**Auditing Tools**

**What we mean by Auditing:**

Auditing = assess + map + collect data

Auditing systematically collects and examines information to inform planning for improvement. An auditing process includes learning and a range of information collecting measures (e.g. attitudinal survey, assessing, data collection). The auditing process collects information about the use of resources and behavioural practices to enable effective planning.

**Before an audit**

• Learn ‘why’ we need to continually improve our environmental impact (activities, products, services) in order to live more sustainable lives

• Learn ‘how’ we can understand our impact through collecting a range of information e.g. mapping, collecting data, and surveys

• Learn what the possibilities are for future improvements.

**How Auditing fits with your School/Site Environment Management Plan (SEMP)**

In order to work out what you want to do, you need to have a baseline of what’s already happening. These Auditing tools help you get this data and information. Share the results with the rest of your community, and identify which actions need to be taken, the priority of those actions, and who is responsible for taking them. As part of the whole process, revisit the audit within a specified amount of time to see what impact your actions have made. It’s all part of the cycle of continuous improvement.

|  |  |  |
| --- | --- | --- |
|  |  |  |
| **Your personal footprint** |
| [**Ecological Footprint Calculator**](https://www.footprintcalculator.org/home/en)Global Footprint Network  | For determining your home ecological footprint. You can save your results, or just look at them, and there is the option to re-do the quiz. Provides hints as well as the option to explore data from around the world to make comparisons. Has engaging graphics that build a picture as you answer the questions. Choosing ‘detailed answers’ to get a more accurate result allows you to slide a scale bar to change frequency or quantity. Questions cover food types consumed and their frequency, food miles/packaging, house type and construction materials, energy efficiency of house, renewable electricity sources, waste created, kilometres travelled by vehicle, fuel consumption of vehicle used, carpooling habits and distance travelled on public transport. Footprint is divided into a visual breakdown; number of planet Earths & global hectares of productive land required; tonnes of carbon produced for your lifestyle; carbon footprint as a percentage of your ecological footprint. There are 8 languages available. |
| [**Carbon Calculator**](https://www.carbonfootprint.com/calculator.aspx)Carbon Footprint | Need to have all of your figures before you start. Need to do calculations such as how far you’ve travelled by bus in a year, energy consumption per month etc. Choice of doing secondary carbon consumption based on expenditure on products in a range of categories e.g. food, drink, insurance, clothing. Can choose time period (week, month, year). After each section you can choose to calculate your carbon footprint in metric tonnes of carbon dioxide emissions.  |
| **Water** |
| [**School water audit**](https://www.landscape.sa.gov.au/files/sharedassets/hills_and_fleurieu/nrm_education/water-use-problems-solutions-work.pdf)Green Adelaide | Guiding questions highlighting potential problems and possible solutions for indoor and outdoor water features in a school. Includes space for notes and action ideas. Use this in conjunction with your school energy bill information to review your existing systems and infrastructure to develop an action plan for reducing water use. |
| [**School Water Audit**](https://www.sydneywater.com.au/web/groups/publicwebcontent/documents/document/zgrf/mdq2/~edisp/dd_046576.pdf)Sydney Water  | A simple school specific audit, including an explanation of what an audit is for, how to do one, calculations and the audit worksheet. This worksheet records numbers of devices (e.g. sinks, toilets, basins), whether they are broken, or leaking, whether they are dripping, and space to calculate how much water is lost via leaks. |
| **School, preschool or childcare centre water audit**Australian Sustainable Schools Initiative ACT *Available as a PDF from Green Adelaide Education* | A comprehensive school, preschool and childcare centre audit created in 2008. Includes information about what, why and how you do an audit in a school; how to read your water meter and check for leaks in toilet cisterns; measuring flow rates; meter reading template; worksheets for toilets/change rooms, disabled toilets, staff toilets, staffroom, classrooms, canteen, bubblers and outdoor taps, outdoors and irrigation; worksheets specific to preschools and childcare centres - laundry, kitchen, carer’s room, children’s toilets; action plan tips, and templates for embedding change. As this resource was written for ACT schools, you will need to work with your facilities manager to obtain records of your site’s water consumption.  |

|  |
| --- |
| **Waste/rubbish/resource recovery** |
| [**School waste audit**](https://www.landscape.sa.gov.au/files/sharedassets/hills_and_fleurieu/nrm_education/waste_problems_and_solutio.pdf)Green Adelaide | Guiding questions highlighting potential problems and possible solutions for waste issues in your school. Includes space for notes and action ideas. Use this in conjunction with a map of your school, and your school’s contractor bills for picking up skips and bins, to review your existing systems and infrastructure. Then develop an action plan for reducing waste and increasing avoidance, reduction, reuse and recycling of materials. |
| [**Bin Systems Assessment**](http://www.wow.sa.gov.au/bin-systems-assessment-bsa.html)Wipe out Waste | Use this template and walk around your school to get a quick ideas of how things currently work, to identify ways to improve your resource management systems and reduce waste to landfill.  |
| [**DIY Bin Audit**](http://www.wow.sa.gov.au/diy-audit-kit.html)Wipe Out Waste audit  | A great DIY bin materials audit kit for schools with less than 100 students, or individual classes. Resources include full procedure and roles for preparing for, and conducting, the audit, labels and photographs for the different categories you will sort materials into, and support materials for the end of the audit on the waste hierarchy, reducing, reusing, compost, recycling and landfill. Use the online form on the audit page or email jo@kesab.asn.au for a results sheet.  |
| **Energy** |
| [**School Energy Audit**](https://www.landscape.sa.gov.au/files/sharedassets/hills_and_fleurieu/nrm_education/explore-energy-at-school-gen.docx)Green Adelaide Education | Guiding questions highlighting potential problems and possible solutions for excessive energy use in a school. Includes space for notes and action ideas. Use this in conjunction with your school energy bill information to review your existing systems and infrastructure to develop an action plan for reducing energy use and carbon emissions. |
| [**Home Energy Audit**](https://www.sa.gov.au/topics/energy-and-environment/using-saving-energy/home-energy-audits/do-a-home-energy-audit)Government of South Australia | Designed for home, but easily transferable to a school. Separate audit tools for heating and cooling; fridges, freezers and cooking; lighting; water heating; other appliances and standby power. Does not come up with a figure for comparison - it uses yes/no questions and provides lots of tips about changes you can make to save energy. Use in conjunction with your energy bill information.  |
| [**Home Energy Toolkit**](https://www.sa.gov.au/topics/energy-and-environment/using-saving-energy/home-energy-audits/home-energy-toolkits)Government of South Australia*Available for loan from Green Adelaide Education or your local library*  | A comprehensive audit for identifying where energy savings can be made around the home. Includes an appliance meter, infrared and spirit thermometers, compass, stopwatch and full instructions. Designed for home use, however some resources useful for auditing other things at school e.g. stop watch and thermometer for measuring flow of taps and amount of hot water used. Needs to be used by adults or with adult supervision.  |
| **Biodiversity** |
| **[Terrestrial Habitat Quality Assessment](https://www.landscape.sa.gov.au/files/sharedassets/hills_and_fleurieu/monitoring_and_evaluation/schools/amlr-me-schools-terrestrial-habitat-teacher-pack-gen.pdf)**Green Adelaide Education  | This educator’s guide steps you through audits for tree diversity, tree health, canopy cover, understorey and vegetation structure, weediness, organic material, logs, vegetation connectivity and photo point monitoring.  |
| [**Nest box and hollow habitat assessment**](https://www.landscape.sa.gov.au/files/sharedassets/hills_and_fleurieu/monitoring_and_evaluation/schools/amlr-me-schools-terrestrial-birds-nest-boxes-hollows-habitat-ass-gen.pdf)Green Adelaide Education | This educator’s guide helps you assess hollow habitat and nest box usage.  |
| [**Identification charts (land)**](https://www.landscape.sa.gov.au/hf/education/for-educators/plants-and-animals/land-based-environments)[**Identification charts (freshwater)**](https://www.landscape.sa.gov.au/hf/education/for-educators/plants-and-animals/freshwater-environments)[**Identification charts (coast and marine)**](https://www.landscape.sa.gov.au/hf/education/for-educators/plants-and-animals/coastal-marine-environments)[**Equipment**](https://www.landscape.sa.gov.au/files/sharedassets/hills_and_fleurieu/nrm_education/library-equipment-gen.pdf)[**Field guides – see 'books' for each topic**](https://www.landscape.sa.gov.au/hf/education/for-educators/loan-library)Green Adelaide Education | Use Green Adelaide Education’s range of identification charts available online and borrow equipment such as binoculars, nest box cameras, universal observation cameras, bat monitors or freshwater macroinvertebrate monitoring kits, along with field guides to animals, plants and fungi, to audit what is living in your area. |
| [**Photo point monitoring instructions**](https://www.landscape.sa.gov.au/files/sharedassets/hills_and_fleurieu/monitoring_and_evaluation/schools/amlr-me-schools-terrestrial-habitat-photopoint-record-work.pdf)Grow a Great School | These instructions explain how to document changes in a space over time by using photo point monitoring. A great way to audit a biodiversity project that includes removing weeds or non-native plants, revegetation, or seasonal changes. |
| **A Simple Guide to Conducting a School Biodiversity Audit**Rumbalara Environmental Education Centre *Available as a PDF from Green Adelaide Education* | Recommended. Most of information is directly applicable to SA. This resource provides templates for recording, and there are a good variety of methods for doing a mini-beast audit. Please note this is a NSW resource and mentions bird and weed species we don’t have in SA. For Green Adelaide identification charts of birds from the Fleurieu Peninsula up to the Barossa, and Adelaide and the Mount Lofty Ranges, [search by environment type](https://www.landscape.sa.gov.au/hf/education/for-educators/plants-and-animals/coastal-marine-environments). Use the weed identification charts below.  |
| [**Weed identification charts**](https://www.landscape.sa.gov.au/hf/education/for-educators/plants-and-animals/land-based-environments#investigating-weeds)Green Adelaide Education | Use these charts to identify Adelaide environmental weeds, and weeds of watercourses and disturbed areas.  |

|  |
| --- |
| **Air quality** |
| **[Air quality assessment](https://www.landscape.sa.gov.au/files/sharedassets/hills_and_fleurieu/nrm_education/air_quality_problems_and_s.pdf)**Green Adelaide | Guiding questions highlighting potential problems and possible solutions for air quality in a school, to assist in developing an action plan for improving air quality |
| **Air Quality and Asthma School Audit** Asthma SA/EPA*Available to borrow from Green Adelaide Education* | An audit tool to identify potential asthma triggers caused by poor air quality in and around the school. Includes instructions, recording sheets and reference guides. Transport as a source of airborne emissions are included in the audit. |
| **Transport** |
| [**Transport assessment**](https://www.landscape.sa.gov.au/files/sharedassets/hills_and_fleurieu/nrm_education/transport_problems_and_sol.pdf)Green Adelaide | Guiding questions highlighting potential problems and possible solutions for transport issues impacting on a school, to assist in developing an action plan for improving air quality, reducing emissions and promoting active lifestyles. |

**After your audit**

* Gather all the information together into a ‘picture’ of what is currently happening in the school or community
* Consult with staff, students and families to share the audit results and work out short, medium and long-term goals for improvement
* Monitor the changes to ensure improvements are being made and recorded
* Set up a system of continuous improvement by implementing a regular cycle of auditing, planning and recording changes
* Celebrate and share achievements!