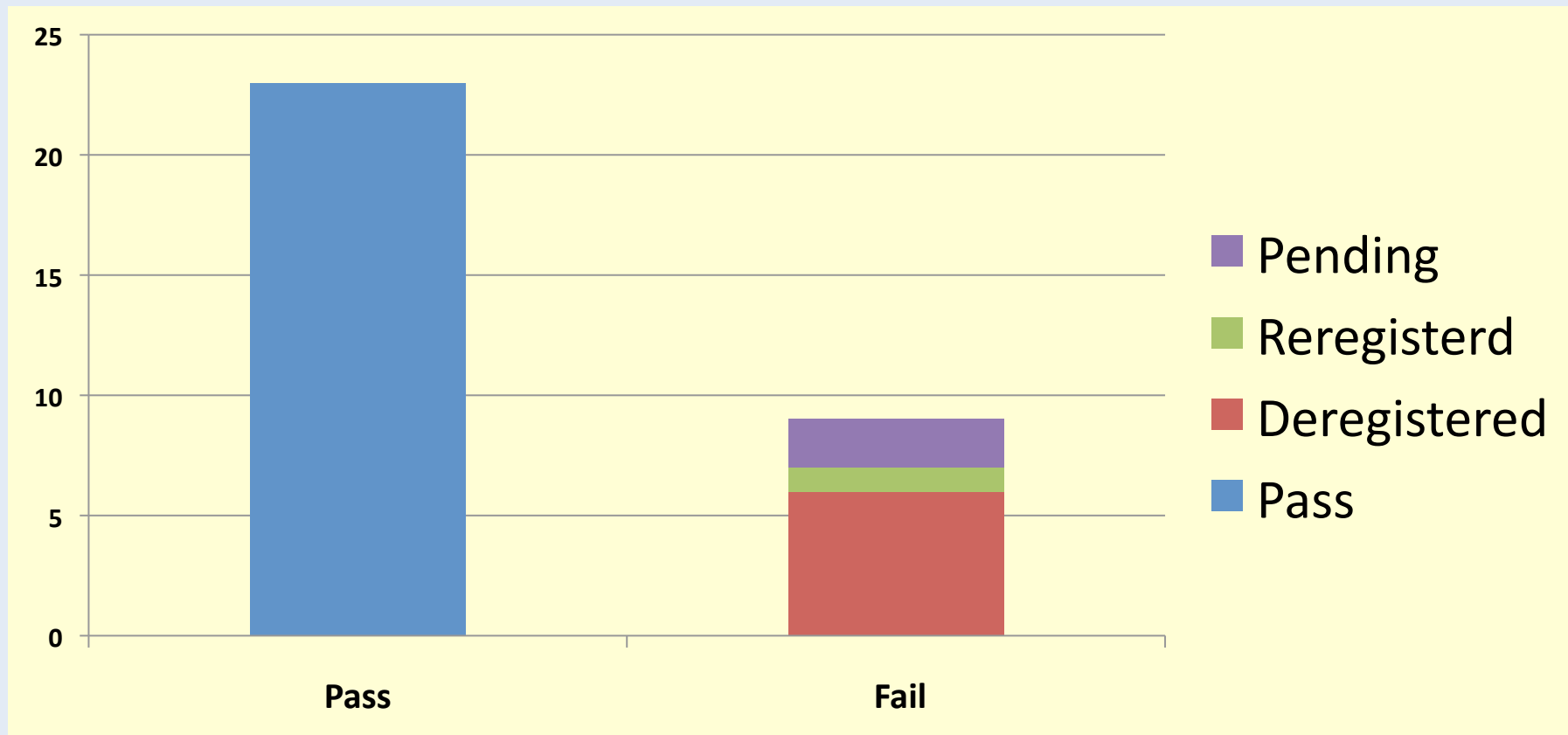
Developing Standards & Capacity – case study

Limit of Reproducibility determined via R Robin process (+/- 2%). This then informs the compliance regime that will follow the introduction of regulations.

Appropriate MEPS levels established via testing of units supplied by industry – Industry provides representative test units, government pays for testing and provides supplier with report. Results inform MEPS level

Display cabinets: check testing results

N = 32, Pass rate = 72%



Overall check testing results

Year	Number Tests	Failed Screen test	Deregistered
2004 (Au)	58	28	11
2005 (Au & NZ)	40	24	10
2006 (Au & NZ)	18	13	9
2007 (Au & NZ)	85	35	10
Totals	201	100	40

Enforcement

APPENDIX 8

REGULATORY OUTCOMES FINALISED FROM JANUARY 2007

Appliance Type	Brand	Model	
Air-conditioner	Air Master	A 30R220	
	CONIA	CA9005	
	OPTICAL	ACC-25V2	
	Crystal	VSD-12HD03	
	Crystal	KFR 26	
Clothes Washer	CHUNLAN	KFR-35GW/VJ	
	Homemaker	HMWM7	
	Centrex	CTW60560, CTW60560S	
Dishwasher	Asko	D3730	
Electric Motor	Neri	0.75 kw 4 Pole	
	Neri	3 Kw - 4 Pole	
Refrigerator/Freezer	HITACHI	R-480ET5, R-480ET5X, R-480ET5 PWH, R-480ET5 SLS	06/06/2007
	CENTREX	CTCF150	31/10/2007
	CENTREX	CTF210A	Unregistered Product
	NEC	NTM470R**	22/10/2007
	NEC	NTM360R**, NTM360RWH, NTM360RSS	24/07/2007



CircuitBreaker

SEPTEMBER 09
EDITION 1

In this issue

- 2 Significant increase in appliance and equipment compliance testing
- 2 Australian Refrigeration Council Ltd (ARC) appointed as new watchdog



NEWS RELEASE

Attn: Consumer, environment writers

LG compensates consumers over misleading energy ratings

Up to \$3.1 million will be available in rebates for eligible consumers who bought five popular LG Electronics Australia Pty Ltd air conditioner models that did not comply with the energy efficiency values claimed on rating labels.

"LG sold more than 15,000 mislabelled air conditioners", Australian Competition and Consumer Commission Chairman, Mr Graeme Samuel, said today.

"LG will also implement new testing procedures to ensure that the energy efficiency of its air conditioners matches the performance indicated by their stated energy efficiency star rating and, where applicable meet, 'minimum energy performance standards'".

LG has given court enforceable undertakings to the ACCC after it raised concerns about the accuracy of energy claims on the five models.

The ACCC investigation followed a complaint by the Australian Greenhouse Office. Check tests conducted on behalf of the Department of Energy, Utilities and Sustainability in New South Wales, and Energy Safe Victoria, found that:

- a) the actual cooling output of a number of models of air conditioners sold by LG between particular dates was less than 90 per cent of the rated output
- b) the energy consumption of some of the affected models was more than the rated power consumption, and
- c) the energy efficiency ratings of the affected models were lower than that claimed by LG, and that of one model was lower than that required by the relevant Minimum Energy Performance Standards (MEPS).

As a result, it is likely that the five air conditioner models use more electricity and, accordingly, cost more to run than would be the case if those air conditioners complied with the values stated on the relevant energy labels.

The ACCC and LG have agreed an estimate of the potential difference in operating costs that may be experienced in respect of each of the five models. LG will compensate purchasers of affected models for the potential increase in operating costs as set out below.

Consumers who purchased these models between the dates listed below and who relied on representations made by LG in relation to the cooling capacity, power consumption or efficiency of that air conditioner should contact LG on 1800 506 154. Consumers will need to provide LG with their contact details, together with proof of purchase or other evidence reasonably establishing their ownership of an affected model within the next six months.

Air conditioner model	Relevant dates of sale	Rebate per unit
LST182H-2	16 October 2002 – 14 December 2004	\$71.54
LST244H-2	31 October 2002 – 22 October 2005	\$198.22
LST244T-2	24 October 2002 – 20 January 2004	\$208.28
LSZ182M-4	23 September 2004 – 20 October 2005	\$89.42
LBNL6081BL / LBUL6080BL	3 September 2003 – 22 September 2005	\$436.77

How the 10 year strategy addresses compliance for cabinets

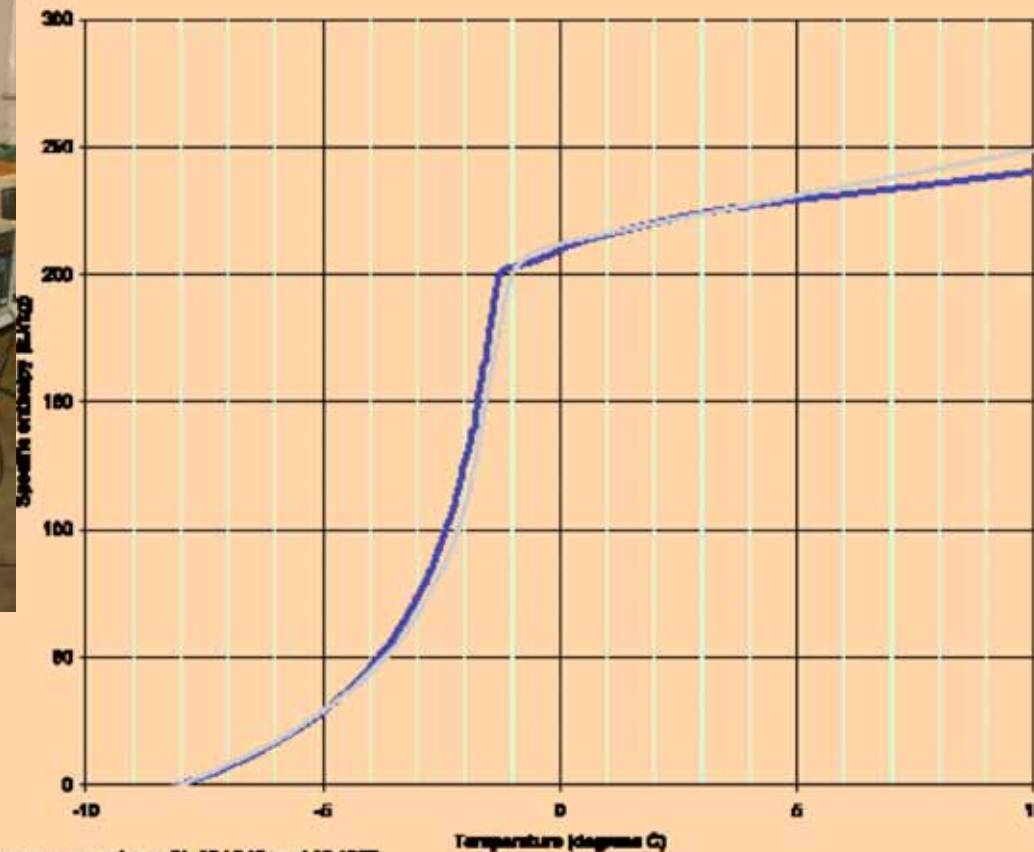
- Fewer, more easily understood categories or types of cabinets
- Removes problems of scope
 - For sale/display vs. preparation/storage
- Deemed to comply provision
 - Avoids the need for tests, particularly for fixtures
- Calls for a review of independent testing capacity

Developing Standards & Capacity – case study

Measurement Pack Calibration facility Developed



Thermal characteristics of Mechlab M-packages



Date: _____

Tested By: _____

Validation: _____

Valid for batch numbers commencing with "0401" and "0402"

— Mechlab M-Pack
— AS 1731.4 - 2003

Types of stores

