

Sustainability North Primary School



School Environment Management Plan 2017 - 2021

This School Environment Management Plan (SEMP) outlines Sustainability North Primary 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 2017. ResourceSmart 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. Sustainability Victoria and Northside Council have funded us to participate in ResourceSmart Schools and receive facilitation support from CERES.

Our SEMP is made up of the following key documents:

- A. Education for Sustainability Vision
- B. Sustainability Policy
- C. Green Procurement Policy
- D. Implementation
- E. Curriculum Review

Ratified by School Council on: 14 September 2017

Date of next review: September 2021



A. Education for Sustainability Vision

At Sustainability North Primary School we strive to inspire our whole school community to connect with the environment and to make a positive contribution to sustainability at school, home and beyond.

B. Sustainability Policy

Rationale

Sustainability North Primary School aims to reduce our ecological footprint through adopting sustainable practices in our everyday operations. We will achieve this by continuing to integrate sustainability into all areas of the curriculum and instilling a sense of ownership of and pride in improving the environment. We will lead the community by demonstrating exemplary practices in waste management, water and energy usage, and continue to develop the school grounds to improve biodiversity.

Guidelines

Energy - To control energy consumption within the school so that we reduce our impact on the natural environment; use resources and equipment as efficiently as possible; include students in developing and maintaining an energy efficient school; educate students, staff and the whole community about the best practice for energy efficiency, our whole-school energy conservation plan and sustainability initiatives and ecologically sustainable design (ESD) features in our school; and conduct auditing and monitoring of energy usage around our school.

Waste - To use an integrated waste management system within the school so that we reduce our impact on the natural environment; practise the 5R's waste minimisation hierarchy, Refuse, Reduce, Reuse, Repurpose, Recycle; close the loop on organic waste onsite; manage recycled products and landfill waste daily in the appropriate manner; educate students, staff and the whole community about the best practices for waste management, and our whole-school waste and litter reduction plan; and conduct auditing and monitoring of litter and waste at our school.

Biodiversity - To improve our outdoor natural environment through implementing our sustainability master plan to continually improve biodiversity in our school; optimise the teaching of sustainability education using the natural environment; educate students, staff and the whole community about actions for improving biodiversity in our school, and linking school vegetation and habitats with surrounding areas; and conduct biodiversity auditing to improve the habitat quality at our school.

Water - To control water consumption within the school so that we reduce our impact on the natural environment; to appreciate water as a precious resource; educate students, staff and the whole community about the best practice for water efficiency, our whole-school water conservation plan, and sustainability initiatives and water retention systems in our school; and conduct auditing and monitoring of water usage and stormwater collection around our school.

Aims and Targets

Benchmark targets are set by Sustainability Victoria

BIODIVERSITY	ENERGY	WASTE	WATER
<p>Increase habitat quality assessment score:</p> <p>Every year from baseline year</p>	<p>To achieve benchmark of:</p> <p>250 kWh – electricity 0.9 GJ – natural gas 0.4 tonnes CO₂ per student / per year</p>	<p>To achieve benchmark of:</p> <p>0.3 m³ per student / per year</p>	<p>To achieve benchmark of:</p> <p>4 KL per student / per year</p>
<p>Aspirational Target:</p> <p>75</p>	<p>Aspirational Target:</p> <p>200 kWh – electricity 0.7 GJ – natural gas 0.35 tonnes CO₂ per student / per year</p>	<p>Aspirational Target:</p> <p>0.25 m³ per student / per year</p>	<p>Aspirational Target:</p> <p>3.75 KL per student / per year</p>

C. Green Purchasing Policy

Rationale

Sustainability North Primary School is committed to sustainable practices within its community. It will endeavour to purchase 'green products' in order to reduce its environmental impact and to help 'close the loop'.

Sustainability North Primary School wishes to reduce its ecological footprint and to educate students on making environmentally friendly choices for life.

Guidelines

When feasible, Sustainability North Primary School will:

- Purchase 100% recycled paper for printers and photocopiers.
- Purchase a percentage of certified GreenPower.
- Purchase furniture, equipment and other materials made from recycled materials.
- Source recycled products for book orders.
- Purchase fair trade tea and coffee for the staff room.
- Use reusable and/or biodegradable packaging in the canteen and at events.
- Ensure the following groups are actively involved in using environmentally friendly and recycled products: Cleaning staff, Garden and grounds staff, Building and maintenance staff, students and school staff.
- Replace appliances with energy-efficient star rated appliances.

D. Implementation

In this snapshot we are documenting our campus, curriculum and community actions and identifying opportunities for improvement. We are also identifying opportunities to shift our whole school culture to take action on climate change.

BIODIVERSITY	Current Practices	Future Goals	How we will achieve our future goals (who & when)
<p style="text-align: center;">Campus</p> <p>Audit Investigations, Habitat Gardens, Food Gardens, Maintenance & Protection</p>	<ul style="list-style-type: none"> • We have plants that encourage bird life • As per school plan, only plant water sensitive, native, indigenous and drought tolerant species • Wetlands –frogs and macroinvertebrates • Butterfly garden • Annual Biodiversity Audit by Enviro Team • Every grade has their own veggie garden 	<ul style="list-style-type: none"> • More animal habitats • Start monitoring animal habitats • Nesting boxes • Bird bath • Rain garden using water diverted from downpipes 	<ul style="list-style-type: none"> • Liaise with gardener • Year 4 students to monitor in term 2, 2018 • Year 6 students to investigate rain garden designs in Term 4,2018 • Student Green Team to research rain gardens in T4 2017 to implement in T1 2018
<p style="text-align: center;">Curriculum</p> <p>How Biodiversity is embedded into learning and teaching and creating opportunities for students to participate in hands-on projects.</p>	<ul style="list-style-type: none"> • Year 6: Term 3 & 4 (Food Garden Program) – Life cycle of plant, seed dispersal, chicken anatomy, history of gardening, benefits of bees, compost, daylight changes • Year 5: Term 2 – Frogs and invertebrates in our wetlands; Excursion to CERES • Year 4: Term 2 – Birdlife (nesting birds) • Year 3: One semester (Food Garden Program) – (Lifecycle of plant, seed dispersal, chicken anatomy, history of gardening, benefits of bees, compost, daylight changes) • Year 2: Term 3 – Natural disasters • Year 1: Term 3 – Endangered Animals • Prep: Term 4 – Animal coverings/baby animals • ‘i sea, i care’ for Year 5s • Kitchen Garden Program for Year 3s 	<ul style="list-style-type: none"> • Garden Program for all grade levels • Incorporate CERES Biodiversity Curriculum Activities into the curriculum • All classrooms to get Spiny Leaf Insects • Incorporate foreign language into garden program • Bush Tucker garden Program linked to the cross curriculum priority: Aboriginal and Torres Strait Islander histories and cultures 	<ul style="list-style-type: none"> • Curriculum leaders to review in T4 2017 planning meeting to implement in 2018 Planner

<p style="text-align: center;">Community</p> <p>Building links with the school community and local community organisations and groups.</p>	<ul style="list-style-type: none"> • Clean Up Australia Day • World Enviro Day • Newsletter articles containing biodiversity updates • Parent Working Bees for school gardens once a term • Plant donations from local nursery • Applied for grant to purchase raised garden beds 	<ul style="list-style-type: none"> • Parent Working Bees currently once a term, make once a month • Students to write monthly newsletter article about school garden program • Lead school tours of wetlands area for other schools • Contact local Friends of group for biodiversity projects 	<ul style="list-style-type: none"> • Sustainability coordinator to discuss with Garden manager next few working bee dates/sessions and schedule call out in newsletter – starting T4 2017 • Grade 3 students, rostered each month • Contact local schools
<p style="text-align: center;">Culture</p> <p>Whole-of-school approach to increase awareness and knowledge of biodiversity issues.</p>	<ul style="list-style-type: none"> • Enviro Leaders • Animal Carers (Grade 3) • Classroom monitors for compost bins etc. • Year 6 Students work with Year 1 students in vegie garden every Friday • Staff attend TENS • During Team Meeting, staff – including maintenance and grounds staff – created planting regime for wetlands area. 	<ul style="list-style-type: none"> • Leadership for Sustainability workshop for staff • Distribute leadership roles amongst staff and students • Survey whole school community (staff, students and parents) to determine understanding of biodiversity issues • Students to present at school assembly once a month on biodiversity updates 	<ul style="list-style-type: none"> • Sustainability coordinator to organise with CERES in T2 2018 • Following workshop AP to elect 2 add staff to join Staff Green Team • Student Green Team to recruit one representative from each year level in T1 2018



ENERGY	Current Practices	Future Goals	How we will achieve our future goals (who & when)
<p style="text-align: center;">Campus</p> <p>Audit Investigations, Computers and Electronic Equipment, Lighting, Heating and Cooling, Renewable Energy</p>	<ul style="list-style-type: none"> • SWEP monitor our energy use • Turning off unused appliances • Timer lights and motion sensor lights in hallways, bathrooms, outside • Energy saving photocopiers • Using natural light in classrooms • Signs in classrooms to turn off lights • Solar panels on roof • Energy Audit annually • 10% of electricity is certified GreenPower 	<ul style="list-style-type: none"> • More Solar panels • More energy efficient appliances • Encourage wearing jumpers in winter instead of having heaters on all the time – Dress for the Weather announcements • Setting heating/air con temperatures at recommended temperature • Audit Lux levels and de-lamping as needed • Solar hot water • 5+ star appliances • Increase to 25% certified GreenPower 	<ul style="list-style-type: none"> • Sustainability Coordinator to research solar grants and discuss with CERES in T1 2018 • Business manager to ensure all purchasing abide by Green Purchasing policy • Classroom teachers to promote dress for the weather. Student announcements the day before with dress code reminder. • Facility manager to adjust thermostat settings in T2 2018 and student green team to do spot checks in T3/T4 2018 • Undertake professional energy audit in T1 2019 • Business Manager to inquire about Green Power plans and report to AP/Sustainability Coordinator in T1 2019
<p style="text-align: center;">Curriculum</p> <p>How Energy is embedded into learning and teaching and creating opportunities for students to participate in hands-on projects.</p>	<ul style="list-style-type: none"> • Year 6: Term 2 – Climate Change • Year 3: Term 1 – Energy Monitoring using Cool Australia audits and ATA energy kits • Year 2: Term 1 – Setting up for Success (Recycling, compost, bin and energy saving monitors) • Year 1: Term 1 – Setting up for Success (Recycling, compost, bin and energy saving monitors) • Prep: Term 1 – Setting up for Success (Recycling, compost, bin and energy saving monitors) 	<ul style="list-style-type: none"> • Year 3s and Year 5s Unit on energy • Use CERES Energy Curriculum Activities • CERES Mobile Energy Classroom incursion • Investigate Indigenous perspective on traditional ways to keep warm and remain cool • Incorporate inverter data from solar panels into curriculum • Using Energy Reports from ResourceSmart Online in Maths 	<ul style="list-style-type: none"> • Curriculum leaders to review in T4 2017 planning meeting to implement in 2018 Planner

<p style="text-align: center;">Community</p> <p style="text-align: center;">Building links with the school community and local community organisations and groups.</p>	<ul style="list-style-type: none"> • Earth Hour at school on Friday and with parents at home on the Saturday night • Walk and Bike to school day once a term • Enviro Day which has an energy focus • Planet Savers worked with students to conduct energy audit and published recommendations in school newsletter • Every class has their own blog on school website and regularly post energy activities in classroom. 	<ul style="list-style-type: none"> • Solar Energy Carnival with nearby schools and solar car race competition • Walking buses / Bike Groups everyday with parent leaders • Working Bees to plant trees outside of Main Building to provide shade during summer months • Energy Tips in School Newsletter • Students to borrow energy auditing kits and do at home with parents 	<ul style="list-style-type: none"> • Enviro captains and students Green Team to start planning in T3 2018 for tentative events in T2 2019 • Parent Leaders to organise weekly schedule • Sustainability coordinator to discuss with Garden manager appropriate time and schedule call out in newsletter • Student Green Team to compile tips and publish in newsletter following audit in T1 2019 • Curriculum leader to include energy home auditing activity in 2019 planner
<p style="text-align: center;">Culture</p> <p style="text-align: center;">Whole-of-school approach to increase awareness and knowledge of energy issues.</p>	<ul style="list-style-type: none"> • Energy Monitors report at school assemblies at end- of-year assembly on school's energy usage for the year • SWEP for energy monitoring reports presented at staff meetings and school council meetings • Switch Off Competition • CERES delivered Energy Module workshop to staff • School Council approved more solar panels at school 	<ul style="list-style-type: none"> • Staff Energy Monitors for different sections of the school to program heating and cooling temperature on thermostats • Use staff meetings once a term to work on Energy Module checklist and energy projects • Training for staff and students on how to read inverter for solar panels • Savings from energy bills to be reinvested for classes to go on an excursion • Pledge to the TAKE-2 Initiative 	<ul style="list-style-type: none"> • Facility manager to adjust thermostat settings in T2 2018 and student green team to do spot checks in T3/T4 2018 • Enviro captains to present at assemblies once a Term to raise energy awareness starting T1 2019 • Sustainability coordinator to organise solar meter reading training with CERES in T3 2017 to start entering data in RSS online • AP to sign up to TAKE 2 by end of 2017 and announce in newsletter

WASTE	Current Practices	Future Goals	How we will achieve our future goals (who & when)
<p>Campus Audit Investigations, Green Purchasing, Waste Systems for: Landfill & Recycling, Electronic Waste, Paper, Reusing, Litter</p>	<ul style="list-style-type: none"> • Small landfill bins and large recycling bins in school grounds • Reuse Paper trays in classrooms • Compost bins and recycling bins in classrooms • Nude Food Days • Compost for garden • Container recycling • 2nd hand uniform shop • Recycled toilet paper • Digital subscription for staff newspapers • Bin Audits on a weekly basis for ResourceSmart • Online bills data 	<ul style="list-style-type: none"> • Reduce canteen litter • Encourage more double sided printing • Reuse old worksheets • Shred used paper and put in compost • Increase signage in classrooms, corridors, offices, public places in school • Use less paper - students to be involved in monitoring paper being used on both sides for paper trays in classrooms • Mobile phone recycling • Buy recycled paper • Buy fair trade tea/coffee for staff room • Environmentally friendly cleaning products 	<ul style="list-style-type: none"> • Speak to canteen manager • IT to set double sided as default • Create containers for old worksheets • Undertake waste and litter audits in T4 2017 and plan with Green Team for solutions to reduce litter and waste to landfill • Green team to make waste-smart signs in T4 2017 and T1 2018. Enviro captains to follow up with announcement at first assembly of 2018 • Green team to investigate other recycling programs in T4 2018 • Sustainability coordinator to present Green procurement policy at assembly in T3 2017 and review school purchases with BM and AP in T4 2017
<p>Curriculum How Waste is embedded into learning and teaching and creating opportunities for students to participate in hands-on projects.</p>	<ul style="list-style-type: none"> • Year 6: Term 1 – Investigate E-waste • Year 5: Term 2 & 3 – Garden Program focusing on food waste and composting • Year 3: Term 2 – Life Cycle of Plastic Bag • Prep – Reduce, Reuse, Recycle • All classes have a Waste Monitor for landfill, recycling, compost and paper tray 	<ul style="list-style-type: none"> • Visit waste transfer station • Use CERES Waste Curriculum Activities • Clean Up Australia Day writing reflection journal • Wrapper Waste measurements for Maths • Fast Fashion discussions • Love Food Hate Waste presentation from Council 	<ul style="list-style-type: none"> • Contact local council • Waste excursion in T1 2018 as intro to 2018 focus on waste • Head of curriculum to provide direction and resources for 2018 waste focus during T4 2017 planning • Sustainability coordinator to investigate waste visitors/ incursions for T2 2018 or T3 2018

<p>Community Building links with the school community and local community organisations and groups.</p>	<ul style="list-style-type: none"> • TerraCycle Brigade for toothbrushes • Parents to collect plastic bags and batteries and dispose of at local shops • Clean Up Australia Day at local park • Council works with school on waste initiatives • Nude Food pledges from students and parents • Twice-a-year clothing donation drive • Newsletter articles on Nude Food and Nude Food • recipe of the month 	<ul style="list-style-type: none"> • Share student projects more • Nude Food Cooking Ideas workshops for parents • Partner with local secondary school to collect mobile phones for They're Calling On You campaign • Parents to donate cleaning bottles for DIY non-toxic cleaning products for students to make 	<ul style="list-style-type: none"> • Sustainability coordinator to enquire within parent community at T4 2017 assembly about need and experience with Nude Food • As part of Green team T4 2018 investigation on other recycling program, review existing programs at school in vicinity
<p>Culture Whole-of-school approach to increase awareness and knowledge of waste issues.</p>	<ul style="list-style-type: none"> • Golden Bin Award for Nude Food results weekly • Garden Club • Every week a new classroom conducts the bin audits and Council delivered Waste presentation to students and staff during school assembly • Waste Monitors present at school assemblies 	<ul style="list-style-type: none"> • Apply for ResourceSmart Schools awards • Staff to monitor Nude Food in classrooms during designated eating times in classrooms before going outside • Investigate Green Purchasing options during staff meetings and savings made from waste to pay the difference, if any, for greener products • School cleaners meet with Waste Monitors on a monthly basis for waste updates and ensure proper disposal of waste between school and cleaners 	<ul style="list-style-type: none"> • Sustainability coordinator to start putting application together in T2 2018 for end of year awards. Set up as Google doc and share/ask input from Staff Green Team. • Waste warriors to meet with cleaners quarterly in 2018

WATER	Current Practices	Future Goals	How we will achieve our future goals (who & when)
<p>Campus Audit Investigations, Water Systems for: Mains Water, Water Collection, Storm Water, Gardens</p>	<ul style="list-style-type: none"> • Wetlands provide a home for frogs and other native wildlife • Measuring water use through SWEP • All water off our buildings goes either into our 	<ul style="list-style-type: none"> • Put signs up to remind students to use less water • Sensors on taps • New washers • Buckets under taps for plants/garden • Water funnels for new trees • Toilets flushed using tank water • Rain Garden off gym 	<ul style="list-style-type: none"> • Run poster competitions • Green Student team to undertake school water audit in T1 2018 • Facility manager to confirm RW tanks are connected to toilets by end of 2017 • Green Team to research rain garden design online in T1 2018 and if possible plan weekend working bee to



	<p>water tanks or wetlands</p> <ul style="list-style-type: none"> • Using water tanks • Mulch/compost use • Native plants in wetlands • Block off grassed areas for growth • Students conduct water audits 		implement in T2 2018
<p>Curriculum</p> <p>How Water is embedded into learning and teaching and creating opportunities for students to participate in hands-on projects.</p>	<ul style="list-style-type: none"> • National Water Week in Term 4 at school and all grades focus on water • Year 6: Water scarcity around the world • Year 5: Frogs and invertebrates in our wetlands; frog project with Corroboree frog • Year 4: Geography – water aspect • Year 3: Interactive catchment education • Year 2: Interactive Water Cycle • Year 1: Water and Plants • Prep: Water Play • Years 5 and 6: 'I sea, i care' 	<ul style="list-style-type: none"> • CERES Water Curriculum Activities • Contact Water Provider to do incursion on water usage during National Water Week • Use SWEP and ResourceSmart Online reports 	<ul style="list-style-type: none"> • Curriculum leaders to review T4 2018 planning to focus on Water and include CERES activities, SWEP data and excursion @ next meeting T3/4 2017
<p>Community</p> <p>Building links with the school community and local community organisations and groups.</p>	<ul style="list-style-type: none"> • Grade 5 Frog project - Corroboree frog – partnered with Melbourne Zoo • Working Bee with parents in wetlands project • Enviro Team Student Leaders attended Melbourne Water Kids Teaching Kids event • School council applied for water tank grant • Council donated water timers for shorter showers project • Local nursery donated drought-tolerant plants for garden 	<ul style="list-style-type: none"> • Posters in kitchen/toilet etc. • Stormwater Signage Project with council and parents during Water Week • School to host Kids Teaching Kids event • Call on parents who are plumbers to help with our water tank / rain garden projects 	<ul style="list-style-type: none"> • Student green team to display winning posters • Sustainability Coordinator to add call for plumber skills within community in T3 2017 newsletter • Enviro captains to discuss hosting KTK at school at T2 2018 assembly in preparation for September 2018, and seek out parents interested in helping
<p>Culture</p> <p>Whole-of-school approach to increase awareness and knowledge of water issues.</p>	<ul style="list-style-type: none"> • Grade 6 Enviro Leaders attended Kids Teaching Kids Conference and did presentation at school assembly about event • 4-minute Shower Challenge – staff, students and parents committed to 4-minute Shower Challenge during National Water Week and kept a log of their shower time. • Student Leaders presented school water usage 	<ul style="list-style-type: none"> • Extend 4-minute Shower Challenge for 1 month instead of 1 week – and then have it be every day • Work with cleaners on non-toxic cleaning products • Empty Water Bottles into bucket for gardens at the end of each school day • Year 6 students to create Water Play 	<ul style="list-style-type: none"> • Sustainability coordinator to contact council / water authority to receive shower timers if available in T2 2018, for use in 4-min shower Challenge in T4 2018 • Classroom teachers to allow time for watering at end of day



	reports from SWEP and ResourceSmart Online during National Water Week assembly <ul style="list-style-type: none"> National Water Week 	activities for Prep students	
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E. Curriculum Review

We are committed to including a sustainability/environmental focus into inquiry units across all year level and as part of daily classroom practices where possible.

Year	Name of Inquiry Unit, Curriculum Area or Learning Activity	Biodiversity	Water	Waste	Energy
F	<ul style="list-style-type: none"> Term 1 – Setting up for success (recycling, compost, bin and energy saving monitors) Term 4 – Animal coverings/baby animals Water Play 	✓	✓	✓	✓
1	<ul style="list-style-type: none"> Term 1 – Setting up for success (recycling, compost, bin and energy saving monitors) Term 3 – Endangered Animals Water and Plants 	✓	✓	✓	✓
2	<ul style="list-style-type: none"> Term 1 – Setting up for success (recycling, compost, bin and energy saving monitors) Term 3 – Natural disasters Interactive Water Cycle 	✓	✓	✓	✓
3	<ul style="list-style-type: none"> Term 1 – Energy Monitoring using Cool Australia audits and ATA energy kits Term 2 – Life Cycle of Plastic Bag One semester (Food Garden Program) – (Life cycle of plant, seed dispersal, chicken anatomy, history of gardening, benefits of bees, compost, daylight changes) Kitchen Garden Program Interactive catchment education 	✓	✓	✓	✓

4	<ul style="list-style-type: none"> • Term 2 – Birdlife (nesting birds) • Geography – water aspect 	✓	✓	✓	
5	<ul style="list-style-type: none"> • Term 2 – Frogs and invertebrates in our wetlands; Excursion to CERES • 'i sea, i care' • Term 2 & 3 – Garden Program focusing on food waste and composting • Frogs and invertebrates in our wetlands; frog project with Corroboree frog 	✓	✓	✓	
6	<ul style="list-style-type: none"> • Term 1 – Investigate e-waste • Term 2 – Climate Change • Term 3 & 4 (Food Garden Program) – Life cycle of plant, seed dispersal, chicken anatomy, history of gardening, benefits of bees, compost, daylight changes • Water scarcity around the world 	✓	✓	✓	✓