

# Reducing liquid waste through cleaner production

**Cleaner production can reduce the volume and toxicity of liquid waste generated by your business. It can increase profits, improve product quality and lift employee morale and safety. This fact sheet will help you implement cleaner production principles and practices in your business.**

## **Cleaner production and your business**

Cleaner production involves improving the environmental and economic efficiency of production processes, products and services. Examples of cleaner production practices that can be explored by your businesses include:

- reusing or recycling liquid waste on-site and making these processes a part of your business
- reducing or reusing packaging
- using alternative, less toxic materials by working with suppliers
- reducing the use of energy, water and other natural resources in production processes, thus improving operational efficiency and reducing production costs
- reducing the volume of liquid waste generated by, for example, installing water saving devices.

## **How cleaner production can benefit your business**

Cleaner production can reduce costs associated with managing liquid waste and material losses thereby boosting profits. Some of the economic benefits that can result are:

- reduced costs of treating and disposing of liquid waste
- reduced quantities of raw materials purchased
- reduced hours of labour and equipment downtime
- reduced water and energy consumption.

In addition to cost savings, cleaner production can also enhance corporate image and community relations, thus enhancing competitiveness and business opportunities. It can also lift staff morale, which can increase productivity.

## **Opportunities to consider for your business**

Consider the following cleaner production actions:

- To identify inefficiencies in your business, monitor production processes, the use of raw materials, the energy that is used, and the amount of waste that is generated.
- Explore equipment modifications, better process control and the use of alternative materials. For example, by modifying cleaning methods to use less water and energy.
- Explore alternative technologies – some new technologies can reduce the quantity of liquid waste that would require disposal. This can result in significant cost savings.
- Examine whether waste products can be recovered and reused in processes on-site or used as raw materials by other industries.
- Review housekeeping, for example, by regular maintenance and prompt repairs to equipment.

## Where to start ...

- ❑ Always look out for small opportunities—these can be easily found, particularly by those who know the business or work on the shop floor. You can start by aiming to reduce waste at its source.
- ❑ Tackle the simple things first and prove that cleaner production will benefit the company. By doing this you will gain support for other initiatives.
- ❑ Understand your process: where do waste materials flow to, where is waste generated?
- ❑ Communicate and 'sell' what you are doing, both to company management and staff. Gain management support and make it clear you value staff involvement.

- ❑ Team up with another cleaner production champion in your industry for support.
- ❑ Join an industry group to share ideas, solve common problems and keep you motivated.

## Tools for exploring and implementing cleaner production

A self-help tool developed by the Department of Environment and Conservation (DEC) can help your business identify cleaner production opportunities and implement cost effective measures. This tool is available from the DEC website at [www.environment.nsw.gov.au/resources/selfhelptool.htm](http://www.environment.nsw.gov.au/resources/selfhelptool.htm)

There are many tools and resources to help businesses implement cleaner production practices. Below is a list of resources that your business may find useful.

### Cleaner production resources

[www.environment.nsw.gov.au/cleaner\\_production/index.htm](http://www.environment.nsw.gov.au/cleaner_production/index.htm)  
[www.sydneywater.com.au/OurSystemsAndOperations/Tradewaste/CleanerProduction.cfm](http://www.sydneywater.com.au/OurSystemsAndOperations/Tradewaste/CleanerProduction.cfm)  
[www.deh.gov.au/settlements/industry/corporate/eecp/index.html](http://www.deh.gov.au/settlements/industry/corporate/eecp/index.html)  
[www.envirowise.co.uk](http://www.envirowise.co.uk)  
[www.elsevier.com/locate/jclepro](http://www.elsevier.com/locate/jclepro)  
[www.uneptie.org/pc/cp/understanding\\_cp/home.htm](http://www.uneptie.org/pc/cp/understanding_cp/home.htm)  
[www.chinacp.com/eng/cplinks/cplinks.html](http://www.chinacp.com/eng/cplinks/cplinks.html)  
[www.bsdglobal.com/tools/bt\\_cp.asp](http://www.bsdglobal.com/tools/bt_cp.asp)  
[www.1000ventures.com/environment/cleaner\\_production\\_main.html](http://www.1000ventures.com/environment/cleaner_production_main.html)  
[www.encapfrica.org/MSE\\_CP\\_Course\\_Nam/mod%20/2.1slides\\_final.PPT](http://www.encapfrica.org/MSE_CP_Course_Nam/mod%20/2.1slides_final.PPT)  
[www.dtsc.ca.gov/PollutionPrevention/sb14-compliance-checklist.pdf](http://www.dtsc.ca.gov/PollutionPrevention/sb14-compliance-checklist.pdf)

### Case studies (Australian)

[www.environment.nsw.gov.au/cleaner\\_production/ipccasestudies.htm](http://www.environment.nsw.gov.au/cleaner_production/ipccasestudies.htm)  
[www.deh.gov.au/settlements/industry/corporate/eecp/industry.html](http://www.deh.gov.au/settlements/industry/corporate/eecp/industry.html)  
[www.geosp.uq.edu.au/emc/CP/xcase\\_studies.htm](http://www.geosp.uq.edu.au/emc/CP/xcase_studies.htm)  
[www.epa.sa.gov.au/casestudies.html](http://www.epa.sa.gov.au/casestudies.html)

[www.cleanerproduction.curtin.edu.au/cecp/ecpcasestudyhome.htm](http://www.cleanerproduction.curtin.edu.au/cecp/ecpcasestudyhome.htm)  
[www.sustainability.dpc.wa.gov.au/CaseStudies/cleanerproduction/cleanerproduction.htm](http://www.sustainability.dpc.wa.gov.au/CaseStudies/cleanerproduction/cleanerproduction.htm)  
[www.epa.vic.gov.au/Business\\_Sustainability/industry.asp](http://www.epa.vic.gov.au/Business_Sustainability/industry.asp)  
[www.epa.qld.gov.au/environmental\\_management/sustainability/industry/case\\_studies/](http://www.epa.qld.gov.au/environmental_management/sustainability/industry/case_studies/)

### Case studies (International)

[www.p2gems.org](http://www.p2gems.org)  
[www.emcentre.com/unepweb/](http://www.emcentre.com/unepweb/)  
<http://es.epa.gov/cooperative/international/>  
[www.cleanerproduction.com/sectors/sectors.htm](http://www.cleanerproduction.com/sectors/sectors.htm)  
[www.businesscare.org.nz/casestudies/index.asp](http://www.businesscare.org.nz/casestudies/index.asp)  
[www.unido.org/NCPC/ReportTexts/NCPC00003016.pdf](http://www.unido.org/NCPC/ReportTexts/NCPC00003016.pdf)  
[www.chinacp.com/eng/cplinks/caselinks.html](http://www.chinacp.com/eng/cplinks/caselinks.html)  
[www.dtsc.ca.gov/PollutionPrevention/Altn-adh-techn-uph-furn-case-stdy.pdf](http://www.dtsc.ca.gov/PollutionPrevention/Altn-adh-techn-uph-furn-case-stdy.pdf)  
[www.pprc.org/cpc/CONTENTS/CASESTUD/CaseStudyHome.htm](http://www.pprc.org/cpc/CONTENTS/CASESTUD/CaseStudyHome.htm)  
[www.waitakere.govt.nz/AbtCit/ec/clnprod/cpprogram.asp?printable=true#case](http://www.waitakere.govt.nz/AbtCit/ec/clnprod/cpprogram.asp?printable=true#case)  
[www.waste.eionet.eu.int/wastebase/prevention](http://www.waste.eionet.eu.int/wastebase/prevention)  
[www.greenprofit.net/cases.html](http://www.greenprofit.net/cases.html)  
[www.p2pays.org/main/case.asp](http://www.p2pays.org/main/case.asp)

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