

# Using the Schools' Global Footprint Resource

## Case study Hamilton Grammar School

No. of pupils	1,200
Local Authority	South Lanarkshire
Teacher	Sinclair Dyer, Principal Teacher Sciences
Pupils	S1 - S6

Hamilton Grammar School's World View Policy, which links together its work on Eco-Schools/Sustainable Development, International Education, Health Promotion, Citizenship and Enterprise, laid the foundation for the interdisciplinary working approach behind this project. By understanding how global warming can affect people in developing countries at a personal level, pupils developed as global citizens as they worked together in an enterprising way to find real solutions for real people.

## Using footprint to develop global citizenship

### 1 Introducing the concept

S1/S2 pupils built up a holistic view of global warming during a two-week period of interdisciplinary work culminating in a multi-departmental display showcasing the best work. They learned about how their lifestyles contribute to the problem, and they were encouraged to think about ways they could reduce their impact. The first step was to find out how big their impact was - and the challenge of working this out was taken on by the Eco-Schools group.

#### Learning about global warming

- Sciences - Data and possible futures
- Social Studies, Geography - Effects on the earth's systems
- Social Studies, Modern Studies - Possible effects on society
- Religious and Moral Education - Moral responsibilities of looking after the planet
- English - Letters to and from people in the future

### 2 Measuring the school's footprint

Working with the Science Department, the Eco-Schools group decided to calculate the school's footprint by looking at three main areas:

**Energy** Gas and electricity readings obtained from office staff were used to calculate how much energy the school used per person in a year.

**Waste** School janitors helped them measure how much waste the school produced over a four day period, and the proportion that was recycled or sent to landfill. This was used to estimate how

much waste the school produced per person in a year.

**Building** They used the plans of the school to work out its area in square metres.

These measurements were checked by the Maths Department and then entered into the Schools' Global Footprint calculator to work out the school's energy, waste and buildings footprints. Other aspects of the school's footprint such as water consumption, transport and food will be the focus of further work.



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### 3 Growing mangoes to reduce the school's footprint

As well as a range of footprint reduction measures within the school to reduce its footprint, the Eco-Schools group came up with the innovative idea to start their very own carbon offsetting scheme using the strong links their school had developed with Donkorkorum Agricultural School in Ghana. Carbon offsetting requires paying into projects which reduce carbon dioxide emissions elsewhere, so the Eco-Schools group decided to support the planting of a mango tree farm at their partner school, which would soak up some of the carbon dioxide emitted by the school's use of energy, travel and production of waste.

They enlisted the Business Department to help them raise funds and by selling



#### HOW TO SET UP YOUR OWN CARBON OFFSETTING SCHEME

- > **Work out the cost of carbon**  
The group found out from their partner school that the cost of planting an acre of mango grove is £90, while internet searches informed them that an acre of mango forest absorbs 405kg of carbon a year.
- > **Market the scheme**  
Through articles in the local paper and a public talk, the school raised awareness in the local community about the scheme and encouraged people to get involved.
- > **Involve local businesses**  
The school's Business Department marketed the scheme to local businesses through "certificates of sponsorship" which they designed themselves. Businesses were encouraged to buy credits at £90 each.
- > **Involve individuals in the community**  
The group put together a display explaining the scheme, and through fundraising drives such as discos, raffles and bingo nights, sold smaller value credits at 20p, representing 0.1kg of carbon each.

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#### Project outcomes for the school

- > Initiative recognised by HMIE as "sector leading"
- > Increased local profile through press
- > Initiative presented at the International Education and Curriculum for Excellence Showcase Event in Hampden
- > Enhanced links with partner school which have been recognised and supported by the British Council

*"The most important aspect of this work has been making facts personal for pupils. Linking our footprint work with our partner school in Donkorkoram has highlighted the need for direct action at Hamilton Grammar".*

Sinclair Dyer, Principal Teacher

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carbon credits within their community, they raised £2,000 in a few months - enough to plant 50 acres of mangoes. As well as helping provide a sustainable income for pupils of their partner school in Ghana, the mango trees will offset over 20 tonnes of the school's carbon emissions per year.

*Pupils receive an award for their innovative scheme.*



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Download resources from [www.LTScotland.org.uk/schoolsglobalfootprint](http://www.LTScotland.org.uk/schoolsglobalfootprint)

#### Schools' Global Footprint Resource

Resources and training are available to help schools to examine, measure and take action to reduce their impact on the environment locally and globally as part of the Eco-Schools programme.

For more information visit [www.LTScotland.org.uk/schoolsglobalfootprint](http://www.LTScotland.org.uk/schoolsglobalfootprint)

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[www.ecoschoolsscotland.org](http://www.ecoschoolsscotland.org)

#### Local Footprints Project

The purpose of the Local Footprints Project is to help local authorities and schools make an effective contribution to reducing Scotland's global footprint through the use of footprint analysis to inform policy and practice, to raise awareness, and to change behaviour.

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