

Bona Vista Primary School

2015

School Environmental Management Plan



Introduction

The School Environment Management Plan (SEMP) is a tool to help you evaluate your school's environmental performance and establish goals, policies and procedures to reach your desired outcomes.

This user-friendly tool will help you develop a plan that includes actions to improve management of waste, water, energy and biodiversity. Taking action in these areas has the potential to significantly improve your school's environmental sustainability, engage students and the local community, and make substantial cost savings.

In developing this plan you will complete 10 of the 24 actions required under the ResourceSmart Schools Core Module checklist. The sections of the SEM Plan which correspond to these 10 actions are highlighted within the plan.

We hope that you find this tool helpful and wish you all the best on your sustainability journey.

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Vision

What will our school environment be like in 3-5 years? How will we be more sustainable?

Action B1.2



Bona Vista Primary School aims to become a Sustainable School by reducing our green house gas emissions and sustaining our environment through adopting sustainable practices in our everyday lives. Our vision is to integrate all aspects of sustainability into our teaching and learning and every day procedures.

Rationale/Mission

Why our school wants to become more sustainable

Bona Vista Primary School recognises the need in today's society to become aware, develop policies and procedures and support the education of our staff, students and broader community in relation to environmental sustainability.

Current infrastructure and daily operations

Have you reviewed current infrastructure and daily operations to better integrate sustainable initiatives

Action A1.4



Bona Vista Primary has reviewed multiple ways to ensure their daily operations is in line with the integration of sustainable initiatives for energy, waste, water and biodiversity. Eg: an ongoing commingled recycling program; bin systems in all classrooms to separate recycling, waste and compost, the promotion of waste reduction projects, building an awareness in the efficient use of water to further develop the vegetable gardens and regular monitoring of energy consumption using the purchased Energy Audit Kit (which includes a PowerMate Lite, Lux Meter and Non-Contact Thermometer).

Links with other school plans and policies

e.g. Site Improvement Plan, school master plan etc.

Action A1.9



Bona Vista is a small rural school that works cooperatively with the Baw Baw Shire and the Education Department in the maintenance of its grounds according to the school site improvement plan and Shire expectations. Discussions with other schools do occur in relation to best practice for ongoing needs.



Leadership team (working group)

The leadership team is ideally representative of the broader school community (students, staff, parents, community members) and reports to school governance bodies.

Action C1.2



The energy audit that was completed at the school was inclusive of all students. Different students are chosen on a rotational system to be responsible for the emptying of bins, gardening, feeding the animals etc. We are taking a whole school approach in Leadership towards sustainability.

Student action team (SAT)

Who is on the SAT, what are their roles, responsibilities and duties while a member? If you have a role description this could also be uploaded as evidence.

Action B1.4



All students are a part of the Action Team due to the school being relatively small in numbers. We believe this gives all students responsibility and ownership of the planned actions into sustainability to ensure they, as citizens, continue to make decisions best for our environment.

Curriculum overview & links to sustainability

An overview of what is currently being addressed within the school in regards to sustainability.

Action B1.1



Many aspects of daily teaching and learning encompasses the importance of sustainability across all curriculum.

Professional development

To empower the school staff the following professional development courses have been identified to be completed over the next three years. Is the role of sustainability coordinator recognised as a leadership role and given P.O.L. (Position of Leadership)?

Action B1.3



The school Principal and staff attended a Resource Smart Professional Development session presented by the local Resource Smart facilitator. The Principal also attended a Sustainability Victoria workshop that included a session on energy. All staff are responsible for ensuring actions and plans are put into place - monitored and changed accordingly.

ResourceSmart Schools benchmarks

Year: 2015



Waste

Aim to keep waste to landfill per student to below:

Primary, Secondary & P-12

0.3 m³/year



Water

Aim to keep use of mains water per student to below:

Primary, Secondary & P-12

4 KL/year



Energy

Aim to keep energy use and CO₂ emissions per student to below:

Primary

250 kWh/year

0.9 GJ

0.4 tonnes CO₂

Secondary & P-12

400 kWh/year

1.4 GJ

0.6 tonnes CO₂



Biodiversity

Increase habitat quality assessment score to:

Primary, Secondary & P-12
A target score of

>75 within the school ground

Our current state of play Start 2015

Based upon data collected this is what is currently happening in our school



Waste

Aim to keep waste to landfill per student to below:

.25 m³/year



Water

Aim to keep use of mains water per student to below:

? KL/year



Energy

Aim to keep energy use and CO₂ emissions per student to below:

386 kWh/year

? GJ

? tonnes CO₂



Biodiversity

Increase habitat quality assessment score to:

> ? within the school ground

Setting targets

Our school's target End of 2015



Waste



Water



Energy



Biodiversity

Aim to keep waste to landfill per student to below:

to below:

Aim to keep use of mains water per student

Aim to keep energy use and CO₂ emissions per student to below:

Increase habitat quality assessment score to:

.22 **m³/year**

? **KL/year**

300 **kWh/year**

> ? **within the school ground**

? **GJ**

? **tonnes CO₂**

Aspirational targets for Year 2016

.21 **reduction**
(Long term –)

? **reduction**
(Long term –)

275 **reduction**
(Long term –)

? **improvement of biodiversity from baseline**
(Long term –)

Aspirational targets for Year 2017

.20 **reduction**
(Long term –)

? **reduction**
(Long term –)

250 **reduction**
(Long term –)

? **improvement of biodiversity from baseline**
(Long term –)

How are we going reaching our targets?

Year 1: 2015

m ³ landfill waste per student	KL mains water per student	kWh electricity per student	GJ gas per student	tonnes CO ₂ per student	Habitat Quality Assessment score
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How are we going reaching our targets?

Year 2: 2016

m ³ landfill waste per student	KL mains water per student	kWh electricity per student	GJ gas per student	tonnes CO ₂ per student	Habitat Quality Assessment score
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How are we going reaching our targets?

Year 3: 2017

m ³ landfill waste per student	KL mains water per student	kWh electricity per student	GJ gas per student	tonnes CO ₂ per student	Habitat Quality Assessment score
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Provide an outline of what you have already achieved for each of the following areas

Energy

- Conducted an energy audit
- Fluorescent tubes changed to LED tubes
- Curtains, blinds and sky lights are installed
- Signage in classrooms and office areas
- Printer and computer monitors have sleep mode
- Solar panels (5.4kW grid connected solar panel system)
- Light timers and sensors
- Cross ventilation (automated CO2 vents) and ceiling fans
- School recently purchased an Energy Audit Kit (includes a PowerMate Lite, Lux Meter and Non-Contact Thermometer)
- Heater/ Air conditioner in main classrooms are pre-set to optimal temperatures as determined by DET
- All items (computers, IWB, printers, etc.) are turned off at the switch over the holiday period
- Where possible we purchase supplies, especially paper that is PEFC, PCF, recycled content and Carbon Neutral

Water

- Water tanks
- Rain catching gutters etc
- Half flush toilets
- Wash trough has push button water taps

Waste

- Paper recycling system
- No packaged food outside of classrooms
- Compost is collected
- Chickens
- Working bees to maintain and clean up grounds
- Litter separated
- Students have own drink bottles and reusable lunch boxes
- Printers set to double sided printing
- We recycle all printer cartridges
- We use scrap paper (paper that has printing on one side) in the classrooms and office

Biodiversity

- Vegetable garden
- Sensory garden with native plants
- Mulching/ compost
- Litter system for collection

Current & past sustainability activities & opportunities for the future

Provide an outline of what you have already achieved for each of the following areas

Curriculum

- Teaching and learning planned with a focus on sustainability where practical.
- The school animals and vegetable garden are a part of day to day learning.
- Weekly science lessons Foundation - Year 6.

Student

- Students involved in energy audit.
- Students given opportunities to research, discuss and implement ways to conserve energy.

Leadership

- Everyone at Bona Vista Primary are involved in the sustainability program at the school.

Other

Goals – What would we like to achieve?

Provide a goal or vision of what you would like to achieve for each of the following areas

Energy

GOAL: To assess, monitor and reduce energy consumption by at least 10% by December 2016.

SUGGESTED ACTIONS:

- Implement a maintenance regime so heaters, air conditioners etc are regularly serviced to ensure they are working efficiently
- Implement a switch off regime for computers/monitors/printers at breaks, end of day
- Implement a heating/cooling system with agreed temperatures etc
- Use resources and equipment as efficiently as possible
- Include students in the process of developing and maintaining an Energy Efficient school

Water

GOAL: To assess, monitor and reduce water consumption by at least 10% by December 2016.

SUGGESTED ACTIONS:

- Use resources and equipment efficiently
- Involve students and their families in the planning of water saving initiatives
- Assign students to monitor water usage and report wastage
- Have students collect water from under drinking taps

Waste

GOAL: To assess, monitor and reduce non-recyclable/ hard waste by at least 10% by December 2016.

SUGGESTED ACTIONS:

- Students to promote and organise Nude Food/ Waste Free days
- Maintain the collection of waste food scraps for chicken feed
- Engage students in the maintenance of the gardens
- Majority of families to receive the newsletter electronically
- Include members of the broader school community in the process of developing a waste wise school
- Encourage the reduction in the amount of photocopied paper being used

Biodiversity

GOAL: To assess, monitor and improve habitats around the school by at least 10% by December 2016.

SUGGESTED ACTIONS:

- Consult local community on ways to improve our garden areas
- Build and install nesting boxes made from recycled timber around the school
- Build and install recycled bird feeders in the sensory garden
- Have more students involved in the maintenance of the vegetable garden area
- Create a master plan of the school grounds incorporating native indigenous plants
- Further develop and maintain the existing vegetable garden to include herbs

Goals – What would we like to achieve?

Provide a goal or vision of what you would like to achieve for each of the following areas

Curriculum

VISION: To have everyone involved in the curriculum development to ensure that everyone has an excellent understanding of our responsibility and become actively involved in creating, maintaining and improving energy saving ways in our school and homes.

SUGGESTED ACTIONS:

- Embed more sustainability aspects into curriculum with whole term focus in teaching and learning on each of the four aspects (Energy, water, waste and biodiversity).
- Promote a switch off and save policy for technological equipment, heating/cooling, lighting.
- Students will investigate ways to conserve energy at the school and at home.
- Reduce the amount of packaging of foods students bring to school daily.
- Promote a water wise turn off policy.
- Engage with community activities including 'Clean Up Australia Day', Planet Ark's 'National Tree Day' and 'National Recycling Week', 'Earth Hour' and 'EnviroWeek'.
- Use the Cool Australia, Get it Right on Bin Night and the Gould League websites to develop curriculum and resources.
- Plan excursions that incorporate a sustainability focus every second year.

Leadership

VISION: To have all students take a leadership role in the implementation, review and progress of the School Sustainability Plan.

SUGGESTED ACTIONS:

- All students will continue to be encouraged to play an active part in the sustainability programs and actions of the school.
- Look into a buddy system with the older students supporting the learning and understandings of younger students.
- A focus on sustainability in the Annual Implementation Plan
- Regular focus on sustainability at staff meetings, assemblies and in the newsletter

Student

VISION: To have all students understand different elements of the School Sustainability Plan and to become responsible for their actions.

SUGGESTED ACTIONS:

- Students decide upon a name given to a student that is responsible for monitoring and educating students on how to be more sustainable. This can become a weekly award at Assemblies (e.g. Power Ranger, Waste Warriors etc)
- Designated clean up areas for each year level in the school yard
- Students reminded of their responsibility to adhere to the sustainability program in the school by regular reminders in the classroom, at assemblies and in the newsletter
- Students promote and organise Nude Food days

Other

Action Plan – How are we going to achieve our goal(s) and target(s)?

Action A1.8

Year: 2015

Theme/Topic: (This would relate to one or more of the areas from the goals section)

Target/s: (if applicable)

Biodiversity

Goals:

Build and install recycled bird feeders in the sensory garden

Action	Location	Strategies to achieve action	Resources	Who	Timeframe	Completed
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Review local birds	Classroom	Students to research - local birds and their habitats	Computers, library books, class discussion	Staff, students and parents	End of term 3 2015	<input type="checkbox"/>
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Date

Design bird feeders

Classroom	During Maths sessions students, using their prior knowledge, design bird feeders (considering materials, dimensions etc). Look at lots of examples of different types of bird feeders - picture books, photos, research on-line	Notes from staff PD, Cool Australia website	Staff and students	End of term 3 2015	<input type="checkbox"/>
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Date

Make bird feeders

Classroom outside areas	Invite parents and members of the community to work with students in making the student designed bird feeders. Dedicate time to run this program. Involve local paper for advertising and promotion.	Recycled timber, tools	Students, staff, parents, community helpers	Term 4 2015	<input type="checkbox"/>
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Date

Install bird feeders around the school

School Grounds	Ask parents to help install feeders in designated areas. Have students explain the significance of creating the bird feeders.	Whole school community	Whole school community	Term 4 2015	<input type="checkbox"/>
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Date

Evaluation

How we will know we have achieved our goals.

Bird feeders will be erected in the school grounds.

Date

Action Plan – How are we going to achieve our goal(s) and target(s)?

Year: 2015

Theme/Topic: (This would relate to one or more of the areas from the goals section)

Target/s: (if applicable)

Energy Saving

Goals:

Implement a maintenance regime so heaters, air conditioners etc are regularly serviced to ensure they are working efficiently

Action	Location	Strategies to achieve action	Resources	Who	Timeframe	Completed
Create a data base of appliances in the school	Admin.	Audit of all appliances in the school		Principal and Business Manager	During 4th term 2015	<input type="checkbox"/> Date
Research serviceman	Admin.	Research servicemen in the local area that could service these appliances. Create a list of companies and servicemen available.		Principal and Business Manager	During 4th term 2015	<input type="checkbox"/> Date
Update database	Admin.	Add to the data base the names and contact details for each of the service providers. Look up and record contact details		Principal and Business Manager	During 4th term 2015	<input type="checkbox"/> Date
Book services	Admin.	Contact service providers and book them to complete a service of required appliances. Allow time to complete this and above strategies.		Principal and Business Manager	During 4th term 2015	<input type="checkbox"/> Date
Add to data base dates of service	Admin.	Include suggested time frame for repeated services ensuring a cyclic system is in place. Keep database up to date and ensure all appliances are serviced.		Principal and Business Manager	By beginning of 2016	<input type="checkbox"/> Date

Evaluation

How we will know we have achieved our goals.

There will be a reduction in the amount of energy used as seen on future bills and all appliances will be working efficiently.

Action Plan – How are we going to achieve our goal(s) and target(s)?

Year: 2015

Theme/Topic: (This would relate to one or more of the areas from the goals section)

Target/s: (if applicable)

Waste

Goals:

Majority of families to receive the newsletter electronically

Action	Location	Strategies to achieve action	Resources	Who	Timeframe	Completed
Notify parents	Admin	Advertise in the Newsletter that the school will soon be introducing the newsletter electronically and that in keeping with the school energy saving program you will be asking parents to utilise this system.		Principal and Business Manager	1st term 2016	<input type="checkbox"/> Date
Parent feedback	Admin	Create an information slip to be returned asking parents for their email addresses. Ensure this is completed, distributed and received back.		Principal and Business Manager	1st term 2016	<input type="checkbox"/> Date
Email database	Admin	Compile all family emails as received on a data base - use this to create a mail group on the computer. Allow time for this to be created		Principal and Business Manager	1st term 2016	<input type="checkbox"/> Date
Remind parents	Admin	Reminders to parents along with a timeline as to when the school will be turning to an electronic version of the school Newsletter. Involve the students in the reminding of parents about the forthcoming change.		Principal and Business Manager	1st term 2016	<input type="checkbox"/> Date
Begin sending Newsletter via emails	Admin	Do this each week.		Principal and Business Manager	2nd term 2016	<input type="checkbox"/> Date

Evaluation

How we will know we have achieved our goals.

The majority of families at Bona Vista Primary School will be receiving their Newsletters and accessing these via their email addresses.

Action Plan – How are we going to achieve our goal(s) and target(s)?

Year: 2015

Theme/Topic: (This would relate to one or more of the areas from the goals section)

Target/s: (if applicable)

Sustainability Plan

Goals:

Students decide upon a name given to a student that is responsible for monitoring and educating students on how to be more sustainable.

Action	Location	Strategies to achieve action	Resources	Who	Timeframe	Completed
Classroom discussion	Classroom	Discuss the schools plan to become more energy efficient. Familiarise the students with strategies and ideas to be put into practise ensuring Bona Vista is an energy/water saving school. Discuss what each individual's role is.		Staff Students	3rd term 2015	<input type="checkbox"/> Date
Research	Classroom	Research and discuss what this means for all individuals. Allow class time for research, discussions and sharing of information.	Computers, library books		3rd term 2015	<input type="checkbox"/> Date
Discuss new award system	Classroom	In discussion announce that the school would like to nominate students at Assembly who are taking their role responsibly and modeling to others energy/water saving ways.		Principal	3rd term 2015	<input type="checkbox"/> Date
Name award system	Classroom	Students will be given the chance to brainstorm a name for this award and through a voting system decide upon one name as the weekly award. Students also decide how a student will be selected.		Staff and students	3rd term 2015	<input type="checkbox"/> Date
Weekly award	Classroom	Create award. Awards then happen at weekly assemblies with an explanation as to why that particular student is the recipient for that week.		Principal	4th term 2015	<input type="checkbox"/> Date

Evaluation

How we will know we have achieved our goals.

The award name is agreed upon and it is in place to happen for each Assembly

Action Plan – How are we going to achieve our goal(s) and target(s)?

Year: 2015

Theme/Topic: (This would relate to one or more of the areas from the goals section)

Target/s: (if applicable)

Waste

Goals:

Students to promote and organise random Nude Food days

Action	Location	Strategies to achieve action	Resources	Who	Timeframe	Completed
Waste audit	Whole school	Have students measure the amount of waste they bring to school in the packaging of their food. Weigh/compare results across the school.		Whole school	3rd term 2015	<input type="checkbox"/> Date
Ways to reduce waste	Whole school	Research/ discuss ways this amount of rubbish can be reduced. Look at and talk about examples of food that are not packaged. Students make posters to put around the school to encourage students to bring less waste to school.		Whole school	3rd term 2015	<input type="checkbox"/> Date
Students decide on a set day to trial a Nude Food day	Whole school	Students advertise, talk about at school assembly and advertise in the school newsletter a day for a Nude Food trial - explaining what it is and why the students are being asked to try it as aligned to the schools waste wise program		Whole school	3rd term 2015	<input type="checkbox"/> Date
Compare results	Whole school	Compare the results of this day to the first day of rubbish collection. On the Nude Food day staff to highlight some great examples of food brought to school.		Whole school	3rd term 2015	<input type="checkbox"/> Date
Nude Food days scheduled	Whole school	Nude Food days are diarised and occur throughout the year. Students see the results of their waste collections and are rewarded for their efforts in reducing waste.		Whole school	Ongoing	<input type="checkbox"/> Date

Evaluation

How we will know we have achieved our goals.

There is less rubbish that comes from the food students bring to school.

Action Plan – How are we going to achieve our goal(s) and target(s)?

Year: 2015

Theme/Topic: (This would relate to one or more of the areas from the goals section)

Target/s: (if applicable)

Water

Goals:

Reduce the water consumption in the school

Action	Location	Strategies to achieve action	Resources	Who	Timeframe	Completed
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Estimate water usage	Whole school	Students estimate the amount of water that the school uses.		Staff	4th term 2015	<input type="checkbox"/>
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Research conserving water ideas	Whole school	Research/discuss/ brainstorm ways each student could become more water wise. Students make posters to be put around the school advertising these ideas.	Computers, library books	Staff and students	4th term 2015	<input type="checkbox"/>
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Measure water wastage	Whole school	Have students collect and measure waste water in buckets from under drinking taps.	Buckets	Staff and students	4th term 2015	<input type="checkbox"/>
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Graph results	Whole school	Ongoing collection and recording of wasted water over an agreed time frame. Record and create a graph showing the lessening of water waste in the school.		Students	Ongoing	<input type="checkbox"/>
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						<input type="checkbox"/>
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Evaluation

How we will know we have achieved our goals.

There will be a significant cut in water usage at the school.