NSW Government's commitment to business

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Office of Environment & Heritage
NSW GOVERNMENT
Achieve net-zero emissions by 2050
NSW Climate Change Policy Framework

Office of Environment & Heritage

NSW Climate Change Policy Framework

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Large energy users

Households

Fleet / vehicles

Commercial buildings

NSW GOVERNMENT

Government

Infrastructure

Councils

Energy Services Markets

Appliances

“The NSW Office of Environment and Heritage (OEH) existing voluntary programs, supporting businesses to improve energy management, are generating 170GWh of electricity savings a year, and $33.5m a year in energy savings for all consumers’

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Brace yourselves…

for how the world is changing

01

Apps and smarts

Remote operation

02

Connectivity

Internet of things

03

Information overload

Big data and analytics

04

Electrification

Solar, batteries and electric vehicles

05

Energy security at lowest cost

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energy supply

energy management

energy efficiency

The game is changing…

…and so are the skills required to play it

Both state and federal governments are assessing the future skills that are needed to respond to this disruption.

Would you go to your current mechanic?

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Skills for now and for the future

OEH training

Business skills

energy contract negotiations

identifying and influencing stakeholders

business case development and presentation

finance

Energy skills

energy management

renewable energy

energy efficiency

energy monitoring and data analytics

Technical skills

control and optimisation strategies

Internet of Things

new technology

asset management and upgrades

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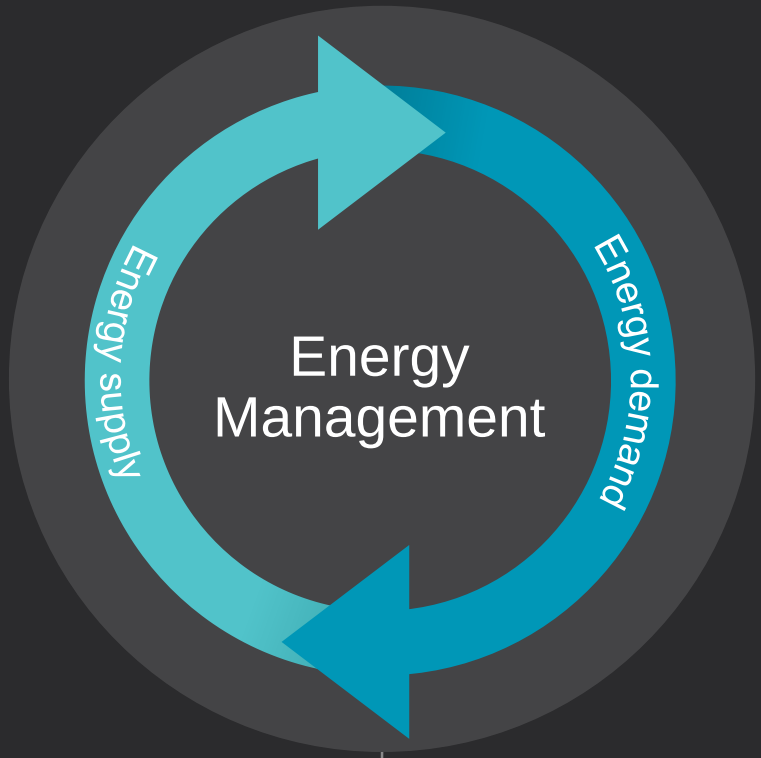
The facility level
or the organisational level



The project level
or the site level

Business skills
Influencing stakeholders and understanding how decisions are made in organisations

Energy skills
The link between data analytics, site energy management and energy efficiency

Technical skills
Optimisation, control and upgrades of systems for increased energy productivity

Results of training program

88% of Building the Business Case attendees are saving $68,122 per year

93% of Introduction to energy management attendees are saving $38,730 per year

78% of Heating, ventilation, air conditioning – introduction attendees are saving $195,630 per year

81% of Heating, ventilation, air conditioning – introduction attendees are saving $92,426 per year

Massive savings when you consider the 2220 total course participants!

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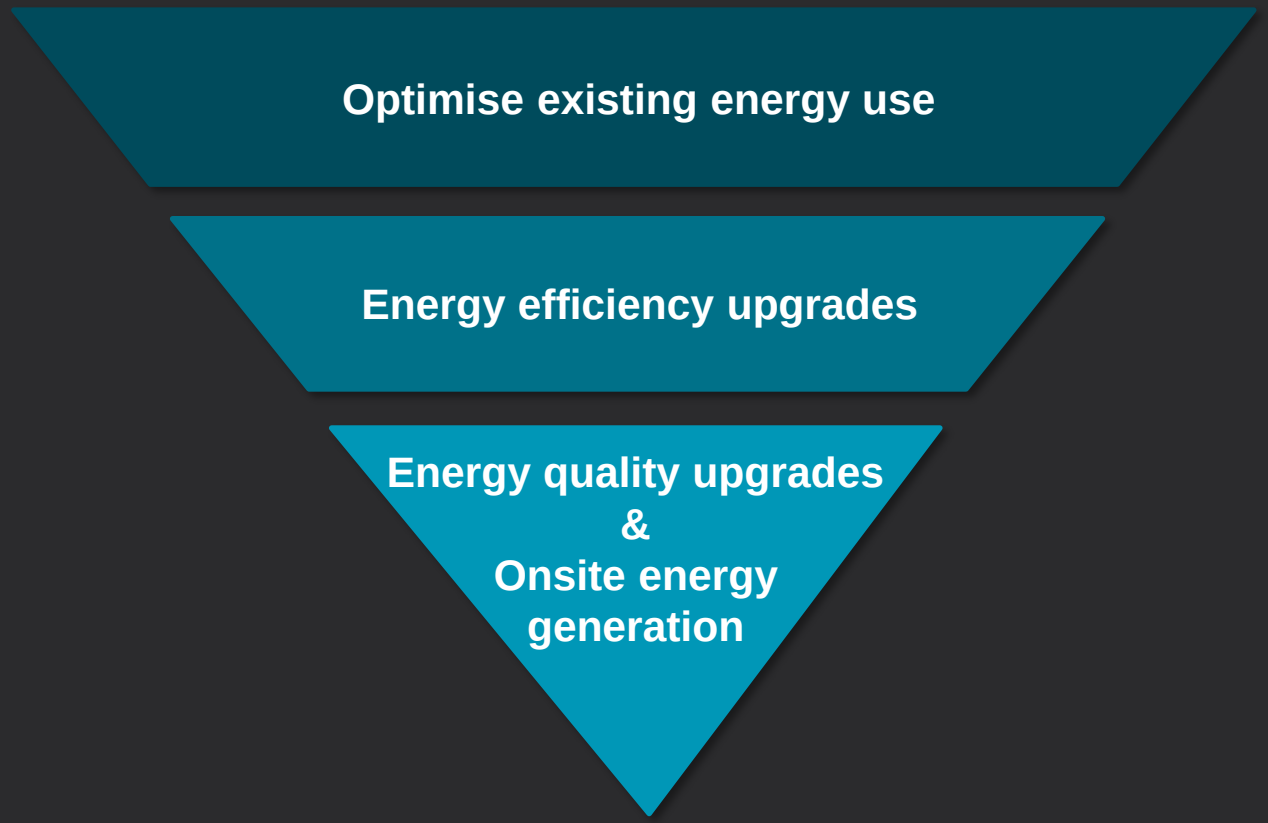
Energy hierarchy



2016 NSW business survey

~60% "will install batteries within 2 years“

Financial expectations are high, and energy usage tariffs are low.

About 40% of businesses said they had no defined investment criteria for batteries at all, and they had other motivations...

Results of battery studies

- 20 year simple payback on average - for a combined PV + battery system (vs 5.6yr payback expectation on average)
  - Proposed system sizes 80kWh average
- Economies of scale are not very pronounced. $/kWh of a 10kWh vs. a 100kWh system appears much the same
  - Off the shelf control systems generally not capable of "smart" battery management
- Utility requirements quite stringent
  - The requirement for a dedicated battery room made physical viability difficult in many instances

Thank you

Please contact me for any further information about OEH's energy management and energy efficiency programs for business.


www.environment.nsw.gov.au/training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