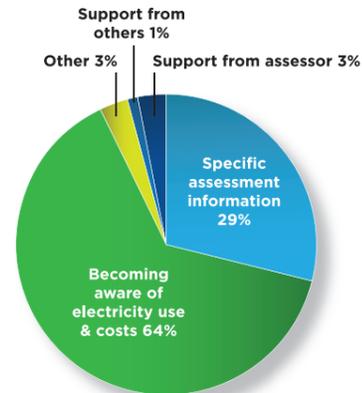


Why did they make changes?

Becoming aware of electricity use and costs as a result of the project was the most important factor triggering changes and action by businesses for 64% of those who had made changes. For another 29% (who may have already been aware), the specific assessment report information on tackling their electricity use was the key factor.

Vietnamese (78%) and Cantonese (69%) businesses were more likely to nominate awareness of costs. Mandarin (43%) and Hindi/Tamil (39%) were more likely to nominate the assessment information.

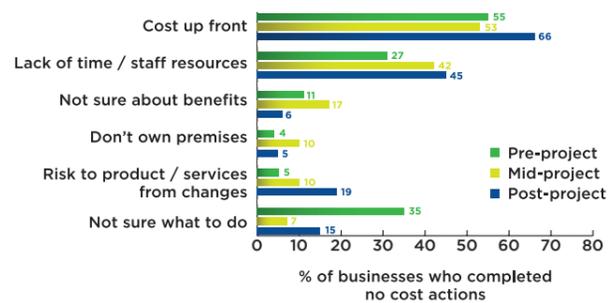
Overall most important reason for making changes in last 3-6 months to reduce electricity use



Barriers to action

Businesses were asked why they hadn't made changes they knew about pre-project; mid-project asked what would prevent them making the recommended changes and post-project why they hadn't made changes. Priority of common reasons varies across the project, with factors such as cost and time increasing and lack of knowledge of what they could do falling dramatically as a result of the project input.

Most important barriers to implementing changes at each-project stage



Melbourne

Compared to Sydney, the 211 Melbourne businesses had a similar profile, except 25% were general retail stores. The language profile differed, with the largest group Dari/ Hazaragi (25%). The rest were Mandarin 20%, Vietnamese 18%, Hindi/South Asian 16%, Cantonese 16% and Arabic 4%. The survey group was much smaller (84) so that results are less reliable, but overall, responses in many areas of the surveys were similar to Sydney.

Pre-project, more (45%) were aware of ways they could reduce electricity use. But more businesses had not taken action to pro-actively manage their electricity bill (65%), for varied reasons including 25% not wanting or needing to do anything. For those who recalled receiving information, energy companies figured more strongly.

At mid-project, fewer (64%) said they were somewhat or very interested in implementing report recommendations.

Post-project, surveyed businesses had made a total of 140 changes (1.7 per business), 86% of which were no cost level.

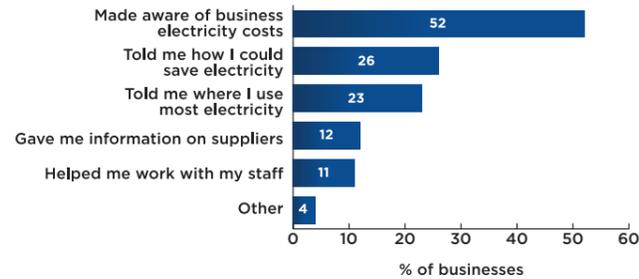
For information delivery, email was a more common preference than in Sydney



Information preferences

63% of the businesses did not recall having received any information on saving electricity before the project. Of those who did, two thirds found it helped them at least a little, particularly in awareness of their electricity costs.

How information helped business with their electricity use



Information they recalled came from largely personal (face-to-face) sources: council workshop, visits by council officers, energy audit program, friends, family or neighbours.

Of businesses who made changes through the project, 92% said that the **information they received in the project** was somewhat or very important in helping make those changes. Most said they hadn't needed anything further, although a few mentioned support from their local council.

For receiving **information in the future**, at pre-project stage 65% chose written information and 40% face-face at their business. Email was not commonly mentioned. Responses to these two questions on recalling information and future information provision highlight an essential contradiction: between effective communication that businesses actually recall (various face-face sources), and expressed preference for modes that more easily fit around their work.

74% **preferred language specific communications**. Half just preferred their own language, while another 24% were also OK with English. Vietnamese (82%), Cantonese (76%) and Mandarin (66%) were more likely to simply prefer their own language, while Thai (78%) were OK in English but preferred their own language. Only Hindi/Tamil had a substantial group (42%) who felt they were fine in English only. Bakers, butchers and general retail were more likely to prefer their own language, while take-away were more likely to say they are OK in English. More owners (55%) prefer their own language,



Ethnic Communities' Council of NSW inc.

BEST

BUSINESS ENERGY SMART TIPS

Energy Smart Ethnic Small Businesses

Outcomes of a 2014 program to support small businesses to manage their energy use

Background

In 2014 the Ethnic Communities' Councils in NSW and Victoria ran a program to directly support small ethno-specific businesses in managing their energy use. Bi-lingual staff made on-site assessment visits to 627 businesses in Sydney and 211 businesses in Melbourne across a range of business sectors and languages backgrounds.

SYDNEY n=627

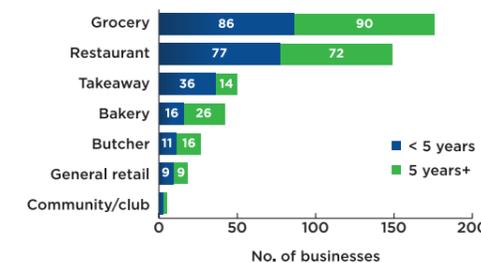
Businesses	Percentage	Languages	Percentage
Grocery store	35%	Vietnamese	25%
Restaurant	33%	Hindi/South Asian	23%
Takeaway outlet	9%	Arabic	15%
Bakery	9%	Mandarin	13%
Butcher	7%	Cantonese	11%
General retail store	5%	Thai	5%
Community organisation/club	2%	Tamil	5%
		Other	2%

Businesses then received assessment reports outlining how they could improve energy efficiency. Strategies ranged from no cost tips to more expensive equipment changes.

To evaluate this program, 76% of assessed businesses in Sydney (477) and 39% in Melbourne (84) completed three brief surveys: prior to the assessment, when they received their report and at follow-up a few months later. This summary focuses on results for the Sydney program with a brief snapshot of differences found in Melbourne.

Some characteristics of businesses surveyed in Sydney

- The profile of businesses surveyed reflected total businesses assessed in both language and business type.
- Time in business by sector



- Most owner-run businesses have less than 5 employees.
- Thai businesses were almost all restaurants. Large Thai and Mandarin restaurants were mainly run by managers.
- Vietnamese businesses spread across almost all sectors, being predominantly small owner-operated businesses.
- Arabic businesses were mainly small convenience stores.
- Mandarin and Hindi/Tamil businesses were predominantly restaurants and grocery stores.

Headlines

There were **very few significant differences by business sector** in the survey results. The most frequent differences were by language group. There were also differences by owners/managers and by business size. These three characteristics may also be inter-related, as particular language groups cluster, e.g. in small owner run businesses.

Despite the differences in sample size, results for **Sydney and Melbourne were quite similar** on most questions. See box on the last page for Melbourne differences.

Significant knowledge gaps regarding electricity use were found among ethno-specific SMEs.

This program achieved **substantial changes in knowledge and actual change in businesses' practices** and use of electricity - **a total of 1575 changes**, or an average of 3.3 actions per business in Sydney.

Addressing knowledge through an **onsite expert assessment process** to provide business specific information in their own language, supported by a written report and other information for perusal when businesses are less busy, was found to be an effective strategy.

This evaluation also found very strong evidence of the overwhelming **importance of cost as a barrier to change** for small businesses, as well as time or staff resources to actually undertake the changes.

There was a strong preference for language specific communications, to meet the needs of all businesses.

Further support may be needed for infrastructure costs or time factors (e.g. sourcing suppliers of suitable fittings/equipment), for businesses to implement many of the changes that would improve their energy efficiency.

Knowledge of electricity use and billing

From the beginning, businesses were generally **correct in assessing their business electricity use** - they know their own business and the area of greatest electricity use.

At the first visit, when electricity bills were discussed and checked, 26% said it was difficult to **understand their electricity bill** and another 15% did not usually look at their bill. By the end of the project, 94% said it was easy or OK, and those who don't look at their bill fell to 3%.

Pre-project, 51% did not know if they were on flat rate or time of day metering. Post-project those who did not know their **charging method for electricity** had almost halved to 27%. Vietnamese (69%) and Arabic (66%) businesses were more likely to not know pre-project. This fell to 60% for Vietnamese businesses and 17% for Arabic businesses.

Knowing how to manage electricity use

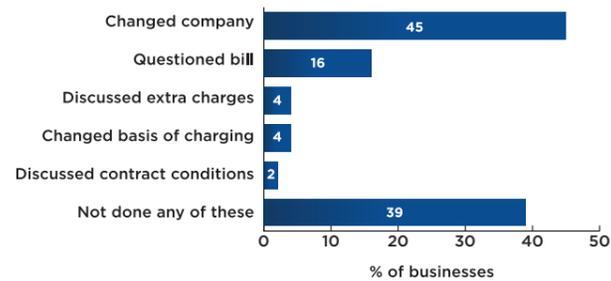
The pre-project survey revealed significant knowledge gaps in this key area:

- Almost two thirds (63%) were not aware of any ways they could reduce their electricity use in their business. The 171 businesses who were aware named a total of 289 changes dominated by low cost structural changes (77 mentions) and no cost (59) or low cost (51) behavioural changes.
- Managers and larger businesses were more likely to be aware than owners and smaller businesses. More Arabic (51%) and Hindi/Tamil businesses (49%) were aware of possible changes, less Mandarin (19%) and Vietnamese (17%) businesses.
- Most (94%) did not know of any government programs or tax incentives to help them reduce their electricity use, nor of any other businesses who had taken such actions on their electricity (80%).

Managing their electricity company

In dealing with their electricity company pre-project, 60% had done something but almost 40% had not done anything. Mandarin (63%) and Cantonese (51%) were more likely to say they had never done any of the suggested strategies.

Previous action in dealing with electricity company



Of the 183 who had not done any of these things, 30% had thought about it but not done anything. Another 39% indicated lack of knowledge was a barrier – they either didn't know you could do these things (11%) or didn't know how to go about it (27%).

Post-project, the businesses felt more confident in dealing with their electricity company: 64% said they definitely could do these things if they wished and 34% said they may be able to. Thai (100%) Cantonese (82%) and Hindi/Tamil (73%) businesses were more likely to say definitely, while capacity also increased with business turnover.

Making changes – pre-project

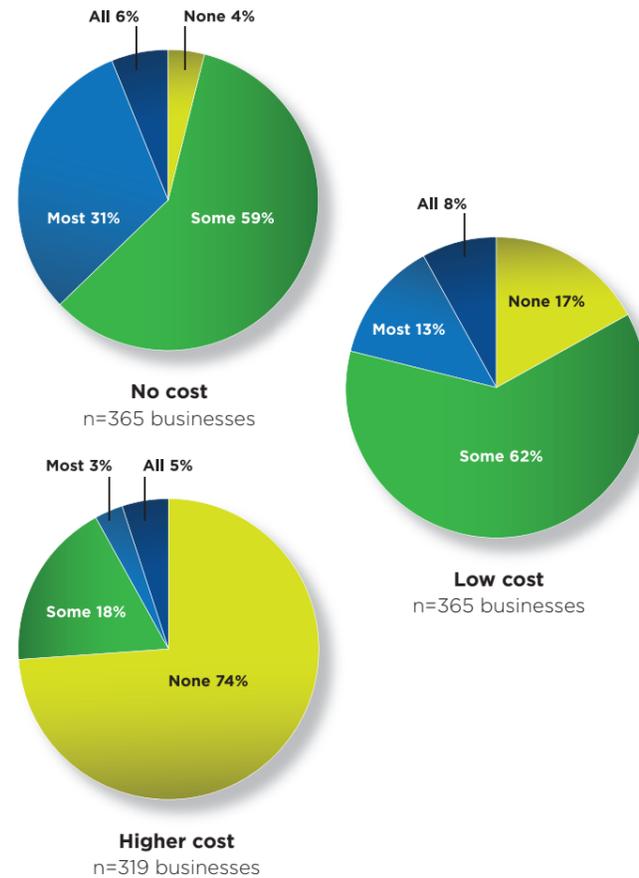
Of the 36% (171 businesses) aware of changes that could reduce electricity use in their business, 88% said they had actually made changes, but most said they had made just a few, whether structural or behavioural changes.

Intent to make changes – mid project

On receiving their assessment and recommendations for changes to reduce electricity use, 80% said they were very (26%) or somewhat (54%) interested in making the changes. Thai businesses (74%) and high (>500k) turnover businesses (55%) were more likely to be very interested, while butchers were somewhat interested (80%).

However, the proportion of the recommendations they were interested in doing was strongly related to cost. Of the businesses for which data is complete, 96% intended to do at least some low cost actions, falling to 83% for low cost actions and 26% for higher cost actions. In addition, the proportion of recommended actions intended to complete declined markedly as the cost rose.

Proportion of recommended actions businesses intended to complete



Differences:

- More Cantonese businesses said they would do **most** (55%) or **all** (21%) of the **no cost** recommendations.
- More Arabic (76%) and Vietnamese (72%) businesses said they would do **some** of the **low cost** options, Thai (84%) said they would do **none** and 21% of Cantonese said they would do **all**.
- More Arabic (93%), Vietnamese (90%) and Thai (94%) businesses said they would do **none** at higher cost.
- More managers (87%) said they would do **none** at **higher cost**, while more of the larger businesses¹ said **some** (75%).

What actions?

Most of the **no cost** recommendations provided in assessments were behaviour changes. Some needed to be done just a few times a year, such as seasonal setting of airconditioning thermostats, but others were everyday behaviours that could require staff training and/or cooperation. The most popular of these ranged from simple everyday switching off of equipment at the power point to checking fridge seals and re-organising stock to more efficiently use refrigerator space.

¹ Larger businesses = 11+ employees, smaller businesses = 5 or less.

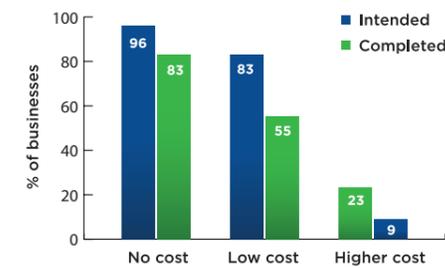
Most **low cost** changes chosen by businesses related to refrigeration and lighting, nominated by almost all who were intending such actions. Lighting is clearly an area in which low cost changes can easily be made by all businesses, (replacing globes and fittings etc) while refrigeration is recognised by many businesses as their most significant electricity user.

Lighting and refrigeration were also the most popular **higher cost options** but with a strong bias to actions to improve lighting efficiency. While refrigeration is the highest use area for many small businesses, lighting is common to all businesses, so is a more common choice.

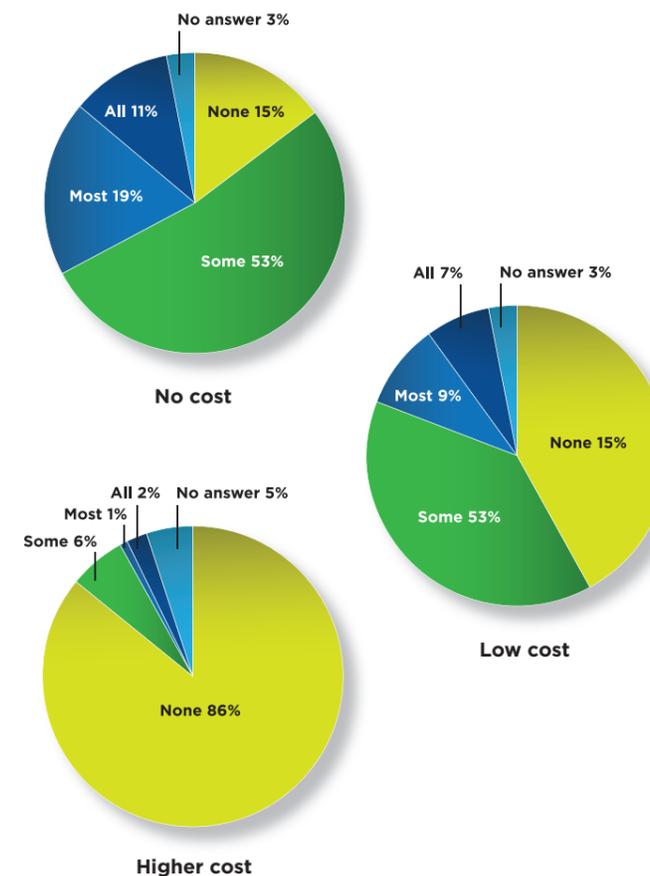
Actual changes – end of project

A substantial amount of change was achieved during the course of the project with **86% of businesses completing at least some actions**. Four businesses completed all recommended actions at all cost levels.

Any actions completed compared with intent



However, the **importance of cost** in making changes to reduce electricity use, obvious in businesses intent, is even clearer at the end of the project. Completed actions fell even more heavily with cost, whether businesses completed some, most or all recommended actions.



No cost actions

More Mandarin (63%), Cantonese (81%) and Hindi/Tamil (45%) businesses had completed **most or all**, while Thai (43%) and Vietnamese (33%) were more likely to have completed **none**.

Low cost actions

■ Hindi/Tamil businesses were more likely to have completed **most or all**, Thai (95%) and Vietnamese (67%) were more likely to have completed **none**.

■ Owners (22%) were more likely to have completed **most or all** and managers (55%) more likely to have done **none**.

Higher cost actions

Mandarin businesses were more likely to have completed **some or all**, 98% of Arabic and 100% of Vietnamese businesses had completed **none**.

Intent compared to action

In a direct comparison of intent and action at no cost:

- 57% of all businesses actually did what they said they would, 24% did less and 19% did more.
- Mandarin, Cantonese and Hindi/Tamil did as much or more than intended, Arabic and Thai did substantially as much as intended, but Vietnamese did less.
- By sector, 50–60% of butchers, bakeries and takeaways did some or most as intended, but the remainder of each of these sectors did less. Most restaurants, general retail and convenience stores did as much or more than intended.

Low cost actions

Those completing as much as they intended fell to 48.9%, those completing more fell to 13.7%, and those completing less rose to 58.3%.

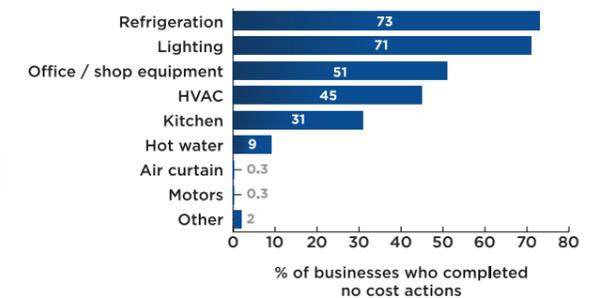
Higher cost actions

Of the 304 businesses for which there is complete data, 71.7% did none as intended, 7.2% completed at least some, 18.4% completed less than they intended and only 2.5% completed more than intended.

What did businesses do?

Over 70% completed no cost actions relating to lighting and refrigeration and around half did things related to HVAC (heating, ventilation and air conditioning) and office or shop equipment.

No cost actions completed (n=396)



Low cost actions

The most popular related to refrigeration with well over half the businesses (59%) completing actions in this area. Changes in office/shop equipment (42%) and lighting (40%) and were also completed by a substantial number, but changes relating to HVAC dropped from 45% at no cost to 2% at low cost.

Higher cost actions

Only 42 businesses, or 9% of the total sample, completed any. These were predominantly actions related to lighting.