

# ResourceSmart Certification Tool

## Energy

School: \_\_\_\_\_

Date: \_\_\_\_\_ Verifying Facilitator: \_\_\_\_\_

<p><b>Per Student Benchmarks:</b></p> <p><b>Primary: 250 KWh/ year</b>  <b>0.4 tonne CO<sub>2</sub></b></p> <p><b>Secondary: 400 KWh/ year</b>  <b>0.6 tonne CO<sub>2</sub></b></p> <p><b>Aim to keep below these levels</b></p>	and/or	<p><b>Aspirational Greenhouse Gas Emissions Reduction Target:</b></p> <p><b>50% per student from baseline year</b></p> <p><b>Long term target 80% reduction</b></p>
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### How to use this Certification Tool

Use this Certification Tool for **Energy** to check your school's progress in this resource module.

- 1) When you have fulfilled the required number of "practices present" contact the Victorian Association for Environmental Education at [vaee@vaee.vic.edu.au](mailto:vaee@vaee.vic.edu.au) or 03 9349 1806 for a ResourceSmart AuSSI Vic facilitator to verify your achievements.
- 2) When verified, apply for a **Certificate of Achievement in Energy** or for **ResourceSmart 5Star Sustainability Certification** contact Sustainability Victoria - [schools@sustainability.vic.gov.au](mailto:schools@sustainability.vic.gov.au) or 03 8626 8700.

**ResourceSmart 5Star Sustainability Certification** is a five star process. See the ResourceSmart website for details [resourcesmart.vic.gov.au](http://resourcesmart.vic.gov.au).

## A: Workplace/ Daily Operations

**A1 Systems Design and Management** At least three practices present

Towards best practice activities	Examples/Comments
Energy and greenhouse emissions assessments undertaken (may include transport (e.g. Walk to School Days, Public Transport Days, Sustainable Transport Week, International Walk to School Month (October), Walking Bus program, TravelSmart plans)	
Baseline data completed and on School Environment Tracking System (SETS)	
Use of DEECD's advice to principals to help support targets (Administrative Guidelines) or similar systemic initiatives for Catholic & Independent schools	

**A2 Development and Planning** At least three practices present

Towards best practice activities	Examples/Comments
Whole school energy use/greenhouse gas reductions development plan in place	
Professional development for staff on energy/air quality/passive solar design/renewable energy technologies and associated themes	
The school has applied for energy related grants and/or entered environmental awards and competitions (e.g. ResourceSmart School s Awards, Home Energy competition)	List

Plan in place for purchase of green electricity	
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**A3 Energy Efficiency - Management, Maintenance and Monitoring** At least seven practices present

Towards best practice activities	Examples/Comments
Interpretive signage re energy conservation practices evident in staffrooms, toilets/bathrooms, canteen, art rooms and general classrooms	
Maintenance regimes implemented (e.g. for cleaning light fittings/ reflectors, heaters, air conditioners)	
Energy monitoring systems in place and figures on SETS or equivalent	
Green purchasing taking place regularly (e.g. Green Purchasing Plan adopted (4, 5 or 6 star energy rating for all appliances), phase-in of green energy supply over next 2 years)	
Switch off regimes implemented in staffroom, utility rooms, specialist rooms, corridors, toilet/bathrooms and general classrooms (e.g. green dot rooms, holiday arrangements)	List
Heating/cooling regimes implemented in staffroom, specialist rooms, corridors and general classrooms	
Computer monitor sleep time regimes established	
Standby and shut down energy regimes established	
Natural air flow (cross ventilation) systems or regimes implemented	
Appliances used on timer systems where appropriate (e.g. staff water urn, air conditioners and individual space heaters)	

**A4 Renewables and Energy Efficiency - Sustainable Building Design** At least one practice present

Towards best practice activities	Examples/Comments
Use green or passive heating and cooling systems (e.g. blinds, deciduous tree planting)	List
Use of solar hybrid, interactive or stand alone systems for lighting	
Use of solar collection systems, including glass houses, for heating or solar hot water	
Use of solar powered water pumps or air movement systems	
Use of solar PV panels/wind generator/biomass	List
Plan to be carbon neutral and include use of passive solar design principles in all new buildings	

**A5 Energy Efficiency – Retrofitting and Technology** At least six practices present

Towards best practice activities	Examples/Comments
De-lamping and re-lamping (e.g. energy efficient globes) programs implemented	
Replacement or addition of light fitting reflector panels and/or painted surfaces for light refraction/reflection	
Installation movement-censored lighting	
Installation of timer switches or switched lighting	
Installation of Smart meters	
Installation of skylights and/or natural lighting and/or energy efficient windows and/or coverings	
Installation of 4, 5 or 6 star rated appliances where appropriate (e.g. dish washers, fridges etc)	
Installation of weather stripping, draft proofing and/or double glazing, where appropriate	
Security lighting clean and timing set to operate effectively (e.g. only during hours of darkness)	
Correct use of ceiling fans (reversible)	
Installation/ improvement of insulation (wall, ceiling and/or floor)	

**A6 Other Carbon Reduction Measures** At least two practices present

Towards best practice activities	Examples/Comments
Protection of existing trees in school Masterplan	
Planting and maintenance of indigenous/native trees as a carbon sink (on school property or in local area)	
Purchase of renewable energy certificates (mitigation) from accredited providers for school carbon emissions	
Creation of school carbon trading group	
Purchase of carbon offsets from accredited providers for travel based school carbon emissions (e.g. Green Fleet)	

## B: Learning and Teaching

### B1 Energy, Global Warming and Climate Change At least six practices present

Towards best practice activities	Examples/Comments
There is an action plan that clearly targets classroom activities across the school to address school sustainability in energy or global warming/climate change policy/curriculum (see SaveEnergy@School CD, TREES, Environment Protection Authority (EPA), AirWatch resources)	
Clearly targeted classroom activities that match the students' stages of learning and personal development	
Classroom activities in energy, air quality and greenhouse issues are clearly linked to outcomes in the Victorian Essential Learning Standards	
Learning and teaching in the classroom in energy and air quality/ greenhouse reduction are linked to practical, 'hands-on' activities that encourage: <ul style="list-style-type: none"> <li>▪ use of the school premises and infrastructure as an authentic learning space</li> <li>▪ excursions to provide students with first hand experience of energy conservation, renewable technologies and energy education centres</li> <li>▪ links to home-based projects and behaviour change in energy and air quality/ Greenhouse reduction (e.g. monitoring home/personal usage and using save energy calculators, using EPA Ecological Footprint calculators and the Australian Greenhouse Calculator, Greenhouse Challenge, Cool Communities, Home Energy Project)</li> </ul>	
School program provides students with the opportunity to take responsibility for classroom activities and programs in energy, air quality and greenhouse issues	
Interactive ICT resources used by students to gain information on and increase understanding of energy conservation and greenhouse cycle, energy issues and air quality or renewable energy sources	
School engages indigenous learning perspectives in curriculum development and relates this to energy	
Incursion to provide students and teachers with knowledge and motivation around energy conservation	
Guest speakers or in-school education programs on energy	
Using SETS or its equivalent as a curriculum activity to monitor progress in energy reduction in the school	

## C: Whole School Community Engagement

### C1 Policy and Reporting At least six practices present

Towards best practice activities	Examples/Comments
Energy policies, targets and action plan approved by School Council/planning committee	
Regular communication of energy, air quality, ecological footprint, and greenhouse activities and programs provided to the whole school (e.g. reports at school assemblies, annual school reports, newsletters, displays and end of year assemblies, parent teacher night presentations, school council reports)	
Regular feedback on the energy, air quality, ecological footprint, and greenhouse activities and programs sought from the whole school (students, staff, parents, School Council/committee and community support personnel)	
At least one case study of school success completed and uploaded onto school/departmental/sustainability website	
Sustainability education in energy included as a priority or focus area or emphasis in the school goals (in School Plan, Policy, Administration and/or Curriculum Charts)	
School events, target being energy smart and keep energy use to a minimum	

**C2 Student and Parent Leadership** At least two practices present

Towards best practice activities	Examples/Comments
Students involved in planning and managing the energy and air quality program (e.g. Student Action Teams)	
School environment leadership through students instituted in the school	
School Environment Club active	
Parents and other members of the school community assist in the planning and management of the energy module	
Parents and other members of the school community assist in implementing actions of the energy module	

**C3 Community and Communications Links** At least four practices present

Towards best practice activities	Examples/Comments
School liaises and/or works with local government or regional energy authorities and groups to develop school-based and joint projects	
Staff and/or students attend local environmental network meetings	
Staff and/or students participate in local energy activities to reduce personal car based transport (e.g. Walking School Bus, Ride2School, TravelSmart, car pooling or bike riding encouragement programs)	
Questions about the attitudes and changes in home ResourceSmart behaviour included in annual parent surveys and wider school community surveys	
Ideas and activities for being more energy smart at home included in school newsletters to families	
Staff and/ or students mentor other schools	
Students and staff open dialogue about energy related issues with other schools across the nation and globe	
Staff and/ or students give presentations on their school energy and air quality programs to other schools	
School liaises with political representatives from local, state and federal governments and local business and local 'friends of' groups for support for projects	

**End of Certification Tool  
Energy**

This school has completed the required tasks for certification in the ResourceSmart AuSSI Vic Energy Module.

School's Name: \_\_\_\_\_

Principal's Name: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Facilitator's Name: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Sustainability Victoria wishes to acknowledge CERES  for the development of this resource.

