



## Dandenong High School

# School Environmental Management Plan 2015-2019

This School Environmental Management Plan (SEMP) outlines Dandenong High School's commitment to sustainability. It highlights our achievements to date and a plan for what we would like to achieve in the future.

This SEMP has been developed as part of ResourceSmart Schools, which we joined in 2013. Resource Smart Schools is a Victorian Government initiative that will help our school benefit from embedding sustainability in everything we do. Our school will take action to minimise waste, save energy and water, promote biodiversity and reduce our greenhouse gas emissions.

Dandenong High School has already embraced and integrated sustainability into the school curriculum and recognised that the management of this requires co-ordination through the role of the Interdisciplinary Environmental Studies Co-ordinator. This has allowed the school to implement and co-ordinate sustainability issues particularly through the creation of a voluntary student environment group known as DHERT - Dandenong High Environmental Response Team. This team and the Co-ordinator have implemented projects such as whole school recycling, tree planting and educational initiatives. The Co-ordinator and these activities as well as the new sustainable school buildings have already put us in a good position to work through the five ResourceSmart AuSSVic modules and on our way to achieve 5 Star accreditation as a Victorian and national sustainable school.

To progress through the 5 stars, the school completes the five modules of: Core; Biodiversity; Energy; Waste; and Water. Through completing these modules and aiming to attain 5 star accreditation we not only continue our commitment to sustainability but show leadership as a school in this area. The first module - the Core module - is about 'Building the Foundations of a Sustainable School' and is an important step for the development of Education for Sustainability (EfS) and sustainability practice in schools. The module helps with the **planning and strategic process** for a whole school approach to sustainability. It is designed to be an integral part of the school's strategic planning process in order to set this strategic environmental management plan (SEMP) adopted by the school.

Date of next review: 2019

## A. Sustainability Policy

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### Declaration of Commitment:

Sustainability at our school involves educating and empowering our whole school community to enhance our environmental awareness. We will achieve our goals by leading and inspiring significant change through meaningful actions in partnership with local and global collaborations.

### Goals:

- To develop an environmentally conscious culture at Dandenong High School and its surrounding community.
- To minimise landfill **waste** to 0.3m<sup>3</sup> per student per year and increase the percentage of material that is reused, recycled and composted.
- To reduce the amount of **energy** to 400kWh, 1.4GJ and 0.4 tonne CO<sub>2</sub>-e per student per year through smarter practices and greater efficiency as well as working towards using carbon neutral energy sources.
- To increase the **biodiversity** and habitat quality score of the school grounds by planting indigenous species and increasing the habitat area for local wildlife.
- To minimise the consumption of mains **water** to 2KL per student per year through the improvement of plumbing systems and water conservation programs.
- To introduce '**green purchasing**' procedures for the school community in order to reduce environmental impacts and educate community on making environmentally friendly choices for life.

### Guidelines:

- **Curriculum** delivery will incorporate elements of sustainability at all year levels.
- Our school will engage in **daily sustainable practices** that incorporate environmentally friendly behaviours by utilising systems ie. Recycle bins
- Our school will lead the **community** by demonstrating exemplary practices in waste management, water and energy usage, and develop the school grounds to promote biodiversity.

### Implementation:

- Our school will implement a hands-on approach to education for sustainability through the curriculum at each year level and whole school events such as Tree Planting. Student learning will focus on taking action within the school and wider community. The Dandenong High Environment Response Team or DHERT will help to achieve this.
- Our school will support an active sustainability coordination team that involves School Council, staff, student leadership, students, parents and other members of our school and local community.

## **WASTE**

- Include the whole school community in the process of developing a 'Waste Wise' school through the principles of Rethink/Refuse, Reduce, Reuse and Recycle.
- Minimise landfill waste and maximise recycling.
- Maintain a litter-free school grounds by using waste education and daily clean up of waste.

## **ENERGY**

- Include the whole school community in the process of developing an 'Energy Efficient' school.
- Use resources and equipment as efficiently as possible.
- Ensure that lights, heaters and coolers are switched off when rooms are not in use.
- Choose the most appropriate energy saving methods available.
- Publish energy use at school in the school newsletter.

## **BIODIVERSITY**

- Encourage an appreciation of the natural environment through learning experiences e.g. curriculum, excursions and school camps.
- Maintain a vegetable garden.
- Maintain areas planted with indigenous plants.
- Continue to remove noxious weeds from school grounds.
- Continue to increase biodiversity in the schoolyard in order to support indigenous plants and animals.
- Showcase native and indigenous gardens as a model to the school and wider community.

## **WATER**

- Appreciate water as a precious natural resource.
- Use resources and equipment as efficiently as possible.
- Choose the most effective means of conserving water (e.g. water tanks and drip free taps).

## **GREEN PURCHASING**

- Purchase environmentally friendly paper for printers and photocopiers.
- Purchase environmentally friendly paper alternatives for items like toilet paper, hand towels, tissues and serviettes.
- Use more environmentally friendly products (e.g. for cleaning).

## **EVALUATION**

- This policy will be reviewed as part of the Dandenong High School review cycle.
  - The Annual Program Budget review will provide recommendations which may be used to affect policy change in future.
  - Staff and community feedback will be sought to review the policy.
  - The School Council and Sustainability Program Coordinators will review whether the school is reaching its environment targets, as outlined in 'Goals', on a yearly basis.
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## B. Sustainability Snapshot

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In this snapshot we are documenting workplace, infrastructure and daily operations and community engagement plus identifying opportunities for improvement.

Last updated: March 2015

Resource Area	Targets
<b>BIODIVERSITY</b> 	<b>Increase</b> our habitat quality score every year
<b>ENERGY</b> 	<b>250 kWh</b> of electricity and <b>0.4 tonnes</b> CO <sub>2</sub> greenhouse gas/ per student, per year
<b>WASTE</b> 	<b>0.3 m<sup>3</sup></b> of landfill waste per student, per year
<b>WATER</b> 	<b>4 KL</b> of mains water per student, per year

<b>BIODIVERSITY</b>	<b>What we are doing?</b>	<b>What could we do better? What else could we do?</b>
<p><b>Audit Investigations</b> Measuring the number, health and types of plants and animals</p>	<ul style="list-style-type: none"> <li>Carried out a biodiversity audit in 2015</li> </ul>	<ul style="list-style-type: none"> <li>Carry out a follow up audit in 2 years time</li> <li>Use data to make recommendations for further planting activities</li> </ul>
<p><b>Gardens</b> Gardens for</p>	<ul style="list-style-type: none"> <li>Food technology vegetable garden</li> </ul>	<ul style="list-style-type: none"> <li>Plant an educational specific garden</li> </ul>
<p><b>Indigineous tree planting</b></p>	<ul style="list-style-type: none"> <li>Planting indigineous trees and plants in the school grounds</li> </ul>	<ul style="list-style-type: none"> <li>Continue to plant indigineous plant species supported by the City of Greater Dandenong</li> <li>Plant House specific indigineous plants in front of all houses</li> </ul>
<p><b>Activating Our Community</b> Educating and empowering the people in our school and local community eg. projects, campaigns, events, school tours, sharing our stories</p>	<ul style="list-style-type: none"> <li>New canteen food choices</li> </ul>	<ul style="list-style-type: none"> <li>Continue to include healthier canteen food</li> <li>More Nude Food encouragement</li> <li>Newsletter articles</li> <li>Staff PD</li> </ul>
<p><b>Student Leadership &amp; Celebration</b> Student role models, leaders, teams, clubs Celebrating and lifting the profile of what we do</p>	<ul style="list-style-type: none"> <li>Encourage DHERT group to participate in making and implementing recommendations</li> <li>Celebrating achievements through student awards, newsletter articles and industry recognition</li> </ul>	<ul style="list-style-type: none"> <li>Posters, Campaigns and student projects</li> <li>More information at assemblies and/or announcements</li> </ul>

<b>ENERGY</b>	<b>What we are doing?</b>	<b>What could we do better? What else could we do?</b>
<p><b>Audit Investigations</b> Measuring electricity, gas and how people travel to and from school</p>	<ul style="list-style-type: none"> <li>• Finance office staff to log in bills onto resource smart for school to monitor usage</li> </ul>	<ul style="list-style-type: none"> <li>• More students should be walking/riding to school</li> <li>• Use COOL Australia resources</li> <li>• Analyse usage and make recommendations for energy saving activities</li> </ul>
<p><b>Energy Efficiency</b> Lighting, heating, cooling, computers, appliances, signage, renewable energy</p>	<ul style="list-style-type: none"> <li>• Turning off unused appliances</li> <li>• Energy saving photocopiers</li> <li>• Using natural light in classrooms</li> <li>• Solar panels on buildings</li> <li>• Passive heating and cooling instead of air conditioners</li> </ul>	<ul style="list-style-type: none"> <li>• More efficient appliances</li> <li>• Signs in classrooms to turn off lights – juniors to make</li> <li>• Set up thermometers (in junior school) and check the temps in various areas of rooms</li> </ul>
<p><b>Activating Our Community</b> Educating and empowering the people in our school and local community eg. projects, campaigns, events, school tours, sharing our stories</p>	<ul style="list-style-type: none"> <li>• Student awareness through curriculum as global citizens</li> </ul>	<ul style="list-style-type: none"> <li>• More Enviro stuff in the newsletters</li> <li>• Nude food days</li> <li>• Better student awareness</li> </ul>
<p><b>Student Leadership &amp; Celebration</b> Student role models, leaders, teams, clubs Celebrating and lifting the profile of what we do</p>	<ul style="list-style-type: none"> <li>• DHERT group sharing their ideas and promoting good practices</li> <li>• Celebrating achievements through student awards, newsletter articles and industry recognition</li> </ul>	<ul style="list-style-type: none"> <li>• Nude Food Week regularly</li> <li>• Nude Food Competitions</li> <li>• Enviro ambassadors beginning with Gr 5/6, read the solar inverter</li> <li>• Wetlands focus</li> </ul>

<b>WASTE</b>	<b>What we are doing?</b>	<b>What could we do better? What else could we do?</b>
<p><b>Audit Investigations</b> Measuring landfill waste, recycling, compost, rubbish free lunches, paper usage</p>	<ul style="list-style-type: none"> <li>• Small landfill bins and large recycling bins</li> <li>• Recycle Paper</li> </ul>	<ul style="list-style-type: none"> <li>• Reduce handouts to staff and students</li> <li>• Reduce canteen litter</li> <li>• Encourage more double sided printing</li> <li>• Reuse old worksheets</li> <li>• Replace big garbage bins in classrooms with smaller waste bins</li> </ul>
<p><b>Waste Systems</b> Signage, using bins, rubbish free lunches, paper use and reuse, collecting food scraps</p>	<ul style="list-style-type: none"> <li>• Paper recycling</li> </ul>	<ul style="list-style-type: none"> <li>• Use less paper! (students to be involved in monitoring paper being used on both sides before it is recycled)</li> <li>• Mobile phone recycling with Mobile Muster</li> <li>• Have more co-mingled recycled materials</li> </ul>
<p><b>Green Purchasing</b> Buying products that are better for the environment and for the people who are involved in making them (fair trade)</p>	<ul style="list-style-type: none"> <li>• Energy efficient photocopiers</li> </ul>	<ul style="list-style-type: none"> <li>• Buy paper, toilet paper made from recycled paper</li> <li>• Buy more fair trade products</li> <li>• Environmentally friendly cleaning products</li> </ul>
<p><b>Activating Our Community</b> Educating and empowering the people in our school and local community eg. projects, campaigns, events, school tours, sharing our stories</p>	<ul style="list-style-type: none"> <li>• Paper recycling</li> </ul>	<ul style="list-style-type: none"> <li>• Keep people informed of our energy/water use, via newsletters and school website</li> </ul>
<p><b>Student Leadership &amp; Celebration</b> Student role models, leaders, teams, clubs Celebrating and lifting the profile of what we do</p>	<ul style="list-style-type: none"> <li>• DHERT group sharing their ideas and promoting good practices</li> <li>• Celebrating achievements through student awards, newsletter articles and industry recognition</li> </ul>	<ul style="list-style-type: none"> <li>• Apply for ResourceSmart Schools awards</li> <li>• Apply grants – gardening/tree planting</li> <li>• Award students with movie tickets for enviro incentives</li> </ul>

<b>WATER</b>	<b>What we are doing?</b>	<b>What could we do better? What else could we do?</b>
<p><b>Audit Investigations</b> Measuring our water use, our impact on our waterways, litter, soil, run off</p>	<ul style="list-style-type: none"> <li>• All water off our buildings goes into our water tank</li> </ul>	<ul style="list-style-type: none"> <li>• Use data on water use to monitor and implement water saving strategies</li> </ul>
<p><b>Water Efficiency</b> Pipes, tanks, taps, toilets, dishwashers, appliances, sprinklers, irrigation, gardens</p>	<ul style="list-style-type: none"> <li>• Using water tanks</li> <li>• Non-drip taps</li> <li>• Indigineous water wise plants used in tree planting programs</li> </ul>	<ul style="list-style-type: none"> <li>• Other leaking taps in toilets</li> <li>• Plant more indigineous plants to replace water intensive species</li> </ul>
<p><b>Activating Our Community</b> Educating and empowering the people in our school and local community eg. projects, campaigns, events, school tours, sharing our stories</p>	<ul style="list-style-type: none"> <li>• Curriculum based understanding on water conservation</li> </ul>	<ul style="list-style-type: none"> <li>• Indigineous eductaion garden for promoting awareness of water issues</li> </ul>
<p><b>Student Leadership &amp; Celebration</b> Student role models, leaders, teams, clubs Celebrating and lifting the profile of what we do</p>	<ul style="list-style-type: none"> <li>• DHERT group promotion of water conservation through conferences and school based activities</li> <li>• Celebrating achievements through student awards, newsletter articles and industry recognition</li> </ul>	<ul style="list-style-type: none"> <li>• Encourage students to be water wise</li> </ul>

## C. Curriculum Overview

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Year	Name of Learning Area or Learning Activity	Biodiversity	Water	Waste	Energy
7	Science - Renewable and non-renewable energy, natural resources	✘	✘	✘	✘
8	Science – energy efficient design			✘	✘
8	Humanities - Sustainability	✘	✘	✘	
9	Science - effects on the environment (acid rain and global warming)	✘			✘
7	Humanities - resources, sustainability and the environment	✘	✘	✘	✘
10	Economics- sustainability	✘	✘	✘	✘
10	Geography – Environment issues in Australia and the World	✘		✘	
10	Humanities- Global Environment Phenomena- (change management)		✘	✘	✘
10-12	VCE Environmental Science	✘	✘	✘	✘

Last updated: March 2015