Be smart with power
Be powersavvy!

Gaylene Whenmouth
Community Engagement Mgr
Ergon Energy
Cairns, Queensland, Australia
What is powersavvy?

powersavvy is Ergon Energy's innovative community engagement program to help residents and businesses in remote communities to

• reduce their power consumption
• cut their power bills
• reduce climate change impacts.
Ergon Energy

- Owned by the state government, which takes an annual profit dividend
- Supply 97% of the state of Queensland
- Approx 690,000 customers
- Government sets the uniform tariff
Our remote generation

- 33 diesel-fired power stations for 38 communities
- 20,000 residents
- 5,500 customers (>1%)
- 100 GWh per year
- Mostly diesel generation
- 1 litre of diesel = 3.75 kWh = about 3.5 kg of CO₂
- 1 kWh ~ $1 to produce
- Revenue ~ $0.23 kWh
- State government pays the difference - >$80 million per year
Our remote communities

- 30 almost 100% indigenous population
- 2 mixed; 6 predominantly non-indigenous
- Mostly pre-paid card meters
- Restrictions until 2005
- Load increases
- Generator upgrades
- Bamaga - $15 million in 2008 for 2000 people
- Increasing CSO
- Bring on the cavalry!
Pilot project to develop and demonstrate a repeatable model for significantly reducing
- electricity consumption,
- greenhouse gas emissions and
- delivered costs of electricity
in small, isolated communities serviced by diesel-fuelled community power stations
- Pilot began in August 2009 in three centres
- 6,000 residents
- 1,825 customers
- 39 GWh
- 60% commercial, 40% residential energy use
- Household energy use ~40% higher than the state average

- Household income much lower than state average
- Using CBSM principles, **powersavvy** approached energy conservation on a whole-of-community basis
- Logistical challenges!
The CBSM tools ... and a few of our own

- Communication
- Social norms
- Social diffusion
- Incentives
- Prompts
- Commitment
- Convenience
- Branding
- Logo – separate identity
- Shirts
- Key messages – Be smart with ...
Consulting with residential customers

- Developed a best practice model for consulting with indigenous householders
- Employed and trained local residents to conduct consultations
- Huge range of supporting resources
- Installed energy saving devices
- Follow up visits
- Completed 875 consultations
- Householders reported energy savings as a result of the consultations up to 17% (equates to ~ $360 pa)

<table>
<thead>
<tr>
<th>Community</th>
<th>Participation rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thursday Island</td>
<td>39%</td>
</tr>
<tr>
<td>Horn Island</td>
<td>60%</td>
</tr>
<tr>
<td>NPA</td>
<td>92%</td>
</tr>
<tr>
<td>Total</td>
<td>61%</td>
</tr>
</tbody>
</table>
The in-home consultation

• Made it visual!
• Energy use in the home
• What things cost to run
• Getting the same outcome for less power and cost

Key message:

It’s the easy little things you do every day that make a big difference
Consulting with commercial customers

- Focused on 143 of the 375 commercial customers which used more than 90% of (commercial) energy
  
- 30 to 2,000 MWh pa

- $7,000 – $450,000 pa

- Offered free consultation including comprehensive energy audit

- 100 customers agreed to implement energy savings recommendations

- Audits typically showed 20% – 30% energy savings with simple payback within 3 years

<table>
<thead>
<tr>
<th>Number of customers</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total energy consumption</td>
<td>18.02 GWh / year</td>
</tr>
<tr>
<td>Total energy savings identified</td>
<td>4.09 GWh / year</td>
</tr>
<tr>
<td>Average energy savings across this group</td>
<td>22%</td>
</tr>
<tr>
<td>Range of identified energy savings</td>
<td>10% to 33%</td>
</tr>
<tr>
<td>Estimated total value of energy savings (to customers) in first year</td>
<td>$978,150</td>
</tr>
<tr>
<td>Estimated total cost to implement recommendations</td>
<td>$1,450,000</td>
</tr>
<tr>
<td>Simple payback on investment (customer perspective)</td>
<td>1.5 years</td>
</tr>
</tbody>
</table>
Other key elements

- A programme in schools to reinforce energy saving behaviours.

- Worked with government departments to improve the energy efficiency of government owned buildings, including community houses.

- Worked with developers and builders to ensure any new buildings that are constructed are as energy efficient as possible.

(and it was all free!)
Community Engagement

- Broad strategy aimed at engaging with all elements of the community
- Communication channels include:
  - Our Field Officers on the ground
  - Word of mouth
  - Letterboxers/flyers
  - Posters on billboards
  - Community meetings
  - Local radio
  - Newspaper advertisements
  - TV commercials
- Aimed to encourage and support long term changes in energy use behaviour
What did we achieve?

• **powersavvy** has demonstrated the personal, face-to-face approach can achieve outstanding results in changing behaviour to reduce residential energy use.

• In 2011 have taken it to 13 more islands and continuing in 2012-13.

• The sustain phase to begin in 2012
For more info and contacts:  www.powersavvy.com.au

Gaylene Whenmouth, Ergon Energy, Cairns, Queensland, Australia

Come and get a free USB wristband – videos, reports, TVCs
Welcome to powersavvy country

For more information: www.powersavvy.com.au