



EREP GUIDELINES

Environment & Resource Efficiency Plans

Guidelines: Environment & Resource Efficiency Plans

EPA Victoria

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Note

These guidelines are intended to assist businesses in complying with the Environment and Resource Efficiency Plans (EREP) program. They do not replace or modify any of the requirements of the *Environment Protection Act 1970* or the *Environment Protection (Environment and Resource Efficiency Plans) Regulations 2007*.

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INTRODUCTION

What is the EREP program?

The Environment and Resource Efficiency Plan (EREP) program requires the largest commercial users of energy and water to identify and implement actions that reduce energy and water use and minimise waste. Importantly, efficiency actions will also save businesses money. Under this new regulatory program, from 1 January 2008 EPA requires Victoria's largest energy and water users to:

- assess their energy and water use, and waste generation at their site(s)
- develop an EREP that includes actions with a three year or better payback to reduce energy and water use and waste production
- implement the actions in the approved EREP
- report on implementation progress.

Your site is required to participate in the EREP program if, in a trigger year, the site's resource use exceeds the following thresholds:

- 100 terajoules (TJ) of energy per year

or

- 120 megalitres (ML) of water per year.

Addressing all three resource streams (energy, water and waste) in your EREP is a key feature of the program. Focusing on overall resource efficiency increases the chances of identifying actions with benefits across more than one resource stream. It allows decision makers to identify any potential conflicts and make decisions with full knowledge of any trade-offs. This approach means that a broader range of cost savings can be included in payback calculations, often making more projects financially viable.

If your site is used primarily for residential housing and primary production, you are not required to participate in the program (with the exception of sites used for intensive agriculture and the processing of agricultural produce). More information on exclusions and exemptions can be found in Sections 1.1 and 1.5 of these guidelines.

See Figure 1 for the steps in the process of producing an Environment and Resource Efficiency Plan.

Purpose of the guidelines

The statutory requirements for the EREP program are set out in the *Environment Protection Act 1970* and the *Environment Protection (Environment and Resource Efficiency Plans) Regulations 2007*.

These guidelines provide advice to sites that are required to participate in the EREP program. The guidelines do not replace or modify any of the requirements in the Act or Regulations but are designed to provide a simple-to-follow explanation of how to meet your obligations under the Act and Regulations. To support program participants, an EREP Toolkit that provides more specific guidance to assist sites in preparing their EREP is available at www.epa.vic.gov.au/erep (see Appendix 1). Specific terms are explained in the glossary found in Appendix 2.

The guidelines also indicate the assistance EPA can provide to businesses to help you gain the most value out of your involvement in the program.

Voluntary participation in the EREP program

While the EREP program is a requirement for all large energy and water users who trigger one of the resource use thresholds, some businesses have asked EPA if they can use the EREP framework on a voluntary basis. These businesses are seeking to voluntarily use the EREP framework to generate financial and environmental savings by more efficiently managing their resource use. EPA encourages businesses to consider voluntary participation in the EREP program. This can be done by either making use of the support resources available on the EPA website (www.epa.vic.gov.au/erep) or by contacting the EREP team to access the online reporting system and tools.

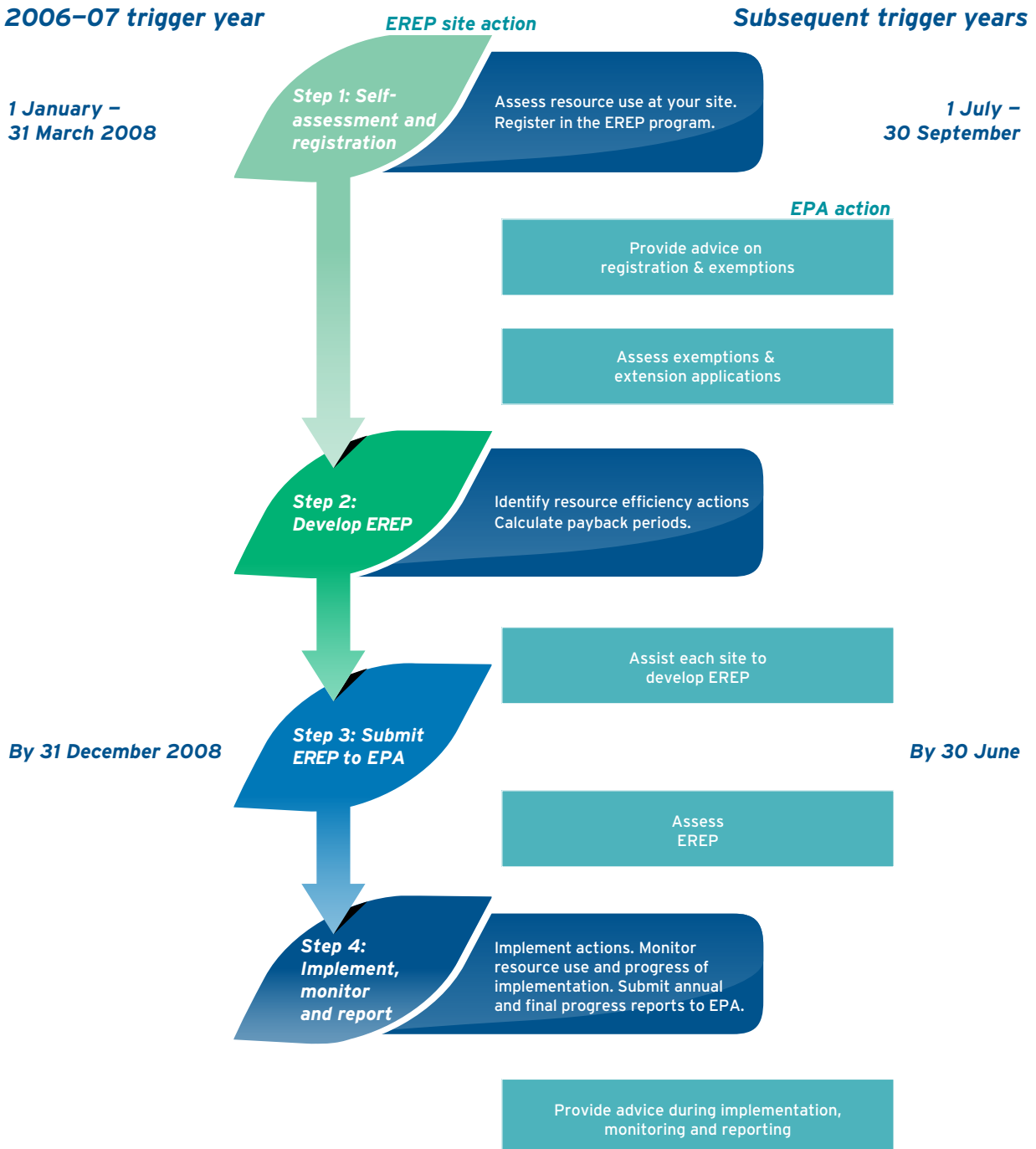


Figure 1: Steps in the EREP program

STEP 1: SELF-ASSESSMENT, REGISTRATION, EXTENSIONS AND EXEMPTIONS

WHAT YOU NEED TO DO	HOW EPA CAN HELP
Calculate your resource use	<ul style="list-style-type: none"> • Online Self-Assessment Tool
Register for the program	<ul style="list-style-type: none"> • Online registration system • User instructions • EREP Guidelines • Individual site advice • Information sessions
Apply for an extension (if applicable)	<p><i>Before submitting application</i></p> <ul style="list-style-type: none"> • Discuss your individual situation with us to help decide if an extension is relevant <p><i>After submitting application</i></p> <ul style="list-style-type: none"> • We will assess your application and advise you of the outcome
Apply for an exemption (if applicable)	<p><i>Before submitting application</i></p> <p>We will provide phone support, information sessions and meetings with individual sites to help you work out:</p> <ul style="list-style-type: none"> • which exemption options are suited to your site • how the EREP program can best recognise and build on any existing work • what you should include in your application <p><i>After submitting application</i></p> <ul style="list-style-type: none"> • we will assess your application and advise you of the outcome

1.1 Does my site need to participate in the EREP program?

All commercial and industrial sites in Victoria that use more than 100 terajoules (TJ) of energy or 120 megalitres (ML) of water in a financial year (from 2006–07 onwards) are required to register with EPA. You will need to carry out a self-assessment to determine if your site triggers either of these resource use thresholds.

Sites primarily used for primary production (excluding intensive agriculture) or residential housing are not involved in the EREP program and do **not** need to register.

Primary production is defined as agriculture, apiculture, aquaculture, forestry or horticulture but not the processing of agricultural produce, or intensive livestock production. For example, piggeries, cattle feedlots and poultry farms that trigger the thresholds must participate in the EREP program.

1.1.1 Self-assessing energy and water use

EPA has developed an online self-assessment tool that will help you calculate your resource use. The tool will help you to:

- include all the necessary energy and water sources
- convert other energy sources into terajoules (TJ)
- figure out if you need to register for the program

Potential sources of this data include:

- energy bills from energy retailers and suppliers
- water bills from water retailers and suppliers
- on-site energy, water and waste metering information, where available
- waste disposal bills
- trade waste discharge records
- databases used for internal resource tracking and business management.

The online EREP system (www.epa.vic.gov.au/erep) allows you to self assess your water and energy use to calculate whether your site triggers either of the resource use thresholds. If your site's energy or water use triggers either threshold, you must register for the EREP program.

Appendix 3 details which sources of energy and water need to be included in your threshold calculations.

1.2 When do I need to register?

If your site triggered thresholds in any financial year, you will need to register in the EREP program within three months after the end of that financial year. For example, if your site triggered a threshold for the first time in 2007–08, you need to register by 30 September 2008.

1.3 How do I register?

Once you have carried out your self-assessment of resource use and established that you must participate in the EREP program, you are ready to register with EPA.

EPA has developed an online registration system to assist you in registering for the EREP program. The system can be accessed at www.epa.vic.gov.au/erep and User instructions for EREP registration and self-assessment are also available on the website.

The information you will need to provide in your registration includes:

- company and site details
- site and senior management contact details
- resource use information.

Appendix 4 provides the full list of registration information requirements.

If your company has multiple sites that trigger the energy or water thresholds for registration, the online system also allows you to include all these sites in a single registration.

1.4 What information will EPA make public?

The information that you supply at registration will enable EPA to contact you about the program and will also contribute to the development of the program's public register of scheduled activities.

Throughout the EREP program EPA will maintain a public register of scheduled activities. This register will list the EREP participants and will include:

- company name
- site location (suburb/town)
- resource use thresholds triggered (energy and/or water) but not actual usage data.

EPA will not publish commercially sensitive information such as site specific resource use and waste data, plans and annual reports.

EPA will make public aggregated reports about compliance and performance under the program and, in partnership with some participants, prepare case studies about achievements under the program.

1.5 What if I am already involved in another program to reduce energy, water or waste?

One of the most important aspects of the EREP program is that it has been specifically designed to avoid duplication of work.

Many sites involved in EREP will already be identifying ways to improve resource efficiency through voluntary action and by participating in other resource efficiency programs. It is important that your EREP builds on this existing work and avoids duplication of effort. The EREP program allows you to achieve this through seeking exemptions for existing plans or by including and building on your existing work in developing your EREP.

Partial or complete exemptions from the need to prepare a plan are available for sites that have an existing plan that meets the requirements of the program (partial and complete exemptions are

explained in more detail under section 1.5.3). If granted an exemption your existing plan will have the same legal status as an EREP in terms of implementation and reporting.

Alternatively, you can choose to include current or previous resource efficiency work in developing your EREP and submit it as part of your plan. This may be preferable if your action plan is based on a limited site assessment (eg site walk through) and requires more detailed metering etc. or includes actions that require further investigation.

If you have an existing resource efficiency action plan (or similar) you are encouraged to contact EPA to discuss the best way to use this work to help meet your EREP obligations. Examples of related programs are included in Appendix 5.

Any application for a complete or partial exemption needs to be made during the program registration period. EPA will make a decision on your exemption application within four months of accepting your application.

1.6 What types of exemptions are available?

There are a number of situations where sites may be eligible for complete or partial exemptions from the EREP program or the need to prepare an EREP. Before applying for any exemption you should discuss your individual situation with EPA.

EPA is particularly interested in helping businesses build on their existing work and avoid duplication of effort.

The types of exemptions available are:

- Abnormally high resource use
- Change of activities or site closure
- Existing resource efficiency work and alternative plans
- Resource efficiency actions under works approval

1.6.1 Abnormally high resource use

You may apply to EPA to be exempt from the EREP program if, during the trigger year, your site used abnormally high resources, but would normally use amounts below the thresholds.

To apply for an exemption for abnormally high resource use, your application must include:

- a description of site activities
- evidence of the site's energy and/or water use for the trigger year and the preceding two years
- information that demonstrates why resource use was abnormally high during the trigger year (for example, plant commissioning).

Before applying for an exemption under this category please contact EPA to discuss your individual situation. EPA will also be able to advise on additional supporting documentation that may assist your application.

1.6.2 Change of activities or site closure

You may apply to EPA to be exempt from the EREP program, if activity at your site will cease or reduce resource use below thresholds within 24 months of the trigger year (such as site closure or reduced production capacity).

To apply for such an exemption, your application should include:

- a description of site activities
- information that demonstrates why activities will cease or reduce resource use below thresholds within 24 months (e.g., explanation of commercial changes such as plant closure)
- the timing of when resource use is expected to drop below the threshold.

Before applying for an exemption under this category please contact EPA to discuss your individual situation. EPA will also be able to advise on additional supporting documentation that may assist your application.

1.6.3 Existing resource efficiency work and alternative plans

The EREP program allows for partial or complete exemptions from the need to prepare a plan for sites that have an existing resource efficiency plan that meets the requirements of the program.

Partial exemptions from the need to prepare an EREP are available for sites that have a good quality action plan targeting at least one resource stream (i.e. energy, water or waste). For example, if you have a waterMAP you may be eligible for a partial exemption and you would only need to focus on identifying energy and waste efficiency actions to complete your EREP.

Typically, an action plan that is eligible for a partial exemption would be based on a detailed site assessment and include the following EREP requirements:

- resource use and/or waste generation baseline data
- description of major resource-using and/or waste-generating activities
- resource efficiency indicators
- actions to improve resource efficiency
- audit or assessment report (documentation to justify actions in the plan)
- resource costs, expected cost savings and payback calculations
- timeframes for implementation
- sign off by senior management.

To meet EREP requirements, payback calculations should be up to date and include whole of business costs and savings on things such as energy, water, waste, maintenance and labour. Further information on payback calculations can be found in section 2.8.

Complete exemptions will only be available to sites that already have an action plan in place that will deliver reductions across energy, water and waste that are equivalent to the reductions an EREP would be expected to achieve for that site. For a complete exemption, the existing plan must be consistent with the requirements of an EREP.

1.6.4 Resource efficiency actions under works approvals

Under the *Environment Protection Act 1970*, a works approval is required when a scheduled premises undertakes construction works that will result in discharges of waste to the environment or an alteration in their existing discharge to the environment.

Sites that are subject to works approval (either new sites or sites that are significantly altering their operations) can apply for an exemption from the requirement to prepare an EREP for up to five years from when the exemption is granted.

This exemption is designed to support businesses that investigate resource efficiency opportunities in designing their sites.

To be eligible for an exemption based on works approval, the works approval should:

- have been applied for after the EREP Regulations came into effect (1 January 2008)
- apply to the activities that comprise at least 80 per cent of the energy and/or water use at the site (whichever triggered the resource use threshold)
- assess resource efficiency opportunities consistent with EREP requirements
- demonstrate that the plant and/or equipment that was subject to works approval are operating at best practice
- include the relevant works approval number in the exemption application.

If your site is subject to a works approval that does not meet these criteria, any resource efficiency actions undertaken or planned through that works approval may be used in developing your EREP.

1.6.5 What if my activities don't fit one of the exemption categories?

If the circumstances on your site don't fit one of the categories listed above you are encouraged to contact EPA to discuss your situation and the relationship to EREP.

For example, many companies have developed innovative sustainability programs that are tailored to their business needs. EPA recognises that these programs may not follow the generic EREP process but may be achieving comparable or better environmental and economic outcomes. EPA will work with these companies to support their existing programs and help them demonstrate they are meeting EREP requirements.

EPA may issue a class exemption to projects that can demonstrate that they are addressing resource efficiency during planning and design phases. For example, temporary construction activities that meet EPA conditions are exempt from complying with the EREP Regulations.

More information on exemptions is available at www.epa.vic.gov.au/erep.

1.7 Do I need an exemption to include existing work in my EREP?

EPA encourages participants to build on existing work when developing their EREP rather than duplicating effort. For some sites it may be better to simply include previous work in your EREP rather than apply for an exemption. For example, if you have a waterMAP that is based on a limited site assessment or identifies actions that require further investigation, you may want to build on this work over the next year and submit it as part of your EREP. If you have already undertaken resource efficiency work, you are encouraged to talk to EPA about how the EREP program can support your initiatives.

Module 3 of the EREP toolkit also provides information about how previous work can be utilised when conducting a resource efficiency site assessment.

1.8 Can I get an extension on the time to submit my EREP?

In exceptional circumstances, smaller energy and water users may be eligible for an extension of up to 12 months to submit their EREP. To be eligible for an extension, your site's resource use must trigger participation in EREP, but your water use must have been below 150 megalitres and energy use below 250 terajoules. Before applying, you should talk to EPA about the circumstances at your site that might warrant an extension. You will need to provide reasons that prevent your site from submitting an EREP by the deadline. Sites must still register for the program during the registration period and any extension application needs to be made during this time.

EPA will advise you if your application has been successful and the duration of any extension granted.

1.9 When does my participation in the EREP program end?

In your EREP you will specify the duration of your plan, which will be up to seven years (the life of the EREP Regulations). Usually, a site will schedule the implementation of their actions over a number of years. Once you have implemented your actions and provided EPA with a final performance report (see section 4.6) you are not required to develop another EREP.

You are no longer required to be part of the EREP program if you can demonstrate that your site uses less than 100 TJ of energy and 120 ML of water for three consecutive years after the financial year in which you triggered the resource use threshold.

You can also apply to have your EREP revoked if you can demonstrate that the operations constituting the scheduled activity at your site will cease within 24 months of the year in which you trigger a resource use threshold. EPA may revoke your EREP if satisfied that the activity will cease.

STEP 2: DEVELOPING A PLAN

WHAT YOU NEED TO DO	HOW EPA CAN HELP
Develop an EREP	<ul style="list-style-type: none"> • EREP toolkit • Workshops • Individual site advice

HOW TO DEVELOP AN EREP	TOOLS FROM EPA
<ul style="list-style-type: none"> • Establish your resource use and waste generation profile 	EREP toolkit <ul style="list-style-type: none"> • Module 3 <i>Resource efficiency site assessment procedure</i>
<ul style="list-style-type: none"> • Develop resource efficiency indicators 	EREP toolkit <ul style="list-style-type: none"> • Module 2 <i>A management systems approach to resource efficiency</i> • Module 3 <i>Resource efficiency site assessment procedure</i> • Industry benchmarks/standards
<ul style="list-style-type: none"> • Assess resource-using and waste-generating activities 	EREP toolkit <ul style="list-style-type: none"> • Module 2 <i>A management systems approach to resource efficiency</i> • Module 3 <i>Resource efficiency site assessment procedure</i>
<ul style="list-style-type: none"> • Identify opportunities and prioritise efficiency actions 	EREP toolkit <ul style="list-style-type: none"> • Module 2 <i>A management systems approach to resource efficiency</i> • Module 3 <i>Resource efficiency site assessment procedure</i>
<ul style="list-style-type: none"> • Calculate payback periods for efficiency actions 	EREP toolkit <ul style="list-style-type: none"> • Module 4 <i>Calculating payback periods</i>

2.1 What must be included in an EREP?

An EREP must consist of a list of actions, the associated costs and savings, and your site's proposed implementation and monitoring schedules. As with registration, preparing and submitting your EREP will be possible through the EREP online system (www.epa.vic.gov.au/erep).

The full details of the information that must be included in your EREP are set out in Appendix 6. In summary, your EREP needs to include:

- resource use and waste generation baseline data
- description of major resource-using/waste-generating activities
- description of proposed resource efficiency actions
- expected resource efficiency outcomes associated with each action
- costs of implementing each action
- expected savings from implementing each action
- payback periods for each action
- implementation time frame for each action and period of time that the EREP will operate
- person responsible for implementation of each action
- monitoring, reporting and review procedures
- documentation that demonstrates that the adopted list of actions are appropriate (eg. assessment report).

You should also include actions with a greater than 3 year payback period in your EREP. It is important to document these actions as resource prices and technology costs are likely to change over the life of your EREP and this will change the financial viability of many actions over time. Also, EPA may be able to assist in identifying potential funding opportunities for these actions.

2.2 Who should be involved in developing my EREP?

An EREP requires a thorough assessment of energy, water and waste reduction opportunities and should be prepared by a team with the necessary qualifications and expertise. Each company participating in the EREP program will have its own approach to developing resource efficiency planning.

Based on EPA's previous work with businesses, many have suggested that they obtain maximum value from environmental management when a range of people from across the organisation, supported by externally sourced expertise where necessary, are involved in generating ideas and identifying opportunities. Ideally, this would include people with expertise in:

- energy, water and waste management
- financial management
- technology knowledge
- process knowledge
- people management
- business management
- strategic organisational development.

Modules 2 and 3 of the EREP toolkit provide guidance on using a management system's approach to resource efficiency. A checklist of what your EREP must include is detailed in Appendix 6.

2.3 What do I need to include in my site's resource use and waste generation baseline data?

For your EREP you will need to assess all energy and water sources used at your site and all types of liquid and solid wastes generated. Appendix 6 provides details of the energy, water and waste sources that need to be quantified in your EREP.

Potential sources of this data include:

- energy bills from energy retailers and suppliers
- water bills from water retailers and suppliers
- on-site energy, water and waste metering information, where available
- waste disposal bills
- trade waste discharge records
- existing databases used for internal resource tracking and business management.

2.3.1 Data gaps, assumptions and anomalies

You may need to make some assumptions or estimates during your data collection and analysis due to a lack of on-site resource monitoring systems. Documenting assumptions will enable you to understand the uncertainty associated with your data, as well as provide a basis for improving data collection into the future. All assumptions made during data collection and in establishing your baseline should be documented in your EREP including, where appropriate, an explanation of how these will be addressed over time.

To establish your resource use baseline data, you can build on the financial year data you compiled when registering for the program. The baseline data needs to reflect current resource use and waste generation at your site. This will provide a basis for tracking the efficiency gains you achieve throughout the EREP program.

The baseline data required includes:

- energy use data, by fuel type
- water use data, by source
- waste generation data, by waste type.

Your baseline data must be based on at least a 12 month data set, covering a period that best reflects your current operations. In order to highlight any trends in resource use and waste generation at your site, you should establish baseline data for a 24 month period, where this is available.

2.3.2 Deviation from typical resource use

If you believe that your baseline data does not represent typical usage patterns at your site, the reasons for this should be noted in your EREP. This will inform comparisons of future resource use data against baseline data. If your resource use has triggered a threshold in the trigger year, but you can demonstrate that resource use at your site would normally fall below the thresholds, you may apply for an exemption from the EREP program (see section 1.5.1).

If you use 100 TJ or less of energy and 120 ML or less of water for three consecutive years after the financial year in which you triggered the resource use threshold, you are no longer required to be part of the EREP program.

You may apply to have your EREP revoked if you can demonstrate to EPA that the operations constituting the scheduled activity at your site will cease within 24 months of the year in which you trigger a resource use threshold. EPA may revoke your EREP if satisfied that the activity will cease.

2.4 What are resource efficiency indicators?

The EREP program seeks to assist businesses to operate in the most efficient way possible with regard to the use of environmental resources, waste generation and costs. To gain an understanding of the relative efficiency of your site, and to track improvements, you need to develop resource efficiency indicators relevant to your site's operations.

Resource efficiency indicators compare resource use data against a relevant business activity measure (see text box below). These indicators provide a more useful measure of resource efficiency than baseline data alone, as resource efficiency indicators account for variables such as the growth in the size of your site and changing levels of activity and production. They also provide a more dependable measurement of performance over time.

To help to showcase resource efficiency best practice, EPA may develop case studies of outcomes from the EREP program (with the consent of the relevant program participants).

2.4.1 Selecting resource efficiency indicators for your site

Understanding how your performance compares to industry best practice allows you to set appropriate targets for increasing resource use efficiency, reducing waste generation and managing costs. Your resource efficiency indicators must be included in your EREP.

If you want to use benchmarking to assist in developing your EREP and tracking your performance Module 2 of the EREP toolkit discusses some common approaches.

The indicators most relevant to your site will depend on the nature of your site's operations. You can use resource efficiency indicators that are similar to those you already use to measure business performance. Indicators will compare energy and water use and waste generation against measures such as:

- quantity of production (e.g. tonnes or litres of production)
- amount of space occupied (e.g. m² of office space occupied)
- number of service units (e.g. full-time students, bed nights, visitor numbers, staff numbers).

2.5 How do I assess the resource use of key activities and processes?

The next step is to work out where and when significant quantities of energy and water are being used and where significant waste is being generated. You will need to examine all major activities and processes carried out at the site and assess the resource use and waste generation of these activities and processes. The level of detail of your assessment should reflect the significance of each process or activity on the sites' overall resource use and waste generation.

You need to describe the water use, energy use and waste generation associated with the key resource-using activities at your site. Supporting material that demonstrates that the actions identified are adequate must be included in your EREP. EPA will allow some flexibility in how you present this information in your EREP, and you should discuss this with EPA during the development of the EREP for your site.

Typically, this should include an assessment or audit report that includes:

- a site map
- resource/process flow diagrams identifying where and how much energy and water is used and waste streams are generated

Module 3 of the EREP toolkit provides further guidance on carrying out an integrated resource efficiency site assessment.

2.5.1 Understanding variations in resource use

Significant variations can exist in resource use and waste generation — seasonally, monthly, weekly and daily. Sometimes these may be unknown to businesses, as many sites will not have metering and monitoring data to show weekly or daily usage of energy and water, or waste generation levels. To assist in identifying efficiency opportunities, avoiding unnecessary resource use, and to better understand your resource use patterns, you may need to undertake more detailed analysis. This will involve monitoring energy and water use, and collecting waste generation data and other information that can help to determine the following:

- energy and water use (by type) within your hours of operation
- energy and water use (by type) outside hours of operation
- types of wastes generated and how these wastes are managed
- daily, weekly or seasonal usage trends for major pieces of equipment
- start-up and shut-down procedures and their impact on resource use and waste generation.

2.6 What is involved in identifying resource efficiency opportunities?

The purpose of this stage is to identify and assess opportunities to improve resource use efficiency and reduce waste generation and prioritise actions for inclusion in your EREP.

An understanding of the major resource use and waste-generating activities and processes at your site will enable you to identify resource efficiency opportunities. Each major resource-using and waste-generating activity at your site must be examined for efficiency opportunities, through considerations such as these:

- Is more efficient and cost-effective technology available?
- Can processes or products be redesigned to minimise energy and water use and waste generation?
- Can processes or products be redesigned or streamlined to maximise efficiency?
- Can processes and procedures be varied across time (days, weeks and seasons) to increase efficiency?
- Can control systems be installed to reduce resource use after hours?
- How do start-up and shut-down procedures affect resource use?
- Can scheduling or production runs be changed to reduce resource use or waste generation?
- Can equipment be maintained or upgraded to reduce resource use?
- Can your current fixtures be replaced with more resource efficient fixtures?

Specific considerations for your site will depend on your particular activities or plant, equipment and management protocols. Based on past environmental management experience, most businesses will draw on the ideas and expertise of staff from a broad cross-section of their organisation, including management and operational staff. To obtain further advice or technical expertise on identifying resource efficiency opportunities, you may choose to use an appropriately qualified consultant.

Opportunities to reduce energy and water use and waste generation will generally fall into two broad categories – management opportunities and technical opportunities.

2.6.1 Management opportunities

Management opportunities focus on business systems and/or staff behaviour. Opportunities may include:

- improved accountability (e.g., linked to performance) for resource use and waste generation
- improved staff awareness and training regarding the cost of resources and ways to maximise efficient use
- improved maintenance cycles so equipment and processes are performing optimally and leaks and blockages are identified
- improved monitoring and review systems for resource use and waste generation.

Module 2 of the EREP toolkit provides guidance on using a management system's approach to resource efficiency.

2.6.2 Technical opportunities

Technical opportunities generally involve specific changes to equipment or processes. Some examples include:

- Installing conveyor and gutter guards to avoid product spillage
- Installing more efficient equipment – for example, boilers, pumps or lighting
- Replacing existing fixtures with more efficient fixtures.

Module 3 of the EREP toolkit provides guidance on identifying and assessing technical opportunities and prioritising actions.

2.7 How do I prioritise my actions?

The principles established in the Victorian waste hierarchy can be adapted to apply broadly to resource efficiency, including reducing energy and water usage. The Victorian waste hierarchy specifies avoidance as the preferred option, followed by reuse, recycling, recovery of energy, treatment, containment and disposal as the least preferred final course of action.

Managing resources in line with the waste hierarchy aims to maximise the practical benefits from products while minimising the amount of waste.

For some sites, the level of energy or water use, or waste generation, may be relatively low compared to the level of energy or water use that triggered your participation in the EREP program. For example, you may have triggered the threshold level for water use (120 ML) but you use relatively little energy at your site. While all resources will need to be examined in preparing your EREP, EPA recognises that focusing on the resources with the highest use profile at your site will most likely create the greatest efficiency gains. Module 3 of the EREP toolkit provides further advice on the level of detail required in carrying out assessments.

Actions with a payback period of three years or less must be implemented under the EREP program. Exceptions to this rule apply when an identified action can be shown to:

- have undesirable impacts such as negative health and safety outcomes
- lead to greater environmental impacts over the life cycle of the product or service being produced
- preclude a future opportunity to deliver bigger gains in resource use efficiency

or

- have other negative business impacts.

At the earliest opportunity, you should discuss with EPA any circumstances that would prevent implementation of actions. Module 3 of the EREP Toolkit provides further guidance on prioritising actions.

2.7.1 Common tools for evaluating environmental impacts

Once you have identified the opportunities to reduce resource use and waste generation at your site, you need to determine which of these opportunities are suitable for inclusion as actions in your EREP.

For some of the opportunities, you may find potential conflicts between different resource and/or waste streams (e.g., an action may decrease water use but increase energy use). In such situations, you will need to examine the impacts on other resources, and waste generation, and determine which opportunities achieve the best overall environmental outcome.

Module 3 of the EREP toolkit provides further guidance on assessing opportunities, including assessing the net environmental benefit of actions by using tools such as multi criteria analysis and life cycle analysis.

2.8 How do I calculate the payback period of actions?

In developing your EREP, you must use a simple payback formula to assess efficiency actions. This formula enables all businesses participating in EREP to calculate the payback period of their actions in the same way.

You should calculate the payback period for all actions. You must implement actions with a payback period to your business of three years or less.

The simple payback formula to be used for EREP is:

$$\text{Payback period (years)} = \frac{\text{Initial investment (\$)}}{\text{Net annual savings* (\$ per year)}}$$

* Savings do not take the initial investment into account.

To assess costs and savings, you will need the following information:

- an estimate of the efficiency gains expected from implementing each action, including the impact on water use, energy use and waste generation
- expected cost saving from implementing each action
- estimated costs of implementing each action
- external funding and grants related to the action.

The payback period should only relate to the company's contribution to the action. This means that:

- If you have obtained a grant or funding from an external party to support the investigation, purchase and/or installation of an action, the amount of the grant or funding should be deducted from the initial investment cost
- Any operational subsidy or grant (or similar) you will receive as a result of implementing the action should be included in the net annual savings.

Module 4 provides more detailed guidance on how to calculate payback periods for your actions.

2.8.1 What costs and savings information should I include in my payback calculations?

You are encouraged to look at costs and benefits broadly. The following lists are not exhaustive but indicate the types of costs and benefits that should be included in calculating the payback of actions. Module 4 of the EREP toolkit provides more guidance on calculating payback periods.

Initial investment:

- cost of capital assets, such as plant and equipment (including installation costs)
- cost of alteration to existing capital assets
- site recoupage or repair costs
- initial consultancy fees
- less external funds and grants (e.g., capital funding).

Net annual savings:

- Energy cost savings
- Water cost savings
- Waste management cost savings
- External funds and grants received (e.g., periodic payments for resource savings).

Any additional cost savings should also be included, such as: operational cost savings, labour savings; materials savings; increased production and/or productivity; decreased repair and maintenance costs, OHS cost savings.

Net annual savings may be reduced by any additional annual costs resulting from undertaking a project, such as: additional product or raw material costs; additional energy and/or water costs; decreased production and/or productivity; additional occupational health and safety costs; additional repair, maintenance and/or servicing costs; and any material costs or costs of sales.

Your payback period calculations should factor in the price of resources (energy, water and waste) in the future where this is known. For example, most sites will have existing energy contracts which include future pricing for the life of the contract. Any known future price increases for water should also be included in payback calculations.

In many cases conducting a life-cycle analysis will help optimise the environmental and economic benefits to be realised from your participation in the EREP program. Module 2 of the EREP toolkit provides further advice on life cycle analysis and you are encouraged to discuss this further with EPA in developing your EREP.

2.9 Can I use other actions as environmental offsets?

An environmental offset is an action to address an adverse environmental impact on resource use at another location to deliver a net environmental benefit. This might include working with your supply chain to reduce the life cycle impacts of your products and/or services.

The EREP program requires you to implement all actions in your EREP with a three-year or better payback period. On approval from EPA, an action at another location not subject to EREP requirements may be included in your EREP in the place of, or ahead of, other on-site actions if it can be demonstrated that the offset action will:

- deliver increased net environmental benefit compared to on-site actions that are otherwise be included in your EREP
- generate resource savings or waste avoidance in proportion to the on-site actions that could be undertaken
- not result in the inefficient use of other resources and/or increased waste generation
- not facilitate or reward poor environmental management practices that pose significant risk or create inappropriate market distortions.

2.10 Can I use a 'representative premises' for identifying resource efficiency opportunities?

You may use an 'opportunities assessment' undertaken for another site of the company to provide the basis for your site's EREP assessment if it can be demonstrated that both sites have similar operational practices and resource use and waste generation profiles. The opportunities identified by the assessment at the representative premises should be equally applicable to your premises, and address resource efficiency and waste minimisation consistently with the intent of the EREP program.

All premises that trigger the resource use thresholds will still be required to identify site-specific actions and include these in either an individual or consolidated company EREP.

STEP 3: SUBMITTING A PLAN

WHAT YOU NEED TO DO	HOW EPA CAN HELP
Submit your plan	<p>Before formal submission</p> <p>EPA will work with sites that submit a draft EREP to help:</p> <ul style="list-style-type: none"> • identify information gaps and additional opportunities • investigate any support available to assist the implementation of actions <p>After formal submission</p> <p>EPA will assess the EREP and advise you of the outcome.</p>
Provide supporting documentation	Provide advice on which reports and studies are relevant.

3.1 Should I submit supporting documentation?

You will need to provide supporting documentation that demonstrates that the list of actions are appropriate and adequate (e.g., audit/site assessment, project feasibility reports). This documentation would typically include:

- a process for prioritising actions to be implemented and timeframes for implementation
- impacts of actions on other resource use/waste generation at the site.

3.2 Can I give EPA a draft EREP?

To ensure that you have a complete and adequate EREP submitted on time, EPA encourages you to discuss the preparation of your EREP with EPA early, obtain advice on information to be included and submit a draft for review. Once your EREP has been submitted, EPA will acknowledge receipt of your plan.

3.3 When do I need to submit my final EREP?

If your site's resource use triggered either the water or energy use threshold in 2006/07, you must submit your EREP to EPA by 31 December 2008. If your site first triggers a resource use threshold in a later financial year, you need to submit your EREP 12 months after the end of the trigger year. An exception to this is if you have been granted an extension of the time to submit an EREP (see section 1.7).

Your EREP must be accompanied by a statement from your Chief Executive, Managing Director (or delegate) that the information in your plan is correct and in accordance with the requirements of the *Environment Protection Act 2007* and the *Environment Protection (Environment Resource Efficiency Plans) Regulations 2007*.

Your EREP must comply with the requirements prescribed in Schedule 2 of the EREP Regulations and include the requirements set out in Appendix 3 of these guidelines.

EPA will decide whether to approve your EREP with four months of accepting the EREP. You will be advised of the outcome within 14 days of EPA making this decision. If the EREP is not approved, EPA will provide reasons why the EREP was not approved and may ask you to resubmit your EREP.

3.4 Substituting an EREP

Once EPA approves your EREP, you will need to implement actions in line with the timeframes specified and approved in your EREP. If, after your EREP is approved, the activities at your site change and/or the proposed actions need to change, you may apply to EPA to substitute a new EREP in place of your approved EREP.

You might consider making such a substitution when, for example:

- the nature of the operations have changed and the actions in the EREP are no longer the most relevant

- new actions have been identified that achieve greater resource efficiency gains (eg. through improvements in technology)

or

- changes in costs and savings, payback periods or timeframes for implementation have occurred.

You may like to review your EREP at the same time as preparing your annual performance report. If after this review you wish to substitute a new EREP for the approved EREP, you may apply for this at the same time as submitting your annual report. You can, however, apply to substitute your EREP at any time after approval of your EREP.

3.4.1 What should I do if I become responsible for a site that is required to participate in the EREP program?

If your company takes over a site that is already subject to an EREP, you will need to:

- notify EPA within three months that you are now responsible for the site
- be responsible for the implementation of that EREP.

STEP 4: IMPLEMENTATION, MONITORING AND ANNUAL REPORTING

WHAT YOU NEED TO DO	HOW EPA CAN HELP
Implement actions with a three-year or better payback period	Provide advice on potential support to implement actions
Continue to monitor resource use and waste generation	EREP toolkit <ul style="list-style-type: none"> • Module 2 <i>A management systems approach to resource efficiency</i> • Module 3 <i>Resource efficiency site assessment procedure</i> Industry benchmarks/standards
Monitor progress on implementing actions	EREP toolkit <ul style="list-style-type: none"> • Module 3 <i>Resource efficiency site assessment procedure</i> • Module 4 <i>Calculating payback periods</i>
Report resource use and progress on implementing actions to EPA	Provide flexibility to align reporting with your other reporting needs

4.1 Am I required to implement all actions listed in my EREP?

Once approved, your EREP becomes a legally binding document. You must implement those actions with a three-year or better payback period within the timeframes specified in the EREP and approved by EPA.

An EREP can be a catalyst for on-going change in your business; to integrate and improve your environmental resource efficiency, maintain it at best-practice levels and foster continuous improvement. During the implementation of your EREP you are encouraged to continue exploring new opportunities for environmental and financial gains through resource efficiency.

4.2 What do I need to monitor as part of my EREP?

Monitoring requirements for EREP are aligned with the annual reporting requirements for tracking the implementation of your action plan.

You must monitor the implementation of your EREP in accordance with the monitoring procedures established and approved in your EREP. In addition to monitoring your progress on implementing actions, you will also need to undertake ongoing monitoring of overall resource use and waste generation. Your monitoring procedures will need to include:

- monitoring process, including a process for dealing with delayed or disrupted implementation
- person responsible
- dates for system review
- dates for reporting to EPA.

Data collected through your monitoring program will form the basis of the reporting requirements outlined in the next section of the guidelines.

4.3 Ensuring compliance with the EREP program

EPA may verify (or arrange for independent verification) to check that EREP participants are complying with the program's legal requirements in the Act and Regulations. This may include verifying:

- sites' assessment of resource use
- the adequacy of actions identified in the EREP
- costs and savings information
- that actions have been properly implemented.

The *Environment Protection Act 1970* sets out penalties for failure to, for example:

- register in the EREP program within the registration period

- submit a plan within the prescribed period and in a form approved by EPA

or

- implement your plan and report to EPA.

If it becomes evident that your business is failing to comply with its obligations, EPA has the right to exercise its enforcement powers. EPA will use enforcement actions where efforts to encourage a participant to fulfil obligations under the program have not been successful. It is not envisaged that enforcement action would be taken in a situation where an identified action has not been able to be successfully implemented for valid reasons, and EPA will work with participants to identify situations where implementation strategies should be adapted in response to new information or new opportunities.

Any enforcement approach adopted by EPA would be in accordance with EPA's publicly available *Enforcement Policy* (EPA publication number 384).

4.4 Annual performance reporting

You must submit an annual performance report to EPA, on the implementation of your EREP and updated resource use data.

For the relevant reporting period, the annual report must include:

- type and quantity of energy used, water used and waste generated
- actions that have been fully implemented
- actions that have been partially implemented
- costs of implementing actions
- energy, water and waste efficiency gains made by implementing the actions
- financial savings of implemented actions.

Full details of annual reporting requirements are set out in Appendix 7.

As stated in section 3.4, Substituting an EREP, at the same time as preparing your annual report you may like to review your EREP and identify any new or updated actions, revised costs and savings information, payback periods or timeframes for implementation. If you want to change this information in your EREP you should do this through applying to substitute a new EREP for an approved EREP.

Minor changes to the content of your EREP, such as changes in responsibility for implementation, would not warrant substitution of your approved EREP and can be made at any time.

4.5 Submitting your annual performance reports

Once you have submitted an EREP for your site, you must report annually on progress towards implementing actions. The reporting period is a financial year from 1 July to 30 June, unless an alternative period has been agreed with EPA. Annual reports must be submitted within three months of the end of the reporting period.

At the time you submit your EREP, you will need to submit resource use data for the first reporting year, typically 1 July 2007 to 30 June 2008

The annual performance report must be signed off by the Chief Executive Officer, Managing Director or delegate.

4.6 Submitting your final performance report

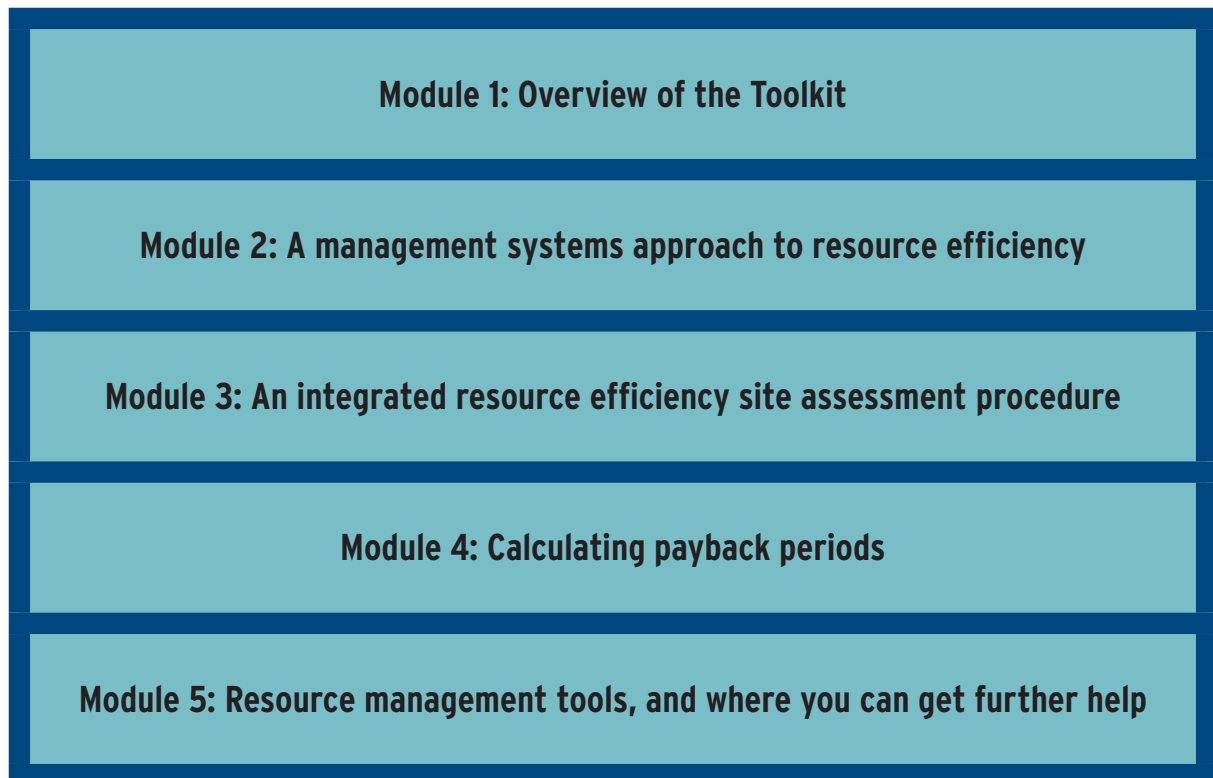
A final performance report must be submitted to EPA no more than three months after the expiration of your EREP. The report needs to include a summary of the actions implemented since the commencement of your plan and other summary information, such as resource efficiency achievements over the life of the plan, as described in Appendix 7.

The final performance report needs to be signed off by the Chief Executive Officer, Managing Director or delegate.

APPENDIX 1: PROGRAM SUPPORT RESOURCES

A range of support resources for the EREP program are available to program participants on the EPA website. The EREP toolkit includes detailed guidance on identifying efficiency opportunities, case studies of best practice and guidance on developing a robust resource management program at your site. The toolkit modules are on the EREP website at www.epa.vic.gov.au/erep under the heading of 'EREP resources'.

The EREP toolkit contains five modules:



The *Environment Protection (Environment and Resource Efficiency Plans) Regulations 2007* are available at the Victorian Law Today Library (www.legislation.vic.gov.au or via the EPA website, www.epa.vic.gov.au/erep). Hard copies (paper) are available from the Information Victoria Bookshop and for viewing at the EPA Victoria Library.

APPENDIX 2: GLOSSARY

TERM	DEFINITION
The Act	<i>Environment Protection Act 1970</i>
Energy use	See energy use in Section 3
Environmental resources	Energy and energy sources and water used at a site
EPA	Environment Protection Authority Victoria
EREP	An Environment and Resource Efficiency Plan
EREP participants	Sites required to participate in the EREP program
Steps in the EREP program	The EREP process comprises several stages: <ul style="list-style-type: none"> • Self-assessment of resource use and register in the EREP program with EPA • Develop and submit an EREP • Implement actions • Monitor progress and report to EPA
Payback period	The payback period is the length of time required to recover an initial investment from savings generated by the investment (calculated in years)
The Regulations	<i>Environment Protection (Environment and Resource Efficiency Plans) Regulations 2007</i>
Reporting period	A financial year or another 12-month period approved by the Authority
Resource use threshold	A threshold level of energy use (100 terajoules) or water use (120 megalitres) which, if exceeded at a site, means a scheduled activity is being carried out
Scheduled activity	The use of more than 100 terajoules of energy or 120 megalitres of water in any trigger year at a site
Self-assessment of resource use	Process by which a business determines whether its resource use exceeds the thresholds and is required to participate in the EREP program
Site	For the purpose of these guidelines, a site has the same meaning as premises
Trigger year	The 2006–07 financial year or any subsequent financial year in which the resource use thresholds are exceeded
Waste generation	See waste categories in Appendix 6
Water use	See water use in Appendix 3 (for self-assessment against trigger threshold) and Appendix 6 (for establishing baseline and use in EREP development)

APPENDIX 3: ENERGY AND WATER SOURCES TO BE USED TO DETERMINE WHETHER YOU TRIGGER THE RESOURCE USE THRESHOLDS

The following table summarises the energy and water sources to be included when calculating whether you trigger the thresholds to participate in the EREP program.

ENERGY ¹	
Resource use threshold	100 TJ per financial year
Energy and energy sources to be included in your self-assessment to determine whether you must participate in the EREP program.	<p>Energy</p> <ul style="list-style-type: none"> • Electricity (whether from renewable or other sources) • Steam (if used to provide energy) • Compressed air (if used to provide energy) • Derived from a reductant <p>Energy sources</p> <p>Combustible fuels</p> <ul style="list-style-type: none"> • Agricultural and food processing residues • Bagasse • Biodiesel • Biogas • Black liquor • Coal (all kinds) • Coal seam methane • Condensate • Crude oil • Ethanol • Fuels derived from coal including blast furnace gas, benzene, toluene and xylene (BTX), coal tar, coke, coke oven gas, gaseous fuels derived from coal, and synthetic liquid. • Hydrogen and reductants • Wood and wood waste • Landfill gas • Natural gas • Natural gas liquids • Petroleum products including automotive diesel oil, automotive gasoline (petrol), aviation gasoline (avgas), aviation turbine fuel (avtur), fuel oil, kerosene, heating oil, liquefied petroleum gas (LPG), marine diesel oil, synthetic petroleum products derived from natural gas. • Petroleum fuel blends (for examples, blends of petroleum of petroleum and ethanol) • Sewage gas • Sulfur (where converted to electricity) • Unconventional crudes and related oils • Wood and wood waste • Other materials used as an energy source by means of combustion (for example, waste or vehicle tyres). <p>Note: it does not include:</p> <ul style="list-style-type: none"> • energy or energy sources sold (eg. electricity or steam produced at a sites but exported from the site to a purchaser). • energy or energy sources that are produced or purchased and stored without being used (eg. fuel stored in tanks. If the stored energy is then used it would be counted as energy use). • material that is a potential energy source, but is disposed as a waste product (eg. waste gas that is vented or flared). • material that is a potential energy source, but is used for another purpose (hydrocarbons used as solvent, base oils used in lubricants).

¹ For a list of the specific energy and energy sources to be included (and not included) refer to Regulation 6, Schedule 1 and Schedule 2 of the Regulations.

WATER²	
Resource use threshold	120 ML per financial year
	<ul style="list-style-type: none"> • Urban water supply delivered by a Victorian water authority. • Direct extraction (e.g. licences or bulk entitlements) provided through a legal agreement with a rural water authority. • Used by a water authority for operating or maintaining infrastructure.
WASTE	
Resource use threshold	There is currently no threshold for waste. Once you have triggered the water and/or energy threshold to, you are required to assess the waste generated at your site, identify actions reduce waste and report on implementation.

² Water sources are set out in Regulation 5(4) of the EREP Regulations. Note that a broader range of water sources must be included in your EREP (Regulation 4) than the scope of water sources used to determine whether your site triggers the resource use threshold.

APPENDIX 4: REGISTRATION REQUIREMENTS

In registering for the EREP program, you should provide the following information. Self-assessment and resource use and registration is via the online system at www.epa.vic.gov.au/erep

Business details:

- Company/organisation name, as registered with ASIC
- Trading name (if different from company name)
- Company/organisation address
- ACN and ABN
- Site name
- Site address
- 2006 ANZSIC Code
- EPA licence number (if applicable)
- Site activity description.

Contact details:

- CEO/Managing Director or delegate
 - Position
 - Phone numbers
 - Email address
- EREP contact officer
 - Position
 - Phone numbers
 - Email address.

Resource use data for trigger year

- Energy use data
- Water use data
- Waste data.

Application for extension (if relevant)

If you are seeking an extension of the time to submit your EREP, you must apply for an extension during the registration period. See section 1.7 for information regarding applying for an extension.

Application for exemption (if relevant)

If you are seeking an exemption (complete or partial) from the requirements of the EREP program, you must apply for an exemption when you register for the program and provide the necessary information. See section 1.5 for the information requirements and criteria regarding applying for an exemption under the EREP program.

APPENDIX 5: RELATED PROGRAMS

Some sites are currently participating in voluntary and other mandatory resource efficiency programs. Work done in other programs can be included in your EREP, where this work can be demonstrated to satisfy EREP program requirements (see section 1.5.3). The table below references some current programs and indicates where they may contribute to the EREP requirements.

EREP KEY REQUIREMENTS						
	Resource use and waste generation profile	Assess resource use and waste generation and identify actions to reduce	Include resource costs, expected costs savings and payback calculations	Document and submit plan	Implement actions	Report progress
waterMAP	💧	💧	💧	💧		💧
Energy Efficiency Opportunities	⚡	⚡	⚡	⚡		⚡
Industry Greenhouse Program	⚡	⚡	⚡	⚡	⚡	⚡
Greenhouse Challenge Plus	⚡	⚡	⚡	⚡		⚡
Waste Wise	🗑️	🗑️				🗑️
SV Resource Smart Business	🗑️ 💧 ⚡	🗑️ 💧 ⚡				
Recent technical audit	🗑️ 💧 ⚡	🗑️ 💧 ⚡				

May contribute to EREP water requirements	May contribute to EREP energy requirements	May contribute to EREP waste requirements	May apply to all resource stream requirements
💧	⚡	🗑️	🗑️ 💧 ⚡

APPENDIX 6: EREP CHECKLIST

Your EREP must include the following:

EREP participant business details:

- Registered name of company/organisation
- ABN.

Baseline resource use and waste generation data for at least 12 months:

- Resource use period
- Energy used on site (TJ)
- Water used on site (ML)
- Waste generated on site (tonnes, m³ and kL).

Major resource-using and waste-generating processes and activities:

- List/description of main activities that use significant quantities of energy, water or generate waste and supporting material including:
 - Site map
 - Resource flow diagrams showing energy and water used and waste generated
- Site assessment/audit report(s) undertaken.

Resource efficiency indicators:

- Business-specific resource efficiency indicators (see section 2.4)
- Comparison of efficiency indicators to industry standards (where available).

Resource efficiency actions:

- Description of action
- expected efficiency gains associated with each action (ML, TJ, tonnes etc)
 - energy
 - water
 - waste
- costs of implementing each action (\$)
- expected cost savings from implementing each action (\$/year)
- payback periods for each action (years)
- indicate which actions have a payback period of three years or less, which are required to be implemented
- indicate which actions have a payback period exceeding three years, which are not required to be implemented
- month and year that each action will be implemented and period of time that the EREP will operate
- responsibility for implementation of each action (position).

Documentation that demonstrates that the list of actions are appropriate (e.g., audit/site assessment, project feasibility reports):

- process for determining actions to be implemented, prioritisation, timeframes for implementation
- impacts of actions on other resource use/waste generation at the site.

Monitoring, reporting and review procedures:

- monitoring process, including a process for dealing with delayed or disrupted implementation
- person responsible
- dates for system review
- dates for reporting to EPA.

Other considerations:

- Description of data gaps and assumptions
- Description of any resource use anomalies.

Sign-off by CEO, Managing Director or delegate.

Energy, waste and water to be included in your EREP

<p>Energy and energy sources used at a site to be included in your EREP³</p>	<p>Energy</p> <ul style="list-style-type: none"> • electricity (whether from renewable or other sources) • steam (if used to provide energy) • compressed air (if used to provide energy) • derived from a reductant <p>Energy sources</p> <p>Combustible fuels</p> <ul style="list-style-type: none"> • Agricultural and food processing residues • Bagasse • Biodiesel • Biogas • Black liquor • Coal (all kinds) • Coal seam methane • Condensate • Crude oil • Ethanol • Fuels derived from coal including blast furnace gas, benzene, toluene and xylene (BTX), coal tar, coke, coke oven gas, gaseous fuels derived from coal, and synthetic liquid. • Hydrogen and reductants • Wood and wood waste • Landfill gas • Natural gas • Natural gas liquids • Petroleum products including automotive diesel oil, automotive gasoline (petrol), aviation gasoline (avgas), aviation turbine fuel (avtur), fuel oil, kerosene, heating oil, liquefied petroleum gas (LPG), marine diesel oil, synthetic petroleum products derived from natural gas. • Petroleum fuel blends (for examples, blends of petroleum of petroleum and ethanol) • Sewage gas • Sulfur (where converted to electricity) • Unconventional crudes and related oils • Wood and wood waste • Other materials used as an energy source by means of combustion (for example, waste or vehicle tyres). <p>Note: Energy and energy sources does not include:</p> <ul style="list-style-type: none"> • energy or energy sources sold (eg. electricity or steam produced at a sites but exported from the site to a purchaser). • energy or energy sources that are produced or purchased and stored without being used (eg. fuel stored in tanks. If the stored energy is then used it would be counted as energy use). • material that is a potential energy source, but is disposed as a waste product (eg. waste gas that is vented or flared). • material that is a potential energy source, but is used for another purpose (hydrocarbons used as solvent, base oils used in lubricants).
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³ For a list of the specific energy and energy sources to be included (and not included) refer to Regulation 6, Schedule 1 and Schedule 2 of the Regulations.

<p>Water used at a site to be included in your EREP⁴</p>	<ul style="list-style-type: none"> • Mains water • Ground water • Surface water • Recycled (including reused) water • Desalinated water • Rainwater • Harvested stormwater • Grey water <p>Note: Water does not include sea water.</p>
<p>Waste streams generated to be included in your EREP</p>	<p>General waste (disposed both on and off site)</p> <ul style="list-style-type: none"> • Putrescible • Solid inert • Prescribed industrial waste <p>Liquid waste (disposed both on and off site)</p> <ul style="list-style-type: none"> • Trade waste to sewer • Domestic sewage • Licensed discharge off-site • Prescribed industrial waste sent to a waste treatment facility <p>Solid waste (reused/recycled)</p> <ul style="list-style-type: none"> • Total recycling <ul style="list-style-type: none"> • Putrescible • Solid inert • Prescribed industrial waste <p>Liquid waste (reused/recycled)</p> <ul style="list-style-type: none"> • Recycled water • Prescribed industrial waste.

⁴ Note that a broader range of water sources must be included in your EREP (Regulation 4) than the water sources used to determine whether your site triggers the water use threshold (Regulation 5(4)).

APPENDIX 7: REPORTING REQUIREMENTS

1. Annual report

Your annual report on the progress of implementation of your EREP must include the following, for the relevant reporting period.

Resource use for the reporting period:

- Type and quantities of resources used
 - energy, by type (TJ)
 - water, by type (ML)
 - waste generated, by type (tonnes, m³ or L)

Action updates (fully or partially implemented in resource use period):

- actions that have been fully implemented
- actions that have been partially implemented
- costs of implementing actions (\$)
- energy, water and waste efficiency gains made by implementing the actions
 - energy, by type (TJ)
 - water, by type (ML)
 - waste, by type (tonnes and ML)
- actual financial savings of implemented actions (\$), and
- management sign-off (CEO, Managing Director or delegate).

2. Final report

You must submit a final performance report within 3 months of the end of the final reporting period of your EREP. This report must include:

- actions implemented since the start of the EREP
- energy, water and waste efficiency gains that have been made since the start of the EREP
- any failure to implement planned actions within the specified timeframes
- any additional actions planned for implementation after the expiry date, and
- management sign-off (CEO, Managing Director or delegate).



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