ESSEX HEIGHTS PRIMARY SCHOOL
SCHOOL ENVIRONMENTAL MANAGEMENT PLAN

This School Environmental Management Plan (SEMP) outlines Essex Heights Primary Schools commitment to sustainability.

This SEMP 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.

Our SEMP is made up of the following key documents:
- Education for Sustainability Vision
- Sustainability Policy
- Green Procurement Policy
- Curriculum Review

Date of next review: 2020

EDUCATION FOR SUSTAINABILITY VISION

At Essex Heights 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.

ESSEX HEIGHTS PRIMARY SCHOOL
SUSTAINABILITY POLICY

RATIONALE

Essex Heights 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 of 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
Increase habitat quality assessment score: **Every year from baseline year**	To achieve/work towards benchmark of: **250 kWh – electricity** **0.9 GJ – natural gas** **0.4 tonnes CO_2** **per student / per year**	To achieve/work towards benchmark of: **0.3 m^3** **per student / per year**	To achieve/work towards benchmark of: **4 KL** **per student / per year**
Aspirational Target: **To work collectively to achieve best practise targets.**	Aspirational Target: **To work collectively to achieve best practise targets.**	Aspirational Target: **To work collectively to achieve best practise targets.**	Aspirational Target: **To work collectively to achieve best practise targets.**

EVALUATION

This policy will be reviewed every three years or more often if necessary.

George Perini   Kristen Steer

Principal   School Council President

School Council - September 2017

ESSEX HEIGHTS PRIMARY SCHOOL
GREEN PROCUREMENT POLICY

RATIONALE

To model best practice for students and the wider community. Environmentally Preferable Purchasing (EPP) or Green Purchasing refers to the procurement of products and services that have a lesser or reduced effect on human health and the environment when compared with competing products or services that serve the same purpose. This comparison may consider raw materials acquisition, production, manufacturing, packaging, distribution, reuse, operation, maintenance or disposal of the product or service.

In the past, many individuals thought of Purchasing as a business function with only bottom-line financial considerations. However, for the past 20+ years purchasing professionals have worked to link purchasing with environmental science and management (as well as other academic disciplines) by researching (and applying) the impacts that purchasing has on social, economic and environmental processes and systems. Therefore, national and international researchers have been able to investigate all aspects of global marketplace behaviour by going into the field to research the complete life cycle of products and services (from raw material extraction, to packaging, shipping, transportation, use/application, disposal and reuse).

By understanding and researching purchasing in this way, purchasing professionals hope to demonstrate and apply the benefits of integrating social, ethical and environmental indicators and criteria upstream (where purchasing decisions are made), which have multiple downstream impacts (including better policy and technological enhancements as well as identifying pollution and waste prevention opportunities and discoveries).

GUIDELINES

When feasible, Essex Heights will:

- ➢ Minimise unnecessary purchasing.
- ➢ Make more sustainable use of natural (often finite) resources.
- ➢ Decrease the impact of the school's activities on the environment.
- ➢ Decrease waste (avoid, reduce, reuse, recycle)
- ➢ Minimise toxicity to promote human and environmental health
- ➢ Support sustainable and ethical industries.
- ➢ Change the culture of purchasing in the community to an informed approach that considers the environmental and ethical implications of all goods and services.
- ➢ Consider the ecological footprint of all products and services purchased for the school
- ➢ Maximise value for money

EVALUATION

This policy will be reviewed every three years or more often if necessary.

George Perini   Kristen Steer

Principal   School Council President

School Council - September 2017

SUSTAINABILITY / ENVIRONMENTAL CURRICULUM REVIEW

We are committed to including a sustainability/environmental focus into inquiry units across all year levels and as part of daily classroom practices where possible. See Appendix A for Victorian Curriculum through lines.

SUSTAINABILITY

Sustainability addresses the ongoing capacity of Earth to maintain all life.

Sustainable patterns of living meet the needs of the present without compromising the ability of future generations to meet their needs. Actions to improve sustainability are both individual and collective endeavours shared across local and global communities. They necessitate a renewed and balanced approach to the way humans interact with each other and the environment.

Education for sustainability develops the knowledge, skills, values and world views necessary for people to act in ways that contribute to more sustainable patterns of living. It enables individuals and communities to reflect on ways of interpreting and engaging with the world. Sustainability education is futures-oriented, focusing on protecting environments and creating a more ecologically and socially just world through informed action. Actions that support more sustainable patterns of living require consideration of environmental, social, cultural and economic systems and their interdependence.

The Sustainability priority has been developed around the three key concepts of systems, world views and futures. These three organising ideas reflect the essential knowledge, understandings and skills for the Sustainability priority.

Organising Ideas

Systems - explores the interdependent and dynamic nature of systems that support all life on Earth and our collective wellbeing

- The biosphere is a dynamic system providing conditions that sustain life on Earth.

- All life forms, including human life, are connected through ecosystems on which they depend for their wellbeing and survival.

- Sustainable patterns of living rely on the interdependence of healthy social, economic and ecological systems.

World views - enables a diversity of world views on ecosystems, values and social justice to be discussed and recognised when determining individual and community actions for sustainability

- World views that recognise the dependence of living things on healthy ecosystems, and value diversity and social justice are essential for achieving sustainability.

- World views are formed by experiences at personal, local, national and global levels, and are linked to individual and community actions for sustainability.

Futures - aimed at building capacities for thinking and acting in ways that are necessary to create a more sustainable future

- The sustainability of ecological, social and economic systems is achieved through informed individual and community action that values local and global equity and fairness across generations into the future.

- Actions for a more sustainable future reflect values of care, respect and responsibility, and require us to explore and understand environments.

- Designing action for sustainability requires an evaluation of past practices, the assessment of scientific and technological developments, and balanced judgments based on projected future economic, social and environmental impacts.

- Promoting reflective thinking processes in young people and empower them to design action that will lead to more a more equitable and sustainable future

- Sustainable futures result from actions designed to preserve and/or restore the quality and uniqueness of environments.

All learning areas within the Victorian Curriculum F-10 have a potential to contribute to the Sustainability cross-curriculum priority. Sustainability is included in each area in ways that are consistent with the content and purpose of the learning area. Each learning area contributes differently to the Sustainability cross-curriculum priority, its key knowledge, concepts and skills. For example, some have content that enables students to work with ecological and human systems and to appreciate their interdependence. Others contribute to the development of world views necessary for students to act to create a more socially and ecologically just world. There are others that provide content that challenges students to consider sustainable futures and to design and take action that recognises projected future economic, social and environmental impacts. While some areas do not address sustainability directly in their content descriptions, they may still contribute to learning that is essential for understanding sustainability issues by providing the analytical, measurement and persuasive skills needed to advocate effectively for sustainability. Refer to Appendix 1 Learning Area Contribution Overview.

The capabilities within the Victorian Curriculum F-10 can also play a significant role in addressing Sustainability as a cross curriculum priority. The four capabilities; Critical and Creative Thinking, Intercultural, Personal and Social, and Ethical Capability include a set of discrete knowledge and skills that can and should be taught explicitly in and through the learning areas, but are not fully defined by any of the learning areas or disciplines. When developing the teaching and learning program, schools need to give the same consideration to the capabilities as they do for the learning areas. For example, exploring possibilities, interrogating points of view, becoming socially aware and applying ethical principles are part of the knowledge and skills of the capabilities and these clearly contribute to creating a more sustainable future.

The curriculum content is set out in the content descriptions and is therefore mandatory for schools to include in their teaching and learning programs. Within the curriculum, schools are also provided with elaborations to support their planning. These elaborations give guidance about further opportunities to incorporate Sustainability into teaching and learning programs.

The following table provides a summary of learning about sustainability contained within the content descriptions in the Victorian Curriculum F-10. The direct links to the content descriptions are included. By following these content description links, the elaborations can be easily accessed.

Victorian Curriculum: Sustainability related content descriptions

	Foundation to Level 2	Levels 3 and 4	Levels 5 and 6
History	The history of a significant person, building, site or part of the natural environment in the local community and what it reveals about the past (VCHHK063) Differences and similarities between students' daily lives and perspectives of life during their parents' and grandparents' childhoods, including family traditions, leisure time and communications (VCHHK061)	A significant example of change and a significant example of continuity over time in the local community, region or state/territory (VCHHK073) The diversity and longevity of Australia's first peoples and the significant ways Aboriginal and Torres Strait Islander peoples are connected to Country and Place (land, sea, waterways and skies) and the effects on their daily lives (VCHHK078)	The nature of convict or colonial presence, including the factors that influenced changing patterns of development, how the environment changed, and aspects of the daily life of the inhabitants, including Aboriginal and Torres Strait Islander peoples. (VCHHK089) Significant contributions of individuals and groups, including Aboriginal and Torres Strait Islander peoples and migrants, to changing Australian society (VCHHK096)
Science	Earth's resources are used in a variety of ways (VCSSU047) Observable changes occur in the sky and landscape; daily and seasonal changes affect everyday life (VCSSU046) Living things have a variety of external features and live in different places where their basic needs, including food, water and shelter, are met (VCSSU042)	Science knowledge helps people to understand the effects of their actions (VCSSU056) Earth's surface changes over time as a result of natural processes and human activity (VCSSU062) Different living things have different life cycles and depend on each other and the environment to survive (VCSSU058)	Sudden geological changes or extreme weather conditions can affect Earth's surface (VCSSU079) The growth and survival of living things are affected by the physical conditions of their environment (VCSSU075) Living things have structural features and adaptations that help them to survive in the environment (VCSSU074) Scientific understandings, discoveries and inventions are used to inform personal and community decisions and to solve problems that directly affect people's lives (VCSSU073) Energy from a variety of sources can be used to generate electricity, electric circuits enable this energy to be transferred to another place and then transformed into another form of energy (VCSSU081)
Economics and Business			Explore the concept of opportunity cost and explain how it involves choices about the alternative use of limited resources and the need to consider trade-offs. (VCEBR002) Identify the types of resources (natural, human and capital) and explore the ways societies use them in order to satisfy the needs and wants of present and future generations. (VCEBR003) Consider the effect that consumer and financial decisions of individuals may have in themselves, their family, the broader community and the natural, economic and business environment. (VCEBC005)

Geography	Weather and seasons and the ways in which different cultural groups including Aboriginal and Torres Strait Islander peoples, describe them. (VCGGK067)	Collect and record relevant geographical data and information from the field and other sources (VCGGC074) The many Countries/Places of Aboriginal and Torres Strait Islander peoples throughout Australia, and the custodial responsibility they have for Country/Place, and how this influences views about sustainability (VCGGK080) Types of natural vegetation and the significance of vegetation to the environment, the importance of environments to animals and people, and different views on how they can be protected; the use and management of natural resources and waste, and different views on how to do this sustainably (VCGGK082) Main climates of the world and the similarities and differences between the climates of different places. (VCGGK081) Similarities and differences in individuals' and groups' feelings and perception about places and how they influence views about the protection of these places. (VCGGK083)	Influence of people, including the influence of Aboriginal and Torres Strait Islander peoples, on the environmental characteristics of Australian places (VCGGK094) Impacts of bushfires or floods on environments and communities, and how people can respond (VCGGK095) Environmental and human influences on the location and characteristics of places and the management of spaces within them (VCGGK096) Differences in the demographic, economic, social and cultural characteristics of countries across the world. (VCGGK093)
Civics and Citizenship		Investigate why and how people participate within communities and cultural and social groups (VCCCC006)	Examine the concept of global citizenship (VCCCC017) Identify who can be an Australian citizen and describe the rights, responsibilities and shared values of Australian citizenship and explore ways citizens can participate in its society (VCCCC014) Identify different points of view on a contemporary issue relating to democracy and citizenship (VCCCC015) Investigate how people with shared beliefs and values work together to achieve their goals and plan for action. (VCCCC016)
Health and Physical Education	Explore actions that help make the classroom a healthy, safe and active place (VCHPEP078) Identify and explore natural and built environments in the local community where physical activity can take place (VCHPEP079) Participate in play that promotes engagement with outdoor settings including aquatic and the natural environment (VCHPEP063)	Describe strategies to make the classroom and playground healthy, safe and active spaces (VCHPEP095) Participate in outdoor games and activities to examine how participation promotes a connection between the community, natural and built environments, and health and wellbeing (VCHPEP096)	Explore how participation in outdoor activities supports personal and community health and wellbeing and creates connections to the natural and built environment (VCHPEP113)

Digital Technologies			Explain how student-developed solutions and existing information systems meet current and future community and sustainability needs (VCDTCD034
Design and Technologies	Identify how people create familiar designed solutions and consider sustainability to meet personal and local community needs (VCDSTS013) Explore needs or opportunities for designing, and the technologies needed to realise designed solutions (VCDSCD018)	Recognise the role of people in design and technologies occupations and explore factors, including sustainability, that impact on the design of solutions to meet community needs (VCDSTS023) Investigate the suitability of materials, systems, components, tools and equipment for a range of purposes (VCDSTC027) Evaluate design ideas, processes and solutions based on criteria for success developed with guidance and including care for the environment and communities (VCDSCD031) Critique needs or opportunities for designing and explore and test a variety of materials, components, tools and equipment and the techniques needed to create designed solutions (VCDSCD028)	Investigate how people in design and technologies occupations address competing considerations, including sustainability, in the design of solutions for current and future use (VCDSTS033) Investigate how and why food and fibre are produced in managed environments (VCDSTC035) Investigate characteristics and properties of a range of materials, systems, components, tools and equipment and evaluate the impact of their use (VCDSTC037) Negotiate criteria for success that include consideration of environmental and social sustainability to evaluate design ideas, processes and solutions (VCDSCD041) Generate, develop, communicate and document design ideas and processes for audiences using appropriate technical terms and graphical representation techniques (VCDSCD039)
Ethical Capability		Explore the extent to which particular acts might be regarded by different people as good or bad, right or wrong, better or worse, and explain why (VCECU005) Discuss the ways to identify ethical considerations in a range of problems (VCECU006)	Examine how problems may contain more than one ethical issue (VCECU011) Explore the significance of 'means versus ends' by considering two ways to act when presented with a problem: one that privileges means and one ends. (VCECD012) Discuss how ethical principles can be used as the basis for action, considering the influence of cultural norms, religion, world views and philosophical thought on these principles. (VCECU010)

Note: List is not exhaustive

LEARNING AREA CONTRIBUTION OVERVIEW

English - develops the skills necessary to investigate, analyse and communicate ideas and information related to sustainability, and to advocate, generate and evaluate actions for sustainable futures. The content in the language, literature and literacy strands is key to developing and sharing knowledge about social, economic and ecological systems and world views that promote social justice. In this learning area, students may interrogate a range of texts to shape their decision-making in relation to sustainability. They develop the understanding and skills necessary to act responsibly and create texts that inform and persuade others to take action for sustainable futures.

Mathematics - develops the skills for the exploration of sustainability issues and their solutions. Students apply spatial reasoning, measurement, estimation, calculation and comparison to gauge local ecosystem health and can cost proposed actions for sustainability. Mathematical understandings and skills are necessary to measure, monitor and quantify change in social, economic and ecological systems over time and statistical analysis enables the prediction of probable futures based on findings and helps inform decision-making and actions that will lead to preferred futures.

Science - the Sustainability priority provides contexts for investigating and understanding chemical, biological, physical and Earth and space systems. Students explore a wide range of systems that operate at different time and spatial scales. By investigating the relationships between systems and system components and how systems respond to change, students develop an appreciation for the interconnectedness of Earth's biosphere, geosphere, hydrosphere and atmosphere. Relationships including cycles and cause and effect are explored, and students develop observation and analysis skills to examine these relationships in the world around them. In this learning area, students appreciate that science provides the basis for decision-making in many areas of society and that these decisions can impact on the Earth system. They understand the importance of using science to predict possible effects of human and other activity and to develop management plans or alternative technologies that minimise these effects.

Humanities – supports students to respond to the challenges of sustainability requiring an understanding of the key historical, geographical, political, economic and societal factors involved, and how these different factors interrelate. The learning area provides content that supports the development of students' world views, particularly in relation to judgements about past social and economic systems, and access to and use of Earth's resources. It gives students opportunities to integrate their study of biophysical processes with investigations of the attitudinal, demographic, social, economic and political influences on human use and management of the environment. The curriculum prepares students to be informed consumers, to act in enterprising and innovative ways and to perceive business opportunities in changing local, regional and global economic environments. Students explore contemporary issues of sustainability and develop action plans and possible solutions to local, national and global issues which have social, economic and environmental perspectives.

The Arts - provides engaging and thought-provoking contexts in which to explore the nature of art making and responding. It enables the exploration of the role of The Arts in maintaining and transforming cultural practices, social systems and the relationships of people to their environment. Through making and responding in The Arts, students consider issues of sustainability in relation to resource use and traditions in each of The Arts disciplines. The Arts provides opportunities for students to express and develop world views, and to appreciate the need for collaboration within and between communities to implement more sustainable patterns of living. In this learning area, students use the exploratory and creative platform of The Arts to advocate effective action for sustainability.

Technologies - enables consideration of preferred futures. When students identify and critique a problem, need or opportunity; generate ideas and concepts; and create solutions, they give prime consideration to sustainability by anticipating and balancing economic, environmental and social impacts. The curriculum focuses on the knowledge, understanding and skills necessary to design for effective sustainability action taking into account issues such as resource depletion and climate change. Technologies give students opportunities to explore their own and competing viewpoints, values and interests. Understanding systems enables students to work with complexity, uncertainty and risk; make connections between disparate ideas and concepts; self-critique; and propose creative solutions that enhance sustainability. Students reflect on past and current practices, and assess new and emerging technologies from a sustainability perspective.

Health and Physical Education - explores how people connect and interact with natural, managed and built environments, and with people in different social groups within their social networks and wider communities. They consider how these connections and interactions within systems play an important role in promoting, supporting and sustaining the wellbeing of individuals, the community and the environment as a whole, now and into the future. Students develop their world view by exploring concepts of diversity, social justice and consumerism as these relate to the promotion and maintenance of health and wellbeing. Through movement experiences, students are provided with opportunities to develop a connection in and with environments and to gain an appreciation of the interdependence of the health of people and that of environments.

Languages - contributes to students' capabilities to investigate, analyse and communicate concepts and understandings related to sustainability in broad contexts, and to advocate, generate and evaluate actions for sustainable futures. Within each language, students engage with a range of texts focused on concepts related to sustainability. In this way, students develop knowledge and understanding about sustainability within particular cultural contexts. This is crucial in the context of national and international concerns about, for example, climate change, food shortages and alternative ways of caring for land and agriculture. Through developing a capability to interact with others, negotiating meaning and mutual understanding respectfully and reflecting on communication, students learn to live and work in ways that are productive and sustainable.