Unilever Case Study

Cost savings and reduced environmental impact through lower energy and water consumption
Every day around 160 million people in 150 countries will buy a Unilever brand. Unsurprisingly, Unilever’s brands have social and environmental impacts around the world. The multinational is increasingly embedding sustainability thinking its day to day activities.

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A Unilever plant in Ontario, Canada, has an ongoing campaign to improve energy efficiency to help manage rising and unpredictable energy prices. The plant produces margarine and other vegetable oil products – expenditure on energy represents 15% of all production costs. To meet an aggressive goal of reducing energy consumption by at least 6% per year, the plant’s energy team has implemented, and carefully documented, 120 projects since 1999, saving more than $4.2m in costs (based on 2006 prices), and avoiding about 23,000 tonnes of greenhouse gases.

By 2003, the energy team had exhausted many of the more obvious ways for reducing energy consumption, so needed to find more innovative ways to meet the ongoing goal of 6% reductions per year. One of the solutions was to invest in new technology – a reverse osmosis (RO) system that would enable significant, measurable improvements in the efficiency of the steam plant operations.

In the first year of operation, Unilever calculated that the project would lead to net savings of $378,166 (based on 2006 prices), even after accounting for the full cost of operating and maintaining the RO system. It is expected that the technology will pay for itself in less than 16 months.

By converting to the RO system, the plant is consuming 13 million gallons less municipal water, with an associated cost saving of $68,000; and 8% less natural gas, saving $299,000. The plant is also saving nearly $25,000 in boiler and softening chemicals, releasing 240,000 less pounds of chemicals into the sanitary sewer. As a result of consuming fewer chemicals, the environmental impact of producing and transporting them was reduced too. There were other benefits, such as savings in labour and storage costs and less back breaking work for employees.

The RO system qualified the plant for a $50,000 incentive grant from the city of Toronto for decreased water consumption and a $14,000 incentive grant from the local gas utility. According to Unilever, the project was ‘easily justified by the direct financial benefit to Unilever, but we are also proud of the environmental benefits.’ The project has lead to the company reducing carbon dioxide emissions by 1.6 million tonnes as well as cutting other greenhouse gases.

Source: Adapted from a GE case study GE’s RO system helps Unilever reduce water, natural gas consumption and chemical usage

Read CIMA’s latest report *Accounting for Climate Change* at [www.cimaglobal.com/sustainability](http://www.cimaglobal.com/sustainability)

The report includes case studies from other organisations and looks at how management accountants, their skills and their tools can provide business intelligence to support strategy and influence decision making, driving their organisations to mitigate and adapt to climate change. If you are interested in sharing your own insights and experiences in this area, we would be delighted to hear from you. Please email us at research@cimaglobal.com

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