

Managing Environmental Resources and Eco-Schools

The Eco-Schools programme encourages and enables school communities to:

- become involved in managing their own school environment
- consider their impact on the wider environment
- take action on sustainable development issues

Managing Environment Resources (MER) Courses and Units provide pupils and teachers with many opportunities to contribute to the different topics of the Eco-Schools programme.

Work done for MER at all levels can be used as additional evidence to support a school's accreditation as an Eco-School.

The nine topics of Eco-Schools are:

Litter	Waste Minimisation	Energy
Water	Transport	Biodiversity
School Grounds	Health and Well-being	Sustaining our World

The objectives and learning outcomes for each Eco-Schools topic can be mapped against the curriculum content statements and notes of the MER Units, showing the clear links between the two.

The investigative nature of parts of the MER Courses will allow pupils to prepare work which could be used, for example, as part of Eco-Schools and Citizenship assembly work, or as the source of data for whole-school environmental action. This could take the form of work done throughout the Course or for Outcome 3 assessment. A specific short project could also be run in the additional 40 hours to meet the environmental needs of the school.

Here are some examples of short projects:

- Growing vegetable plants to be used in the school garden (Access 2 or 3 — School Grounds; Sustaining our World)
- Planting a flower bed or window box (Access 2 or 3 — School Grounds)
- Collection and analysis of data about the energy consumption of the school followed by an assembly presentation and poster campaign (Intermediate 2 — Energy; Sustaining our World)
- Carrying out the Eco-Schools Environmental Review, analysing the data to inform the school action plan (Higher — Eco-Schools programme)
- Field studies work in the school grounds to investigate a variety of ecosystems, carrying out sampling techniques, analysing data and investigating biodiversity (all levels — School Grounds; Biodiversity)
- Litter-pick followed by analysis of waste and recycling centre visit (Int 1 — Litter; Waste Minimisation)
- Traffic /school transport survey linking to Safe Routes to School and pollution (Int 1 and Int 2 — Transport; Health and Well-being)
- Visit to local water treatment plant (Higher — Water/Sustaining our World)
- Study of a local tourist attraction (Higher — Sustaining our World)

Support for schools

There are many resources available to support the delivery of activities which will link MER with Eco-Schools (all urls correct at the time of publication):

www.ecoschoolsscotland.org/guide

www.brightnewscotland.org.uk

www.biodiversityscotland.gov.uk

www.nhm.ac.uk/nature-online

www.wasteawarescotland.org.uk

www.ltscotland.org.uk/sustainabledevelopment

www.snh.org.uk/snhi/schoolActivities

Organisations such as the Scottish Environmental Protection Agency (SEPA), Scottish Natural Heritage, Scottish Government, Forestry Commission, and local authority ranger services can provide resources and speakers/activity leaders.

Eco-Schools Topic	MER Access 2/3	MER Int 1	MER Int 2	MER Higher
Litter	Maintenance of the site through litter survey/ removal	Local bye-laws relating to litter	Effect of litter on ecosystems	Local bye-laws relating to litter
Waste Minimisation	Composting waste to maintain the site	Relationships in an ecosystem, including composting Local waste reduction initiatives	Careful use of non-renewable and alternatives including recycling Reducing consumption rate of non-renewable natural resources	Study of renewable/non-renewable recyclable resources Management of waste including composting and recycling Study of recycling initiatives
Energy		Uses of renewable energy sources Physical requirements of industry	Study of natural resources used in energy production	Sustainable use of energy Insulation and other measures to reduce energy use Renewable/non-renewable sources of energy
Water	Maintenance of site	Study of local water use	Effect of water pollution on ecosystems	Effect of water pollution on ecosystems Legislation relating to water
Transport		Effect of pollution from local transport	Effect of pollution from transport and measures to reduce this	Reduced use of car transport related to sustainable use of resources
Health and Well-Being	Outdoor learning	Outdoor learning	Outdoor learning	Outdoor learning
School Grounds	Surveying and selecting a site Planning and developing a chosen site as an environmental area	Use of school grounds to study ecosystems Identification of types of environment	Use of school grounds to study ecosystems	Use of school grounds to study ecosystems
Biodiversity	Initial survey of wildlife on a site Monitoring of wildlife populations Construction of bird-feeders, nest boxes etc	Definition of biodiversity Studies of national biodiversity, including UK BAP, LBAP for specific species Contribution of human activity to the loss of biodiversity Sampling of plant and animal species in an ecosystem	Definition of biodiversity Sampling of plant and animal species in an ecosystem Impact of human activities on biodiversity in ecosystems Conservation in practice through UK BAP, LBAP	Loss of biodiversity due to pollution Study of UK BAP or LBAP Sampling of plant and animal species in an ecosystem Biodiversity reduction related to detrimental human activity
Sustaining our World	Enhancing the local school environment for future years	Effects of human activity on the global environment Studies of initiatives, organisations and legislation operating at local, national and global levels for protection of the environment Conservation and environmental measures influencing land- and water-based industries Role of industries in the local economy	Sustainable development content statement Comparative study of energy production and use locally, nationally and globally Food chain length and efficiency related to diet in developing countries Impact of human activities on ecosystems Studies of local, national and international examples of causes and prevention of pollution and conservation in practice Studies of local land- and water-based industries, activities and users to include use, conflict, integration and co-operation	Availability, supply and demand for resources at local, national and international level Sustainable use of resources and sustainable practices in a variety of situations Local, national and global environmental effects of waste disposal methods Audit of school energy use and suggested improvements Comparison of energy sources and use between developed and developing countries Sustainable development principles and initiatives content statement International sustainable use of resources and waste management content statement Effects of human activities on ecosystems and strategies for improvement Sustainable management of land and water resources in Scotland Impact of local, national and European policies, agencies and legislation on land and water use in Scotland Effects of changing land and water use on communities and environment in Scotland