
Energy Efficiency Opportunities

Participant Survey

Energetics Pty Ltd, August 2008

Energetics has played a leading role in the Energy Efficiency Opportunities (EEO) program. Involvement has ranged from input to program design and program trials with Government, to assisting over 60 of Australia's largest energy users plan, assess and prioritise their opportunities to improve their energy efficiency.

Energetics undertook a survey of participating companies in June/July 2008. The survey was designed to gauge the effectiveness of EEO in defining savings opportunities and changing business energy efficiency culture. It was also intended to understand the main barriers to, and effective solutions for, accelerated implementation of opportunities.

Headline Findings

Most participating companies have now completed their initial energy savings opportunity assessment (required by June 30 2008), and more than 20% of companies have gone beyond this “minimum compliance” requirement. The survey responses therefore reflect the views of participants as they progress from initial assessments towards responding to opportunities across their business.

The key findings of the survey include:

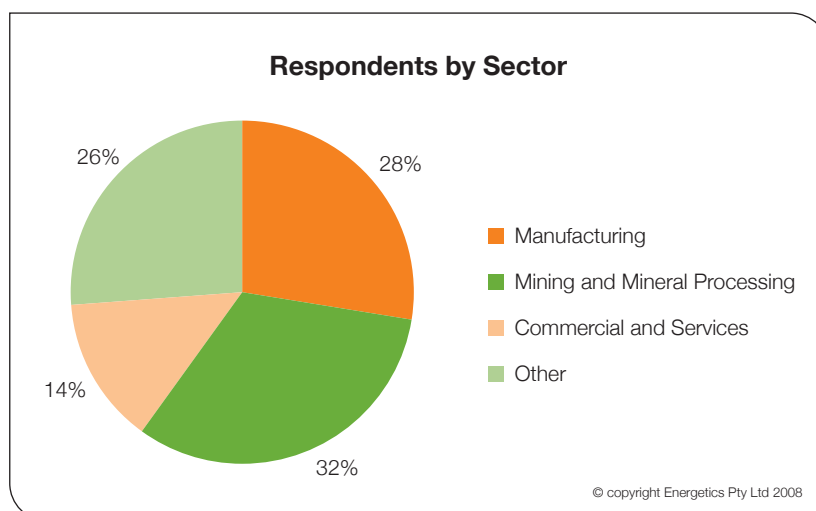
1. EEO has had a very significant impact in terms of the business focus it has brought to energy efficiency, encouraging knowledge building of energy management, and identifying energy savings opportunities. However, more needs to be done. The priority of energy efficiency needs to be raised at top corporate levels, success in identifying savings from initial assessments should be replicated across all sites, and the savings identified need to be implemented.
2. Nearly 40% of respondents indicated that they have used EEO to drive their energy management process beyond minimum compliance requirements. Alongside this finding a similar number indicated that they are already focussed on energy efficiency. This suggests EEO has been a significant driver to increased energy efficiency awareness.
3. Over 45% of companies said that savings of up to 10% were identified from their initial assessments with a payback up to 4 years, while a further 10% of respondents identified savings of 10-20%. Over 70% indicated that some or all of the opportunities identified would be implemented in the next 1-2 years. This is encouraging given that many companies have only identified savings opportunities under EEO at one site.
4. Companies identified three key measures that would support implementation of energy efficiency opportunities. These issues need to be addressed to overcome barriers and accelerate savings:
 - i. Establishing a price for carbon emissions.
 - ii. Provision of financial or tax incentives for energy efficiency investments.
 - iii. Overcoming resource limitations.

Other measures viewed as important were assistance with research, development and commercialisation of energy efficient technologies, and building capacity and skills in energy efficiency.

5. One of the greatest challenges that businesses face in completing EEO assessments and in responding to opportunities is the lack of time available to current resources. Energetics estimates that 50% of the work associated with meeting EEO requirements is contracted to external consultants. This lack of resources/skills could be a future barrier to realising the full potential benefits of EEO.

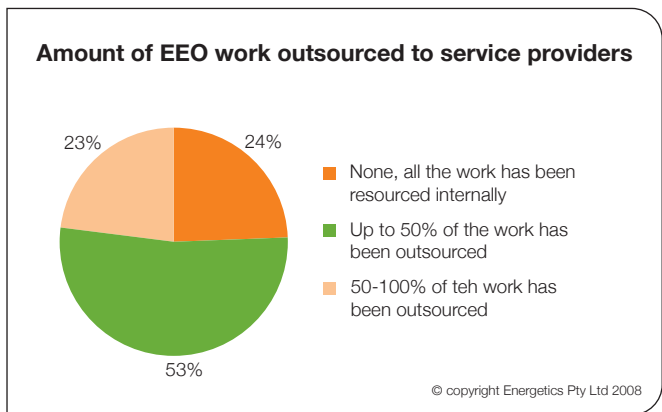
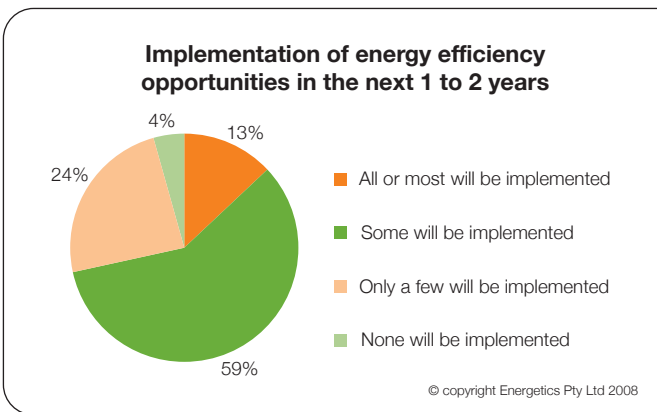
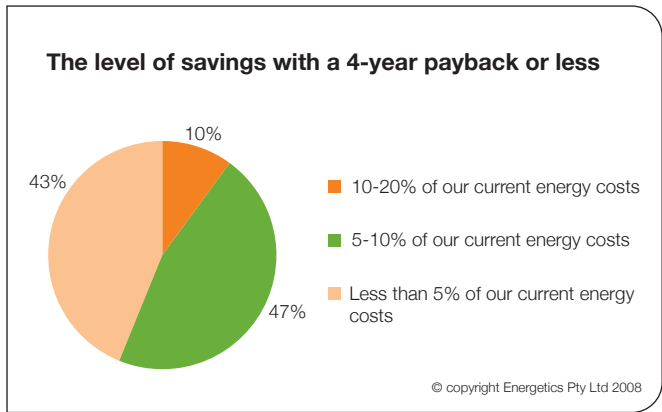
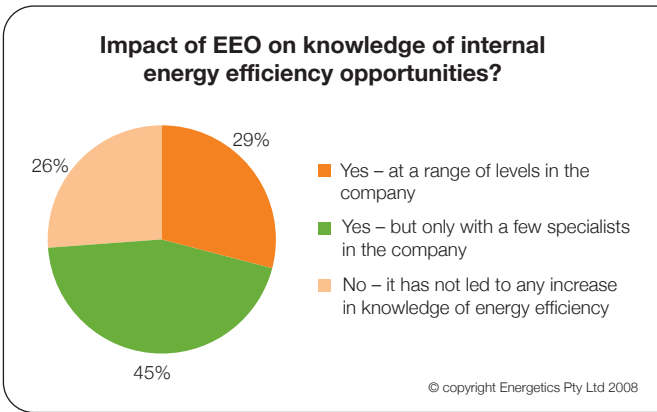
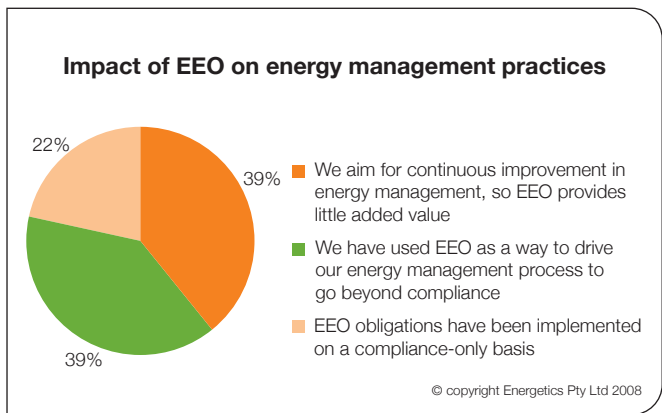
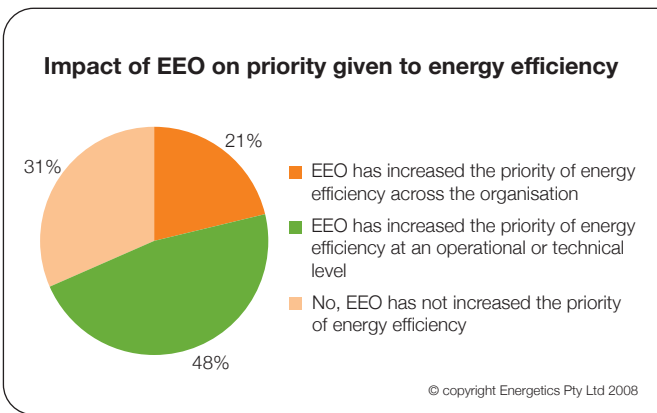
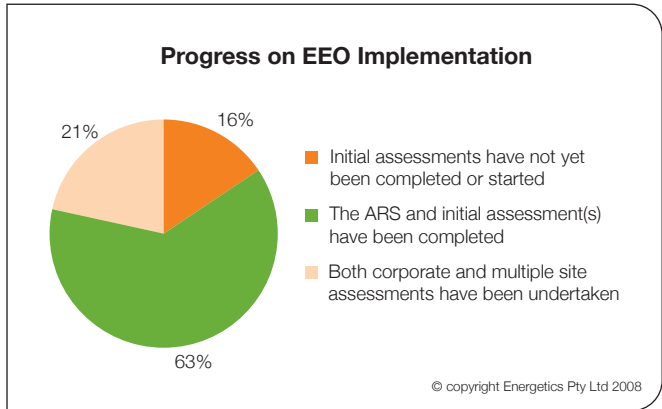
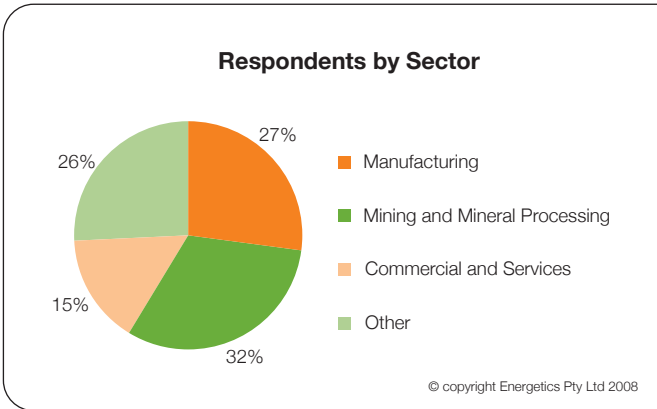
Companies Responding

The survey was sent to 175 organisations (about 80% of total registered EEO corporations). The majority of the 55 companies (70 respondents) who responded to the survey are in mining and minerals processing, manufacturing, and the commercial and services sectors. These sectors represent 74% of all companies participating in EEO. Other responses came from the transport, utilities, education, waste services and government sectors. Responses were received from a range of organisation levels, including corporate, site and division levels.

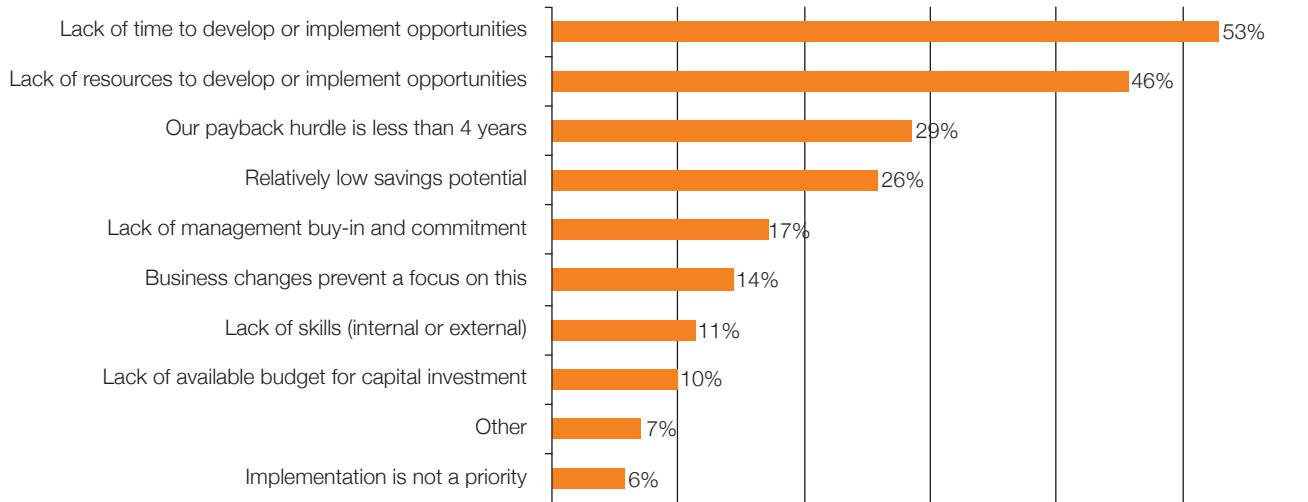


Survey Results

The results of the survey are presented graphically below, with each graph heading reflecting the relevant survey question.

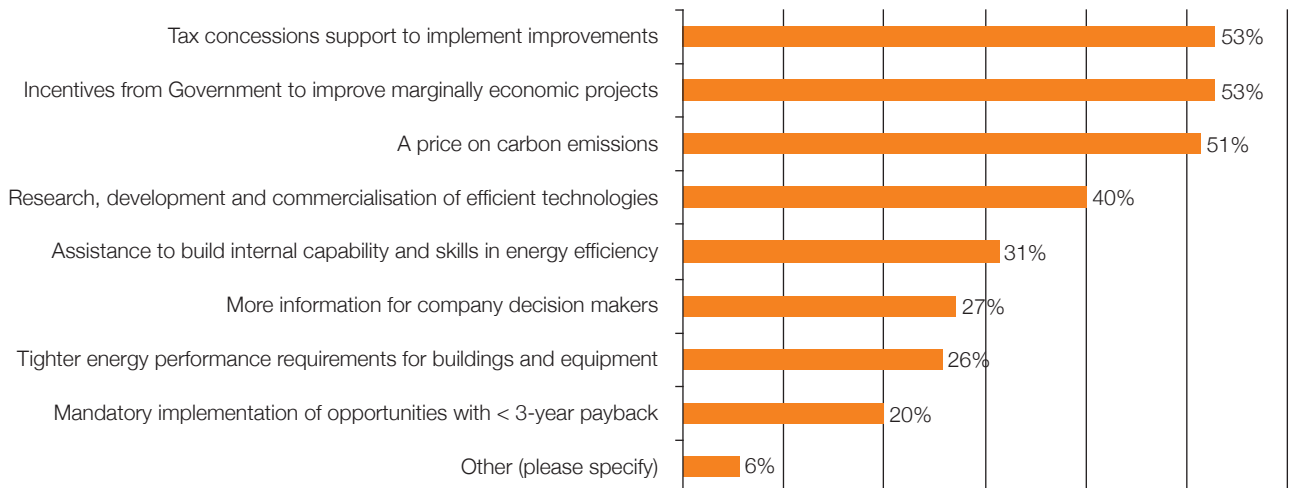


Barriers to implementing energy efficiency opportunities



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Which of the following would best enable more of the opportunities to be implemented?



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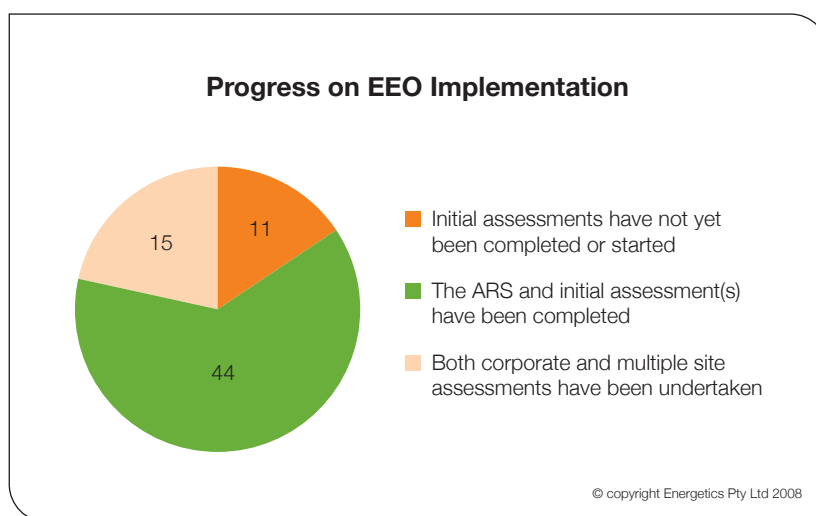
Comments on survey findings

1. Progress on EEO implementation

The EEO program required participating corporations to complete their Assessment and Reporting Schedule (ARS) by 31 December 2007 and initial EEO assessments at their corporate, division, site or activity level by 30 June 2008. This applies to corporations who registered with the program by 31 March 2007.

A number of respondents have moved beyond the minimum mandatory measures to date, with 21% reporting that they had implemented corporate and multiple site assessments. A further 16% of respondents had not yet completed their initial assessment(s) and were therefore at risk of not meeting the minimum EEO requirements; though in many cases respondents were close to completing their initial assessments.

On the whole it seems that companies are working towards meeting their EEO requirements. In general, companies who report as having gone beyond “minimum compliance” also report that they have been focused on energy internally for some time, and that the level of “additional” savings identified by their business is low.



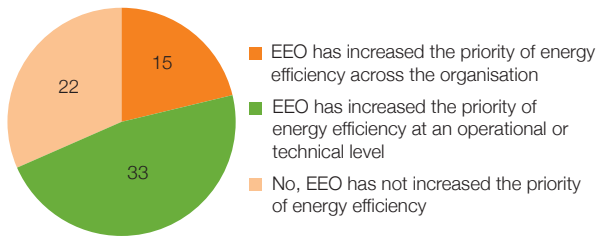
2. Impact of EEO on organisation priorities and practices

The majority (69%) of organisations reported that EEO raised the priority of energy efficiency within the company, including 21% that increased the priority of energy efficiency across the organisation through to the corporate level. Knowledge about internal energy efficiency opportunities has been enhanced according to 74% of respondents.

39% of respondents indicated they are using the EEO program as a vehicle to drive improved energy management across the company and beyond the minimum EEO requirements. The same proportion indicated that EEO is a continuation of business-as-usual. Just 21% said that implementation is being done on a compliance-only basis.

These findings provide sound evidence that the EEO program has had a marked influence on the level of awareness and prioritisation of energy efficiency. The program has greatly helped to increase the focus on efficiency in companies, and has substantially raised the level of knowledge about opportunities for business to improve their energy utilisation and reduce costs. However, there is still some way to go. The priority of energy efficiency has been raised within operational and technical functions, but awareness needs to be greater at top corporate levels.

Impact of EEO on priority given to energy efficiency



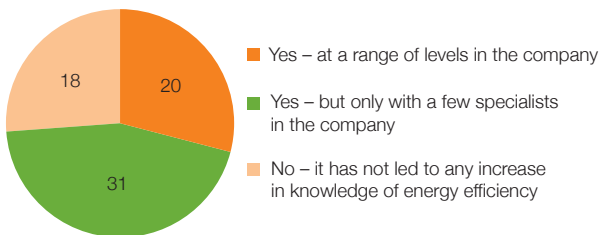
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Impact of EEO on energy management practices



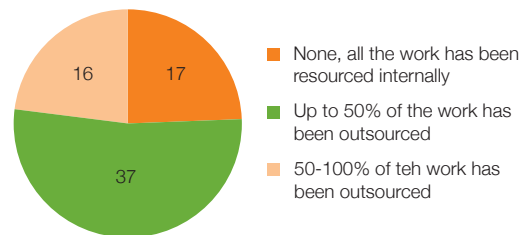
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Impact of EEO on knowledge of internal energy efficiency opportunities?



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Amount of EEO work outsourced to service providers



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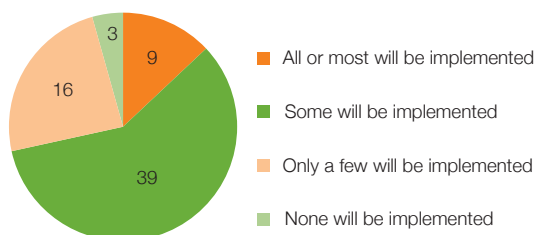
3. Opportunities identified through the EEO program

Some 47% of respondents identified significant (5-10% savings) new energy efficiency opportunities as a result of their initial EEO assessments. In some cases companies have completed multiple assessments. A total of 6 respondents identified energy saving opportunities of greater than 10% and up to 20%.

There were a relatively large proportion of respondents (43%) who reported that savings of less than 5% have been identified. In most cases respondents provided further information as to why the savings identified to date are low. In 47% of these cases the business already has a focus on energy efficiency via technology, productivity and continuous improvement systems. In some cases technology is at or close to best practice and has a long asset life. In 32% of cases the respondent indicated that assessments are not yet completed, so identified savings cannot yet be reported. In only 14% of cases did the respondent indicate that there are few opportunities with a payback of under 4 years.

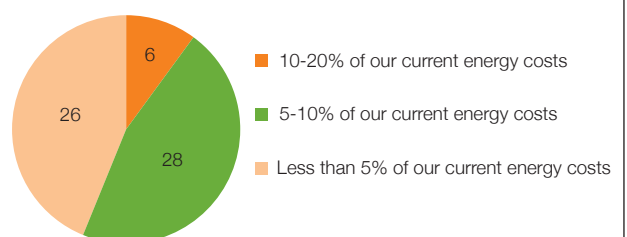
Nearly all respondents reported that they expected at least a few of these opportunities to be implemented in the next 1 to 2 years. 13% reported that all or most of the initiatives would be implemented in that time frame and 59% indicated that some opportunities will be implemented. Only 3 respondents reported that none of the opportunities are likely to be implemented.

Implementation of energy efficiency opportunities in the next 1 to 2 years



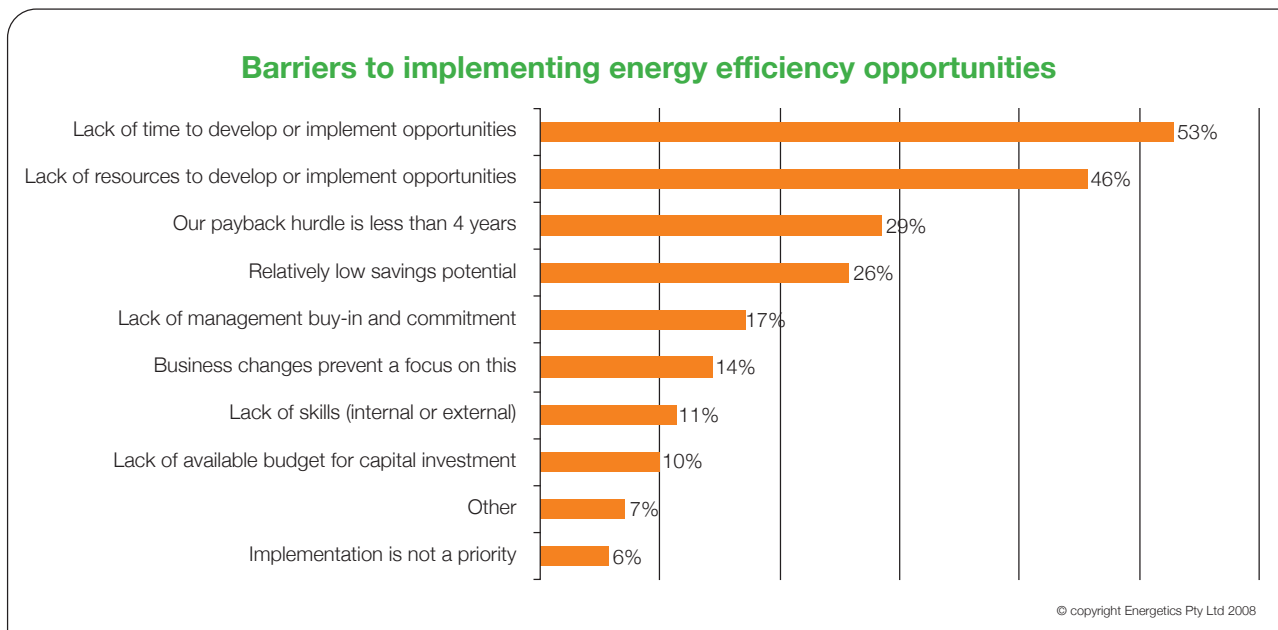
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The extent of EEO energy efficiency opportunities with a 4-year payback or less



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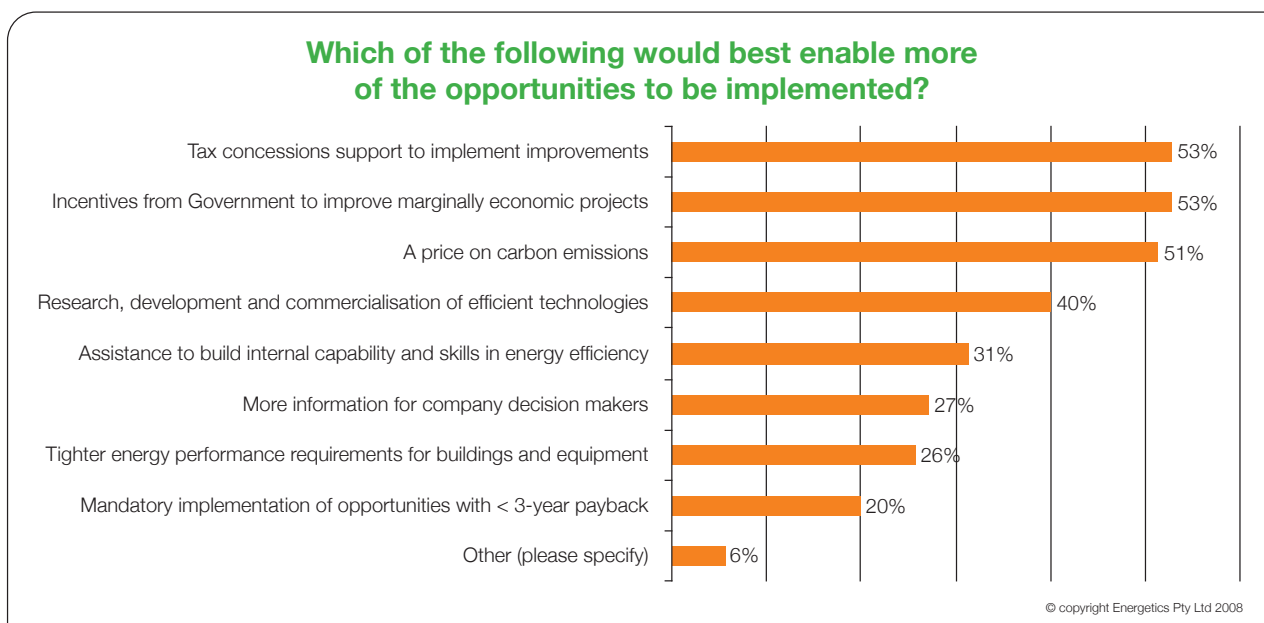
Of the barriers to implementation in the EEO organisations surveyed, the major issues are a lack of time and internal resources available to develop or implement opportunities. A sizeable proportion of respondents reported that internal payback criteria for initiatives were not sufficient for them to be implemented (29%). A further 26% identified that energy savings are low on a relative basis – i.e. compared with other cost savings initiatives that a business could undertake.



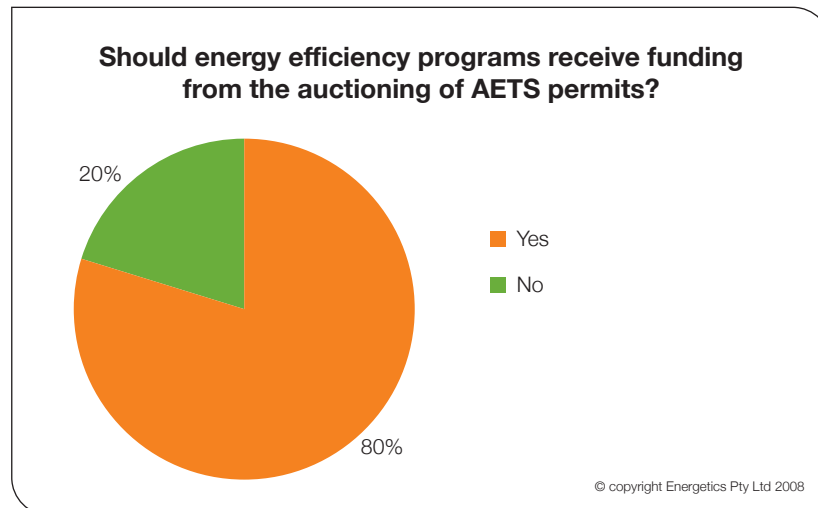
4. Further government support

Most organisations reported that financial assistance or incentives would increase the implementation of energy efficiency initiatives. More than half indicated that a carbon price would drive further implementation, as would tax concessions and direct government financial assistance. These responses are consistent with other findings – that savings in energy are currently seen to be of relatively low value and that payback requirements are under 4 years. Financial incentives and/or carbon prices will serve to raise the relative importance of energy efficiency. These responses may also indicate that such assistance could potentially encourage companies to direct the time of more resources towards implementation of energy efficiency solutions.

Other forms of assistance also viewed as important were assistance with research, development and commercialisation of efficient technologies (40%), and assistance to build internal capacity and skills in energy efficiency (31%).



In addition, 80% of respondents believed that some of the revenue raised from the auctioning of CPRS (AETS) permits should go to supporting business energy efficiency programs.



Sectoral responses

Considering the responses to the EEO survey by the major sectors – mining and mineral processing, manufacturing, and commercial and services, we can see how different sectors are responding to the EEO program.

- The mining and mineral processing sectors have led other sectors in terms of going beyond the mandated requirements. Around one third of mining and mineral processing respondents have gone beyond compliance, and virtually all respondents have at least met the minimum requirements to submit an ARS and complete initial assessments. This contrasts with the manufacturing sector, where 28% indicated that they have not completed their initial assessments, while 12% have completed multiple assessments beyond the minimum requirements.
- In terms of the priority of energy efficiency the manufacturing and commercial and services sector responses stand out in terms of the level of influence EEO has had across both corporate level and operational / technical levels. Whereas priority and knowledge of energy efficiency has mainly risen at the technical level in minerals and mining, 32% and 42% of respondents in the commercial and services and manufacturing sectors respectively indicated that the priority and knowledge of energy efficiency had been raised at corporate levels as well as technical levels. This perhaps reflects the view by mining and minerals respondents that energy efficiency is already a corporate focus, and EEO has helped to translate that focus to the site level in some cases.
- The level of energy savings identified was consistent across all sectors. Whereas mining and minerals processing and manufacturing sectors respondents generally indicated that “some” opportunities will be implemented, 34% of the commercial and services sector respondents were of the view that “most or all” of the opportunities they identified would be implemented within the next 1-2 years.
- In relation to both barriers to implementation and initiatives that would aid in implementation of energy efficiency, there were relatively small differences between sectoral responses compared with the overall survey results reported above.

Further information:

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