

INFLUENCING CHANGE THROUGH A LOW CARBON SCHOOLS PROGRAM

Research Question

What role does community play in a school's ability to decarbonise?

Methodology

This research will track and evaluate the extent to which a new Low Carbon Schools Pilot Program (LCSP) can reduce schools' operating carbon emissions from energy, and whether the schools (through their initiatives) can influence community awareness, knowledge and action on climate change and decarbonisation.

15 schools from across metropolitan Perth were selected to participate in the program. The participating schools are made up of 10 primary schools and 5 high schools.

To develop the social impact methodology, a participatory approach was used where program stakeholders (such as principals and councils) were engaged to assist in identifying the potential outcomes and measurement indicators.



Figure 1: LCSP Participants in Ardross Primary School's native garden

Results

The pilot program commenced in February 2016 with five workshops on carbon reduction topics. During this period, all participating schools calculated their baseline carbon emissions and costs from electricity, water and gas, and developed their own action plans to reduce emissions.

A baseline survey of the participating school buildings was also completed to determine their current 'low carbon' status. Some initial results include:

School 'low carbon' baselines

- 13 % have solar hot water
- 33 % have waterless urinals
- 60 % have completed an energy audit
- 67 % have solar panels
- 97 % have conducted a waste audit

This data helps provide an important snapshot of the state of the schools' buildings and facilities and the opportunities for improvement. School action plans thus far have collectively identified a total of 58 behaviour change actions and 70 technical actions (e.g. replacing lights with LED) for energy reduction alone. Over the remainder of the program, schools will continue adding and completing items on their action plan.

The schools are now in the second phase of the program, where they meet monthly to share experiences, record their progress against their action plan, and document any communication activities that occurred (to help identify

social reach). This, along with data collection to establish social impact, will be the focus of the next twelve months.

Conclusions

While we are still in the data gathering stage of the research, anecdotal evidence suggests that the facilitation of a low carbon community and the sharing of experiences between schools has been highly valuable so far.

Comparing results from the baseline utility data has encouraged many schools to investigate anomalies with their bills, with some schools already saving significant costs.

Data on the social impact of the program is currently being collected.

Anticipated impacts

The aim of the LCSP is to reduce school carbon emissions by 20 per cent. This reduction would equate to:



These savings extrapolated over the approximately 1,200 schools in WA or 10,000 schools nationally, represents a significant opportunity to reduce carbon emissions and costs on utilities for the education sector.

However, the benefits of targeting schools extend beyond the schools themselves. Schools form a pivotal role in society connecting many people, and therefore have the potential to influence many people.

This research will shed light into the potential social impacts that carbon reduction in schools can have on the community and will act as an important case study for social impact measurement. These results can help to inform the development of future programs and could be applied to other sectors.

Can low carbon initiatives in schools have a wider impact in the community around low carbon living knowledge and action?

Further information

Contact

Portia C. Odell

Curtin University Sustainable Policy (CUSP) Institute

portia.odell@postgrad.curtin.edu.au

@PortiaOdell