



EMSOL UPDATE DEC 2017

Please feel free to forward this newsletter to your financial controller or others who have an interest in energy savings.



Emsol's December 2017 Update includes four important topics:

1. Training and mentoring for energy management
2. Energy savings achieved by Emsol's clients (incl. carbon savings)
3. The benefits of energy audits (EECA Grant available)
4. Emsol's Energy Performance Services

1. Training and mentoring for energy management

A sizable portion of your low-cost energy savings can be achieved through staff training and awareness. Emsol has helped our clients realise this potential by working closely with site energy teams including mentoring graduates, engineers, and managers.

We have observed cultural changes at a number of sites, after working with our clients for 3 – 4 years. Energy savings have been achieved by staff members diligently switching off unused equipment, immediately reporting and fixing leaks, and initiating many new ideas on how energy performance can be improved.

Staff behaviour can save up to 30% of energy use; this has been demonstrated in equipment and vehicle operating behaviour studies. We have found regular support to the energy team has ensured businesses continue to realise this potential year in and year out.

2. Energy savings achieved by Emsol's clients (incl. carbon savings)

In the past three years, our clients have grown their annual energy savings, collectively, to more than \$2 million (saving more than 20,000 tonnes CO₂e per year).

Successful energy management relies on a logical sequence of events, called the Energy Management Cycle. Each time an organisation completes a cycle, they can expect to achieve further savings.

Some examples of savings projects have been: not over-drying product, optimising refrigeration set-points, using heat recovery from waste streams, employing a smarter configuration of VSDs and compressors, and tuning drying systems.



We have seen businesses that have adopted the full energy management cycle, achieve broad benefits beyond energy savings, such as safer working conditions, improved product quality, and less maintenance. And, of course, energy cost savings can be re-invested elsewhere.



3. The benefits of energy audits (EECA Grants available)

An energy audit is a health check on energy services consumed by your business. There are three levels of audits – Type 1, Type 2 and Type 3, as per AS/NZ 3598:2014 Energy Audits. Emsol is an EECA Programme Partner; they offer grants to help support energy saving initiatives.



- **Type 1, 2, and 3 Energy Audit** 40% grant up to \$20,000 per site

We can provide the correct energy audit so you will understand your energy costs and appropriate investment opportunities. We have found an energy audit usually pays for itself in less than two years. Our clients often advise us after an energy audit “...I knew some of these savings opportunities but didn’t realise how much it was costing us...”

4. Emsol’s Energy Performance Services

“You can’t manage what you don’t measure”. Monitoring and Targeting (M&T) energy use is a key ingredient in achieving energy savings. M&T is the logical low-cost starting point to improve your energy performance.



Accurately reporting energy performance is essential to maintaining an effective energy management programme.

How do you measure energy performance reliably?

Monitoring and reporting gross energy use (or costs) alone will often not reveal true energy performance. Normalising energy use with key influencers, such as production or ambient temperature, is a step in the right direction; however, this alone is not guaranteed to give the full picture.

In order to most accurately assess energy cost savings or overruns, it is best to compare actual energy use against an expected value, derived from your business’ energy-use-baseline. One client recently found energy use had increased 28% more than expected. Analysis against a daily energy baseline and discussion with the site energy team revealed that an air compressor had started being left switched on unnecessarily after hours, increasing energy consumption and run hours on the machine.

Two common methods (used to normalise energy use) include calculating an Energy Use Index (EUI), or producing an energy use baseline (using regression analysis). When key drivers for energy use vary, and coupled with an energy baseload, then a regression analysis is vital.

For further information, please request a copy of Emsol’s three M&T service options.

Seasonal Greetings and Happy New Year

Thank you for your business this year. It has been a pleasure helping you reach your goals, and we look forward to contributing to your success in 2018. We wish you a prosperous and Happy New Year.



Find Out More

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