AIE Event – Smart Meters Explained

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Australian Institute of Energy

DEPARTMENT OF BUSINESS AND INNOVATION

State Government Victoria

2010 AIE Study Scholarship

Traveled to Texas and California for 18 days in late January 2011

- Smart Energy Summit – Austin, Texas
  - Three day conference run by Parks Associates
  - Consumer focused conference

- Distributech - San Diego, California
  - Annual smart grid conference and exhibition over three days
  - 8,000 attendees, 400 exhibiting companies

- Met with US utilities, technology firms and regulators.
  - Los Angeles and Silicon Valley.

Objective

- To investigate how consumers can begin to realise the benefits of smart meters in the short term.
  - Home Energy Management

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Home Energy Management

Energy Company

17,520

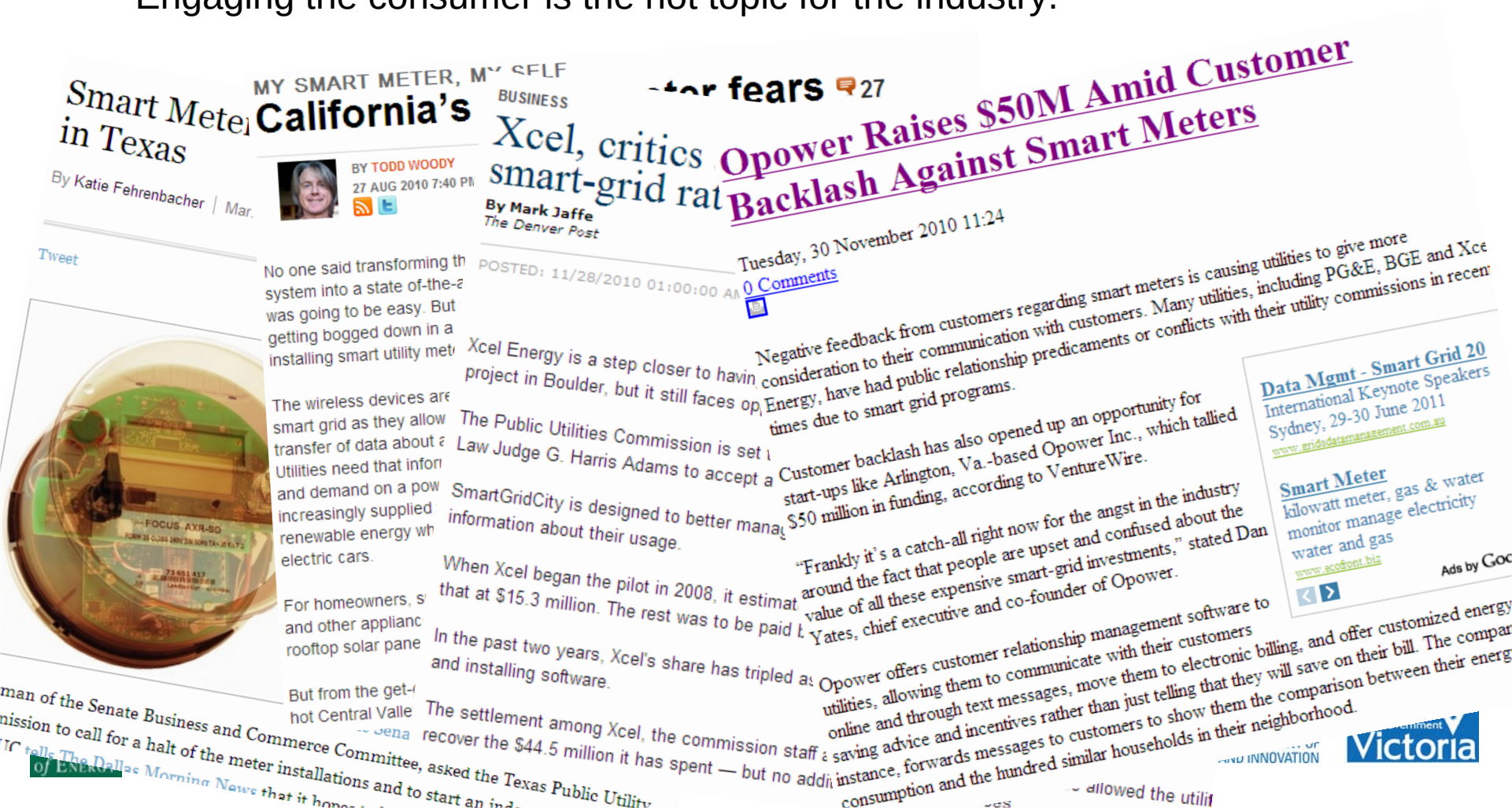
ZigBee® Alliance

Key trends identified

1. Consumer engagement is ***the*** hot topic
2. Home energy management is an emerging market
3. Electricity market competition dictates the drivers and the passage to market
4. There are products and services available now

1. Consumer engagement

- Engaging the consumer is the hot topic for the industry.



2. Emerging Market (a)

- Products and services are still evolving
  - Transition from In-Home Displays to apps and web portals.

- Products and services must be convenient and easy to use…

2. Emerging market (b)

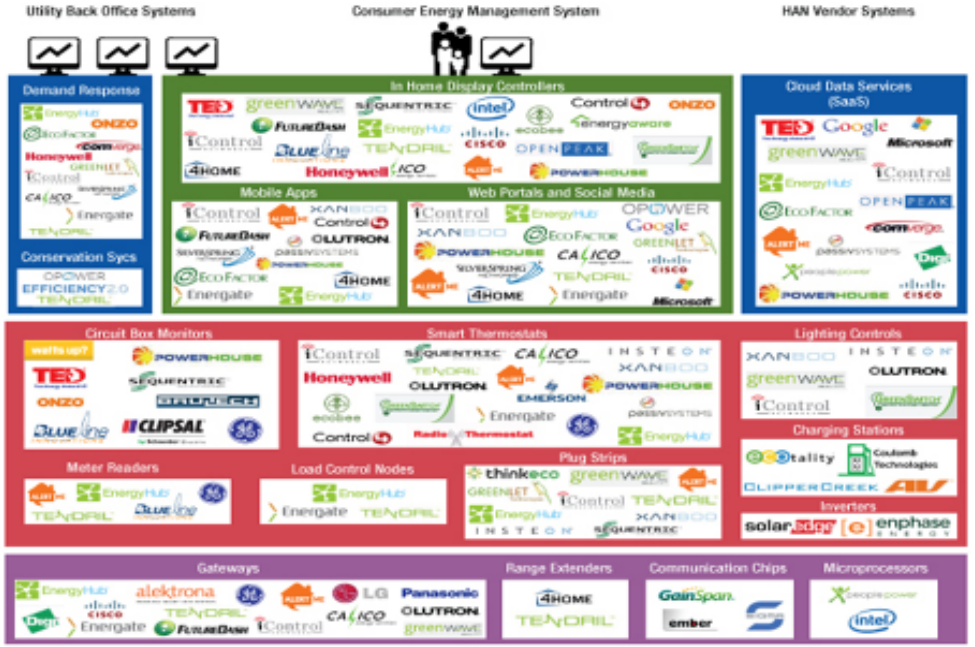
- Standards: **<u>Zigbee Smart Energy Profile 2.0</u>** will allow for interoperability

ZigBee Alliance

HOMEPLUG POWERLINE ALLIANCE

Wi Fi

- Turning meter data into meaningful, actionable information is big business…



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3. Retail electricity competition determines drivers for uptake and passage to market.

- Non competitive retail electricity markets (EG: California)
  - One retail provider of electricity
  - Home energy management is not a priority
  - Main priority is demand response and reducing peak demand
  - Main driver is regulated energy efficiency targets and customer backlash

- Competitive retail electricity markets (EG: Victoria, Texas, UK)
  - Looking at ways to engage their customers and to attract and retain customers
  - Victoria – most competitive retail electricity market in the world
  - Distribution businesses looking at ways to form a relationship with the customer to enable demand response.

4. There are products and services available now

Home Energy Management: 3 Stages

1. Meaningful information, appliance monitoring, web portals, smart phone apps, bill inserts.

2. Smart appliances, demand response.

3. Electric Vehicles, distributed generation, home storage, 3rd party services.

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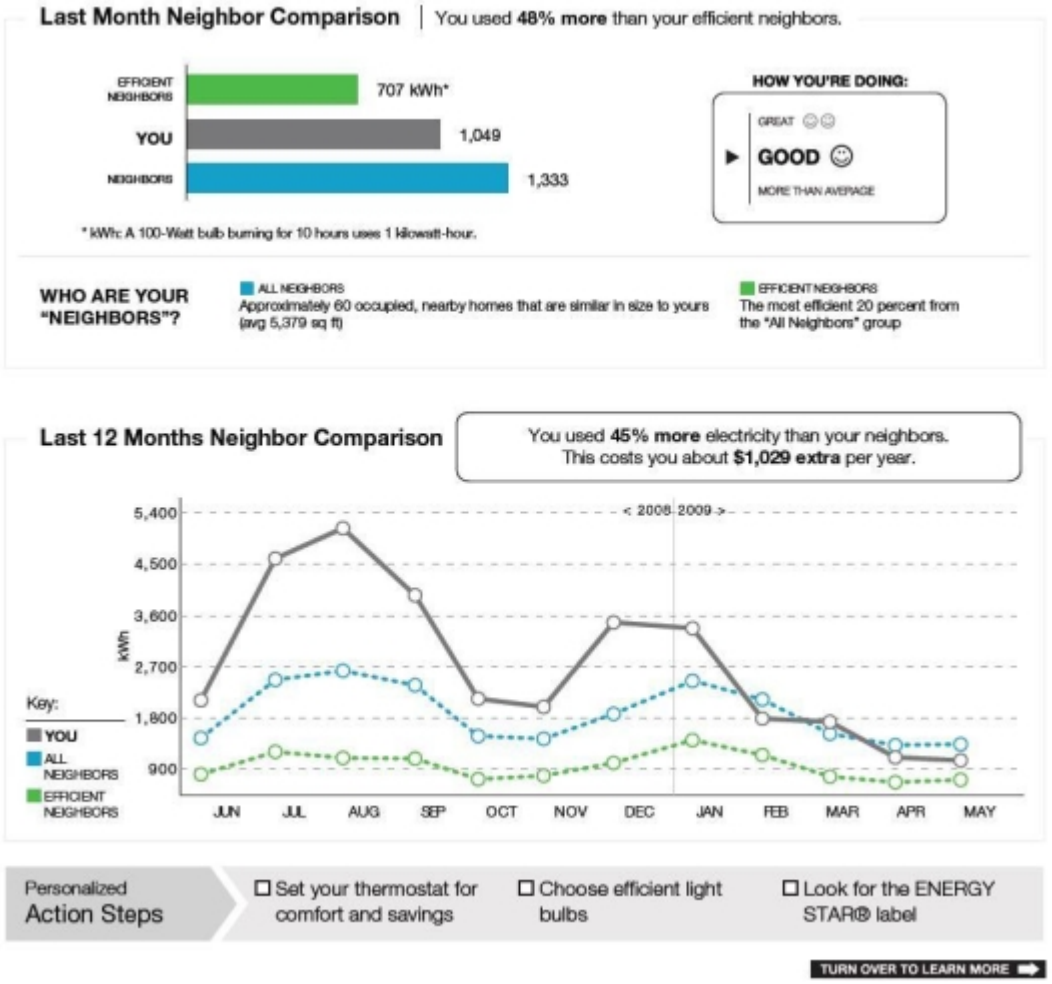
Bill inserts



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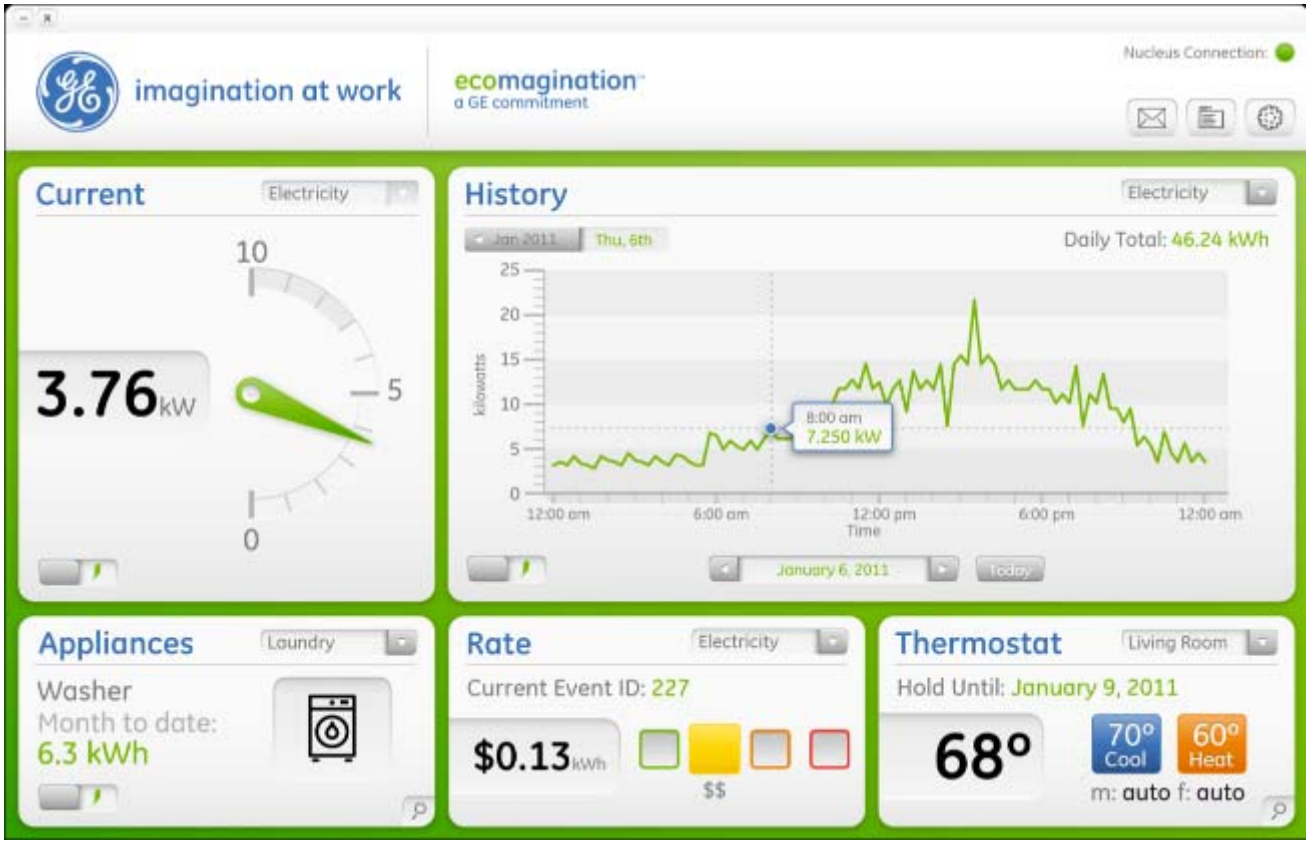
Web portal, smart phone app and appliance monitoring



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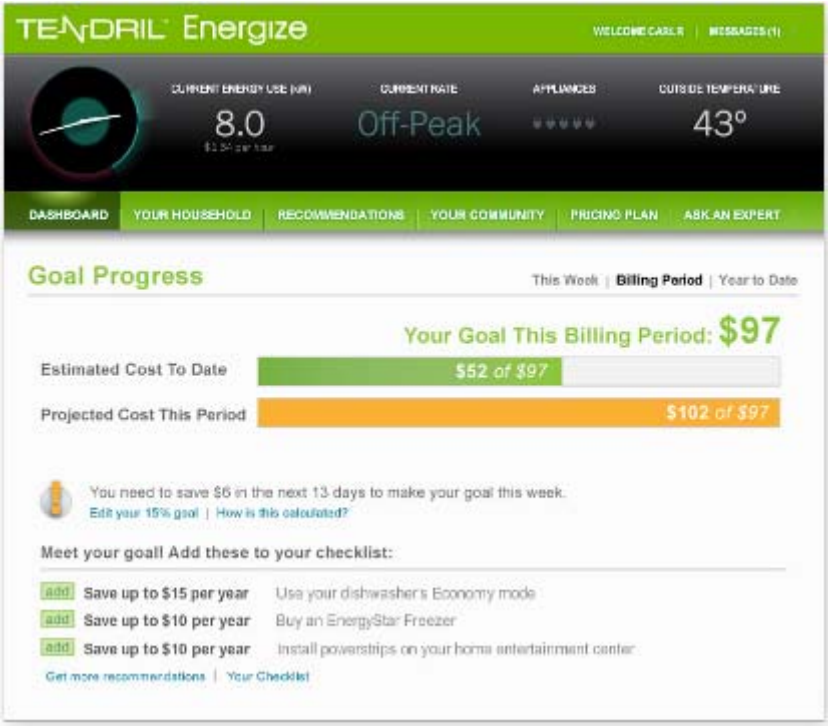
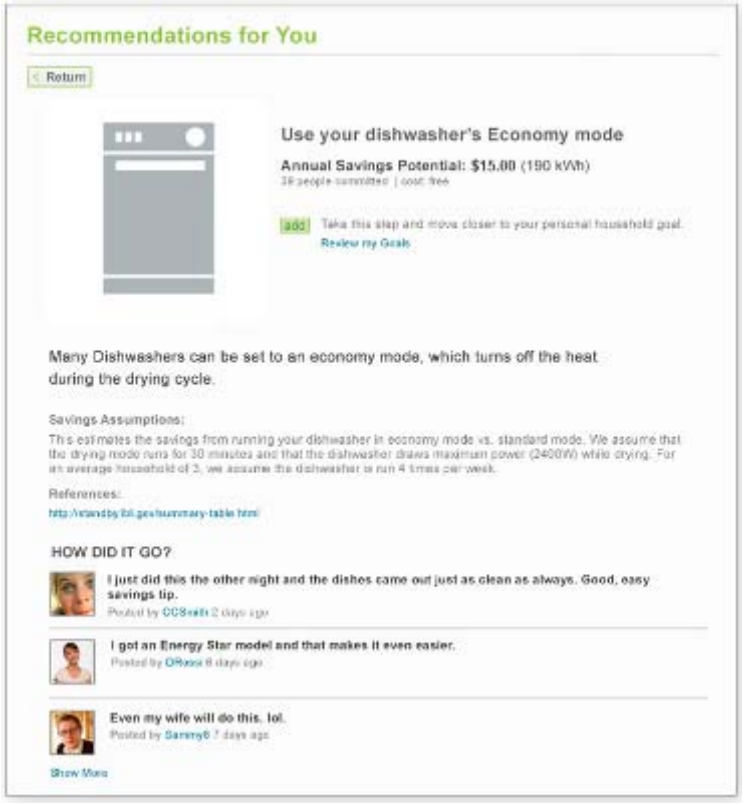
Something for everyone





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Origin and Tendril partnership

TENDRIL™
The Power is Yours

origin energy

ORIGIN ENERGY SELECTS TENDRIL TO DELIVER INNOVATIVE CONSUMER ENGAGEMENT TECHNOLOGY

The Leading Australian Integrated Energy Company to Deploy Tendril Energize Application Suite; Vastly Increases Global Footprint of Tendril Connect Energy Platform

BOULDER, Colo., May 20, 2011 – Tendril, the energy platform company, has been selected by Origin Energy, the leading Australian integrated energy company, to deliver groundbreaking consumer engagement technology to Origin's customer base in Australia.

Origin will deploy Tendril Energize™—an application suite that provides energy service providers with a turnkey solution to deliver simple, easy-to-use tools to engage customers in energy efficiency and accelerate consumer participation in new programs, pricing and active home energy management. The companies will begin a pilot of the service in thousands of Origin customer homes in the second half of 2011 with potential for mass distribution to nearly 5 million households.

"What attracted us to Tendril was its unique combination of leading edge technology and deep commitment to customer outcomes. This focus on customers is what makes Tendril the right partner for Origin," said Phil Craig, general manager – retail, Origin. "We believe our product will be class-leading and are excited to be able to give our customers greater visibility into their household energy use."

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The times, they are a changin’

- The energy industry is implementing the necessary changes in the way we generate and supply electricity. But this comes at a cost…

"You are looking at a doubling of electricity pricing over a six-year period…”
CEO, TRUenergy, May 2011

- Prices will increase and pricing structures will change.

- Meaningful and convenient products and services that help to monitor and manage their energy consumption will have increased appeal.

Thank You

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