

Eco Drama's Magic Van Tour



Eco Drama – CCF 612

2010 –2011



Eco Drama's Magic Van Tour

I feel more confident about recycling. P5 Pupil

We have to stop pollution. Stop using so much oil. P6 Pupil

I know that the Earth is heating up, also that we are using too much fossil fuels. So we all need to do something. P5 pupil

I feel I can be a Green Agent at home and at school, and that other people would too. Megan, P6

I learned that you can change how you live, and that being Eco can be great fun

Loved the active, vibrant approach to Eco education!

It got the message across in a motivating and exciting way.

The children had many opportunities to be active learners

A great learning experience for the class

They had fun whilst learning!

Drama added another dimension to their learning.

...an excellent start to our work on sustainable energy

The drama made saving energy look like fun

...pupils were learning to take personal responsibility for their actions

Final Report
Eco Drama's Magic Van Tour

This report will fully evaluate how the Climate Challenge Fund helped Eco Drama to achieve their project aims within their local community during a 1 year period from February 5th 2010 – February 5th 2011.

The report will be structured around the following headings & subheadings: -

▪ **Project Activities and Delivery**

- *What We Did And How We Did It*
- *The 5 Steps*
- *Eco Drama's Education Programme*
- *The Staff*

▪ **Community Engagement**

- *The 80 Schools*
- *What Changed In Our Community Because Of The Eco Drama Project – What Were The Main Benefits?*
- *Successes & Achievements, Quality of Engagement & Follow-up Packs*
- *The Problems Or Barriers We Experienced And How We Dealt With Them*
- *Things We Will Do Differently In Future Tours*

▪ **Co₂e Emissions Reduction**

- Executive Summary
- Baseline Calculations – Energy, Transport, Recycling
- C02 Reductions– Energy, Transport, Recycling, Bio Diesel
- Overall C02 Reduction
- What Has Been Learned Since We Made The Original C02 Assumptions?

▪ **Other Social, Economic and Environmental Impacts**

▪ **Legacy**

▪ **Supporting Section**

- Pupil & Teacher Feedback



Project Activities and Delivery

What We Did

Eco Drama's Magic Van Tour delivered their educational programme of workshops and theatre to **80 primary schools** within **Glasgow City Council** during the year 5th February 2010 – 5th February 2011.

We reduced carbon emissions through: -

- Education, specifically using theatre and drama as a medium of teaching
- Raising awareness of environmental issues with young people & the community with an ultimate aim to instigate behavioural change.
- Reducing emissions of the tour by using bio diesel in our touring vehicle (fuel made from 100% reclaimed vegetable oil).

The Magic Van Tour successfully visited 80 primary schools in Glasgow City Council, reaching 6433 pupils

- ✓ **30 schools** received a performance of The **Isle of Egg theatre show** during May & June 2010, in total reaching **2579 children**.
- ✓ **50 schools** received the Eco Drama workshops, **Recycling Heroes & Eco Gadgets** during August – December 2010, in total reaching **3854 children**.
- ✓ All teachers received a comprehensive **Education Pack** to follow-up on pupils learning in class after the visit.
- ✓ Baseline data was collected directly from classes before and after the visit in order to calculate **reductions in CO2**
- ✓ Children were encouraged to **take the message home** with OWL Energy Monitors and Energy Stickers and Booklets
- ✓ We started development on a new Eco Workshop for Secondary School's

How We Did It

80 schools requested to take part in this project, stating a choice of either the show or workshop for their pupils. They did so on the understanding that this was a community based carbon reduction challenge. These schools particularly expressed a need to achieve their Green Flag Award or better their eco work within the school. Some of them also expressed budget limitations which is why they couldn't normally afford Eco Drama. There are 149 primary schools within Glasgow, which means **WE** visited over half of the authority.

The relationship between the Eco Drama Tour Manager and the school contact was established prior to the tour commencement and a strong level of communication upheld throughout the tour. The process was clearly communicated from the start so teachers were aware of what was required of them.

The schools were made aware that the free day of shows and workshops were being provided to them on condition that they collaborate and complete the following **5 steps** in order for us to reduce CO2 and calculate any behavioural change taking place: -

The 5 Steps

1) *Initial Survey – ‘Quick Quiz’*

Each school received a Quick Quiz which was done with all pupils attending the Eco Drama show/workshop. The questions asked were geared to the show & workshop outcomes & enabled us to gather baseline data about each class's behavioural habits before the visit. Teachers also received pre information about the show & workshops so they could prepare pupils for the visit.

2) *Into Action*

Each of the 80 schools received a **1 day visit** from Eco Drama, where we delivered the show or workshops requested.

3) *Follow-Up Activity Packs*

- Class teachers received a **Follow-up Activity Pack**, which they were asked to do within 1-2 months of our visit. The pack contained ideas for arts activities & tasks to help revise and cement pupil learning. The Isle of Egg pack also contained The Isle of Egg's Big Green Challenge information booklet.
- All pupils taking part received a **badge & pocket sized information booklet** (recycling or energy/ transport). If they were taking part in The Isle of Egg or Eco Gadgets, they were also given an A4 page of **'Power Hungry' stickers** to take home as well as an **OWL wireless energy monitors**. Each class

were given 1 monitor to do as either a class task, or to take it home for a period on a library share basis to try out with their parents. We believe giving the pupils something tangible that they can carry around and take home will contribute to the behaviour change taking place.

4) *Evaluations*

These were given out on the day of our visit. Pupils & teachers are asked to complete the **evaluation forms** and send them back to Eco Drama no later than 3 weeks after our visit in order to monitor the project & make sure we were providing a service that was of high quality. It was stressed that it was their responsibility to the project to complete the activity packs and return evaluations within the stated timescales.

5) *Final Survey – Quick Quiz Round 2*

2-3 months after our visit, the teachers of each class involved received a final survey to do with their class in the form of a second Quiz. The questions were exactly the same as the initial survey, to allow us to compare and contrast findings & calculate what behavioural change has taken place since the visit.

Please see the Hard Copy of Supporting Documents for: -

- **Quizzes**
- **Follow-up Packs & Evaluations**
- **Stickers**
- **Booklets & Badges**

Eco Drama's Education Programme

***'Tell me and I'll forget
Show me and I may remember
Involve me and I'll understand'***

(Chinese Proverb)

Eco Drama seeks to enhance the work of **Eco Schools Scotland** & compliment the **Curriculum for Excellence** by using theatre & drama as an educational medium.

The 3 services that we delivered to the 80 schools came from our successfully developed programme previously toured during 2009: -

The Isle of Egg

Eco Gadgets

Recycling Heroes

The show & workshops encouraged young people to make an emotional connection with why we should help the planet, and we sought to engage both heart and mind through humour and laughter. The work offered solutions and positive ways forward in a bid to motivate pupils to our ultimate aim - behaviour change. We showed them optimism in our storytelling and solutions, in hope that they accept that change is both necessary and possible and take positive action themselves.





The Isle of Egg

Eco Schools Links: Transport; Energy; Sustaining our World

Overall CO2 Aim: - To increase the number of pupils walking/ cycling to school & the number of pupils reducing energy at school & at home



The Isle of Egg is an ecological fable inspired by Eigg, a beautiful, self-sustainable island off the west coast of Scotland. Through interactive storytelling, eco gadgets, humorous characters & live music, Eco Drama brings to life a fun & uplifting story about climate change, positive thinking & the power of community spirit.



The actors making the fantasy island of Egg out of recycled old junk..... Ta Da!



'Welcome to our Island'

The sea...

Meet Bob & Bob, the island Fishermen



Granny & her petrol powered inventions Shougle MacBougle Sea levels rising bring worries for his house!



A terrible storm hits the island...



No more ferry = no more oil



No more bobbin, just sobbin'



Granny gets solutions from the pupils... and invents a 'sci-cycle'




Shougle & his solar powered windmill



Bob & Bob invent a candle powered boat.... While Granny invents a hydrogen car. With no smoky pollution we can smell the true smell of Egg... and the bees come back...



 *Anyone can be their own green island, whether in a city or at sea, a tower block, a classroom or a village, working together, that's the way to be. Even if you are the last one, you can be the first one, with a change in your direction; you can turn the world around.*



Recycling Heroes

Eco Schools Links: Waste Minimisation; Litter; Sustaining our World

Overall C02 Aim: - To increase the number of pupils actively partaking in the principles of Reduce, Reuse, Recycle.

This workshop is written around the principles of 'Reduce, Reuse, and Recycle'. Through a fun and informative drama workshop led by the fearless 'Bag Girl', pupils are encouraged to find their own inner recycling hero and rid the town of the menacing Rubbish Monsters!



Landfills are disgusting



Learning Recycling Hero Powers



Kapow! to the Rubbish Monsters



Reducing explained...



Reuse the Rubbish Game



4 Minute Recycling Challenge



Graduating as Recycling Heroes (& getting a badge to prove it!)



Kapow! We are now Recycling Heroes.

Eco Gadgets Workshop



Eco Schools Links: Transport, Energy, Sustaining our World

Overall C02 Aim: - To increase the number of pupils walking/ cycling to school & the number of pupils reducing energy at school & at home

The Eco Gadgets workshop explores themes of sustainability, specifically relating to transport and energy. Pupils meet Hope, a very hopeful Green Agent who will show participants the latest eco gadgets that could help solve our global warming problem... a solar powered windmill, a hydrogen powered car, a boat run on nothing but candle wax, plus, a very special mystery gadget!

However Hope has a problem; no one trusts the inventions because they don't run on traditional oil. Using drama and role play, pupils work with her to solve the problem, and in doing so become top class Green Agents!



Green Agents of the world Unite!



Fossil Fuel Timeline



Oil & Coal took 300 Million years to form!



Hope demonstrating global warming with her Magic Mug



Solar Windmill



Eco Boat run on Bees wax



Testing Bio Diesel against the Renewable Chart....85% lower C02



The Hydrogen Car = Zero C02



We need to spread the word... with good advertising! Pupils in groups creating their Eco TV Adverts



Performing their TV Adverts live on Eco TV... 3-2-1 Action!



Our earth is fragile – pass the globe and each make a suggestion on how we can reduce the amount of electricity or petrol we use at home & at school, or any alternative ways of doing things...?



Pupils graduate as Special Green Agents and encouraged to spread to the word – they receive a badge, and as a reward for their hard work, a shot on the sci-cycle!

Staff

A strong, highly skilled team of staff was essential to the success of Eco Drama's Magic Van Tour. Throughout the year the project created employment for 1 Full Time position, and 3 Freelance positions. It was the talent; determination and genuine interest in green education that made the employees fulfil their posts to the best of their ability. They believed in the messages of the tour – therefore it worked.

✓ **Tour Manager & Development** – Full Time

Emily Reid -Company Director & Founder

Emily Reid founded Eco Drama in 2007 and has produced & managed Eco Drama's Magic Van Tour 2010. This job was very diverse, each day a new challenge, drawing on several skills to produce the required work. Here are a few of the main duties which have made up her year:

- *Fundraising and Report Writing*
- *Writing and Directing the shows and workshops*
- *Liaising with and booking all 80 schools (and booking other school visits and leading tours out with the Glasgow based tour)*
- *On occasion leading workshops when Georgina was not available*
- *Driving for the Isle of Egg tour, since neither actor holds a driving licence*
- *Managing recruitment and training all staff*
- *Preparation of Teachers Education Packs*
- *Preparation of contracts, with the help of the Eco Drama Board – Lucy Conway & Maggie Fyffe from Isle of Egg Heritage Trust*
- *Ongoing tour management*
- *Day to day running of Eco Drama – general enquiries & bookings*
- *Preparing accounts for a company limited by guarantee*
- *Preparation of education pack merchandise, liaising with designers and retailers to prepare the pack*
- *Development of new workshop for Secondary schools, for delivery in 2011*
- *Project planning for next year!*

✓ Two Professional Actors/ Musicians to deliver The Isle of Egg Tour
Eilidh MacAskill & Alistair Edwards, from the original cast

- Two incredibly talented and amusing individuals with a flair for ukulele playing and cello-bellowing.
- Fulfilled their 30 day tour with energy, humour & kept their performances tight.
- Both cycle everywhere & do so in everyday lives. Very good role models for young people (when schools were local they would cycle in to school, instead of coming in The Magic Van) Great for children to see this.

✓ One Drama Workshop Leader recruited to deliver the Workshop
Tour - Georgina Pearson

- Previously Education Manager at the Macrobert, Georgina has a diverse background including drama workshop leading, physical theatre/storytelling work, teaching overseas, and developing and delivering education work.
- A vibrant, energetic and determined worker who knocked us all out in her interview with a fantastic superhero warm-up, devising her own lesson plan for Eco Gadgets & also hand-made a rather impressive plastic bag cape.
- Her enthusiasm & energy for workshop leading were clearly influential in getting children on board during the workshop. It's how you set up the drama & deliver that's important. Because she believed in it, they did too.
- Comments from Georgina after the end of tour meeting: -

"In Eco Gadgets I was constantly surprised by the drama adverts that the pupils produced. When they perform them well, make me laugh, & manage to communicate their learning, it crystallizes that they have learned something."

"The badges as rewards were like giving the children gold – they were so pleased with themselves".

"You know you've got them when they say 'I'm going home to recycle/watch TV less/cycle my bike more/switch lights off when I leave a room – all actions that they can do themselves and that are within their power"

"They're left enthusiastic about the topic"

"When teachers echo what you're saying, are enthused about drama, say they've seen a change in the last hour in learning, and say that they'll continue the follow-up work in class, you know it's a success. After all, they are the experts of their class"

Community Engagement

The 80 Schools

Corpuschristi Primary

Gowanbank

Greenview SEBD

Haghill

Hampden SEN

Hillhead

Hillington

Holycross

Howford

Hyndland

John Paul II

Kelbourne SEN

Kelvindale

Kings Park

Knightswood

Langfaulds

Langside

Lorne Street

Merrylee

Mount Florida

Newhills SEN HIGH SCH

Willowbank

Pollockshields

Royston

Ruchill

Scotstoun

Shawlands

St Alberts

St Angela's

St Benedicts

St Brides

St Brigids

St Catherines

St Clares

St Denis

St Fillans

St Bartholomew's

St Josephs

St. Maria Goretti

St Marnock's

St Mary's

St Mirins

St Monicas

St Monicas (Milton)

St Mungos

St Patrick's

St Pauls

St Rochs

St Saviours

St Convals

St Stephens

St Vincents

Sunnyside

Toryglen

Wallacewell

Westercommon (Ruchill Campus)

Our Lady Of The Rosary

Yoker Primary



What Changed In Our Community Because Of The Eco Drama Project?

Eco Drama Mission

To advance the environmental education of all young people through participation in drama and theatre, and to make learning fun, interactive and motivational whilst demonstrating ourselves to be positive green role models."

Main Benefits

From compiling our evaluations from both pupils and teachers, logging quotes, studying Quiz results showing behaviour change taking place, and processing direct feedback received on the day, we can believe that Eco Drama helped benefit the schools in the following ways: -

- ✓ We provided a **motivational tool** for starting, continuing or wrapping up an eco topic which the school or individual classes were tackling. *E.g. a high % of schools stated Recycling Heroes complimented class topic 'What a Load of Rubbish'.*
- ✓ We **inspired behavioural change** such as walking & cycling more, energy conservation & waste minimisation, at home & at school.
- ✓ We encouraged the **reduction of carbon emissions** by promoting waste minimization, re-use reclamation, recycling, use of recycled products, walking & cycling, and promoting energy saving behaviour.
- ✓ We brought eco topics to life & **involved pupils interactively** in their learning
- ✓ We assisted young people in becoming **independent, creative thinkers**
- ✓ We empowered children and young people to take **responsibility for their actions**, motivating them that they have the power to make **small changes**
- ✓ We provided a **lasting memory** of their learning through participation in drama and fun artistic activities; this increases the chances of longer term behavioural change. *E.g. Pupils still remembered the main themes of the show 4 months after seeing it.*
- ✓ We promoted holistic, inclusive drama education that catered to **the different learning styles**.
- ✓ We raised awareness of greener living & global issues not just with pupils, but **teachers also**. *E.g. on several occasions teachers commented that they learned from the work also.*

Successes & Achievements

✓ **80 Schools!**

Of the 82 schools we bid to do in our original application, we successfully booked, and visited 80 of these (1 school closed down & 1 school could not fit us into their timetable during the month we offered)

✓ **Brilliant Verbal Feedback**

Children coming up to the workshop leader or actors at the end and saying what positive green action they were going to start doing as soon as they got home. This verbal feedback is instant and allows us to witness that the child has not only processed their learning, they have gained a heightened awareness of the issues and are taking responsibility for their own actions.

Most common examples: -

“I’m going to switch off the lights when I leave a room”

“I’m going to cycle my bike to school”

“I’m going to ask mum and dad to take canvas bags to the supermarket”

“I’m going to play my computer less”

✓ **Teachers Are Learning Too!**

Georgina & the actors often gave verbal feedback about teachers echoing the message or saying, ‘oh, I never knew that’. They often showed genuine surprise at what we can all do to help take better care of the environment.

✓ **Children & Young People Remember the Message**

Evaluations were returned on average 2 months after the visit. Many pupil evaluation forms, usually P3+ due to literacy levels, show an understanding and knowledge of the key learning outcomes, and strong memory of the images & ideas portrayed in the show and workshops.

We believe this feedback is a very important factor in gauging the success of our service. Hearing a first-hand account from a pupil is the best way of gauging the emotional and intellectual responses, and evaluating what learning has taken place. It is this emotional response that we believe increases the chances of longer term behavioural change.

To view a selection of quotes from pupils and teachers, please see the Supporting Section at the end of the report.

✓ **Positive Parental Feedback – The Message Is Being Taken Home**

Pupils were encouraged throughout the workshop to 'spread the word' and take the message they were learning home to their parents, family members, and friends. This was pitched as part of their new role as Recycling Heroes and Special Green Agents.

One comment came in from a Teacher at St Clares Primary who was also a parent of one of the kids who took part at Corpus Christie. Her feedback is a fantastic example of a pupil taking the message 'home' *and* being fully understood by the child.

After our phone conversation yesterday I felt I had to tell you how much my own wee boy enjoyed the Eco Gadget Workshop at Corpus Christi. He spent half the evening talking about it, described everything (except the mystery gadget!), and certainly seemed to have understood it all.

I hope the children here get as much out of it as he did.

Karen, St Clares Primary

✓ **Positive Word of Mouth**

As Eco Drama delivered our funded project to the 80 primary schools in Glasgow, we began to get an increase in the number of enquiries, & were also booked to deliver projects out-with our funded project in primary schools and communities all over Scotland. The communities we visited in 2009-10 included: -

The Outer Hebrides (Lewis, Harris, Uist, Benbecula, Barra)

Orkney (Stronsay) and Shetland Isles, Campbelltown, Baldernock Eco Fair

The isles of Gigha, Bute, Islay, Mull and Tiree

✓ **Eco School's Awards**

Of the Evaluations returned, **20** schools that did not have a Green Flag before the visit had one after our visit. **30** schools that did not have their Silver Flag before the visit had one after the visit.*

**Eco Schools Scotland and other school initiatives are also playing a huge role in this; we do not attribute any new flag status to ourselves only.*

✓ Engagement of Different Learning Styles through Eco Drama

Intelligence Type	Capability And Perception
Linguistic	"Word Smart"
Logical-Mathematical	"Number/Reasoning Smart"
Musical	"Music, Sound & Rhythm Smart"
Bodily-Kinesthetic	"Body & Movement Smart"
Spatial-Visual	Images And Space - "Picture Smart"
Interpersonal	Other People's Feelings "People Smart"
Intrapersonal	"Self Smart"
Naturalist	"Nature Smart"

Theory of Multiple Intelligences - Howard Gardner

Drama has the unique ability to engage many of the different learning styles at once, thus reaching more children. Pupils are more likely to remember facts & messages if they have been engaged in a creative way. We believe we met these aims.

Example: - Georgina noticed one P6 boy really not engaging at the start of the Eco Gadgets workshop when she was talking. Even when the gadgets were being demonstrated he still looks disengaged. However, when it came time to work in groups and prepare a short TV advert (that they were encouraged to incorporate drama, role play, dance, music and movement into), this is when he came to life. Clearly being into music, this is what he contributed to his groups Eco TV Advert (Georgina was so impressed with him she recorded it on her i-phone and sent it over to the office 5 minutes after the workshop): -

Eco Boat Rap - Steven, P6, Ashpark Primary

"I'm walking down the street and what do I see,

A petrol boat no good for me

When I want to take my boat to the max,

I can now use candle wax

I think I need to change my fuel,

Only then will I be really cool"



✓ Follow-up Education Pack

Badges and Booklets

I liked that I got a badge and a book. P4 Pupil, St Benedict's

After each visit, pupils received a badge and miniature information booklet, and these were given as a reward for their hard work during the workshop. The excitement displayed when giving them their badges at graduation has shown us their success and generally pupils bought into the idea of graduating as a Recycling Hero or Green Agent, especially the lower primary years as we originally anticipated. The booklets and badges are also incredibly well designed by the freelance illustrator we contracted to draw them, which added to their popularity.*

Goodie Bags

Every class teacher was given a canvas bag per class (80 bags were kindly donated to us from the Co-op) which contained the following: -

- Follow-up Activities, ideas for reflective art activities & energy, transport and creative tasks to deepen pupil learning on the topic in class & at home
- Energy Stickers* (one sheet per pupil to take home and work out which appliances were low energy, medium and high energy, so they were coloured green/orange/red accordingly)
- OWL Electricity Monitors, usually 2-3 given per class to be taken home on a library chare basis by each pupil, and/or done as a class activity (*please see C02 section for a full analysis*)

Here are some pictures of **Recycling Heroes Follow-up Activities** done in class, sent in by Shawlands Primary: -



Making Superhero Costumes!

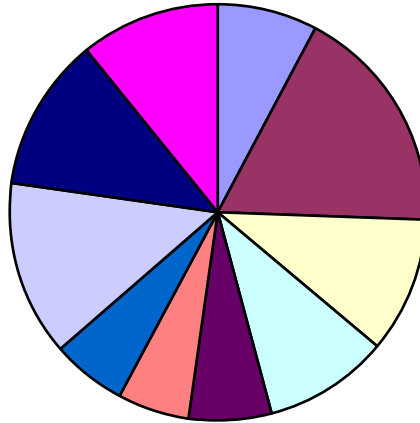












Creating a Rubbish Monster

✓ **Requests for More Visits**

In 2011 we are going to develop new work so that we can keep re-visiting the same schools. We undertook teacher consultation to gather the following results: -

Teacher Consultation - Which Eco Topics would you like to see explored through theatre & drama?



 Bio Diversity	 Global Citizenship
 Litter	 Waste Minimisation
 Energy	 Transport
 Water	 Health+Well Being
 Sustaining our World	 Food & the Environment

Other Comments

- *“Linking to the Rainforest topic would be good*
- *Perhaps tackling the issue of the use of animals in circuses or the unnecessary fur trade, or the use of animals for testing cosmetics*
- *Food Waste would be a good topic*
- *Global citizenship & food & the environment for P4-7 age would be great*
- *All topics are relevant and useful”*

As we already have work covering Energy, Transport, Waste Minimisation & Sustaining our World, this helped us decide on the following topics: -

- **Global Citizenship (Curriculum for Excellence link)**
- **Food & the Environment (Eco Schools link)**
- **Health & Well Being**

The Problems or Barriers We Experienced and How We Dealt With Them

In general, the project from February to February ran smoothly. We met our 80 school target and we believe successfully delivered the project we set out to do. However, when dealing with 80 schools and that many teachers, inevitably there were some problems and barriers to delivery which arose at different stages throughout the year.

The booking process was extremely thorough, and several emails and phone calls were made with each school so they knew exactly what was happening and when. Each school received the same level of communication, so when some schools did not respond or follow through with correct arrangements on the day; this was due to the school and the contact teachers lack of communication to the rest of the school.

We would you like you read the following table knowing that not all schools were a problem! About 90% of schools were a pleasure to deal with, but there were challenges with the small remainder.

Very often, but not always, the schools where we experienced communication difficulties, were in areas of social deprivation. Often teachers' were late getting children to the workshops, and the times previously agreed with the Tour Manager were changed without telling us. However, often in these schools, the children would be some of the most engaged and most responsive.

The table below gives a summary of the main problem faced, how it was dealt with, and what we would do differently next year: -

Main Problems Faced During The Tour	How We Fixed This Problem/ What We Will Do For The Next Tour
Tardy schools – a small percentage of schools needed a lot of chasing to get some information. When we eventually got hold of them, it was fine, but booking became time consuming with these schools.	<i>More comprehensive application process to weed out the good enthusiastic schools</i>
A few teachers were poor communicators within their school, so although they knew what was going on, on some occasions the message was not reaching other teachers whose classes were taking part, or dinner ladies, for booking out the hall. The result of this would be lateness to the workshop, and not having done their Quiz prior to the visit as asked, so they needed to be chased up before leaving the school. Or, dinner ladies getting irate because the workshop would end up running over in to lunch time!	<i>Ask for contact email for <u>all teachers</u> getting involved at the time of booking, not just emailing the head teacher & eco contact. This will help combat any breakdown in communication within the schools system. To alleviate this problem during the tour this year, we sent out email reminders before the visit, and made a call to the school to talk through the booking details to ensure they were reminded of it close to the actual visit.</i>

<p>3 Eco Gadgets per day at 1 hour 30 mins each did not allow for any school timetable issues that arose, or classes coming in late</p>	<p><i>Next tour, we are going to allow more time by only booking 2 Eco Gadgets in any one day. And verse workshop leaders that sometimes we don't have control over sudden things happening with schools, so be prepared to change on the day and adapt/cut workshops accordingly.</i></p>
<p>The 'Mix & Match' day of Recycling Heroes & Eco Gadgets worked well most of the time but on days where there was lateness, this had a knock on effect to the rest of the day. This meant at times the leader lost her tea break, or did not have enough time to re-set, which added unnecessary stress.</p>	<p><i>Book Recycling Heroes and Eco Gadgets on separate days and don't mix and match on any one day. So schools are allowed to pick one or the other and in effect, so we will organize 2 separate tours.</i></p>
<p>Some teachers not doing quizzes, resulting in Georgina, and myself, having to chase them up. This was stressful for Georgina & very time consuming at my end.</p>	<p><i>More comprehensive application process for schools means only the really enthusiastic teachers shall get the visit. A possible online tool calculator next year may also help this.</i></p>
<p>Some classes had 35 pupils in them resulting in an over-crowded workshop. This meant it was much harder to manage for the workshop leader.</p>	<p><i>Cap Recycling Heroes at 25 pupils, 30 at an absolute push. Cap Eco Gadgets at 25.</i></p> <p><i>The show had no problems at 70.</i></p>
<p>Not returning Final Quiz (Schools were given 3 reminders by email and 1 by phone) Incredibly time consuming and frustrating chasing these up. Reminders did increase the amount of Quizzes returned, however unfortunately not all schools returned their Quiz in the end.</p>	<p><i>Like last year, we will still get teachers to agree to the 5 Steps as a return for the free day. However, we are going to get advice on how best to evaluate each individual school and ask if they would prefer the Quiz by an online tool. It is anticipated this should increase the chance of returns.</i></p>
<p>Isle of Egg tour was May/June, therefore when we went back after summer holidays in September to evaluate, some classes had been changed/merged/teachers had changed, so on a few occasions teachers found it difficult to do the whole class quiz</p> <p><i>E.g. "Returns are on the way! I've had so many staff changes since you were here, that teachers were finding it a bit difficult to complete when they hadn't seen the drama production. In fact, none of the children involved have a teacher who was at the show! Head Teacher, Yoker Primary School</i></p>	<p><i>This is only a small problem as most teachers did get them to us eventually, but I think communicating this to the teacher on the visit day as a potential problem means they can plan for after summer and pass on some notes to the classes new teacher so that they know what went on.</i></p>

November Workshop tour – there was not really enough time for these schools to undertake the follow-up activities and return their findings to me in time for me compile my final report by February 5 th . December can be a hard month to get much done.	<i>Build in more time in the next application for evaluation at the end, which in turn will give schools more time to complete the activities.</i>
Evaluation – because of the forms still getting returned late into January, we did not really build in enough time to evaluate before the deadline of February 5 th which added quite a lot of stress to the Tour Manager job	<i>Next year we would project plan for 2-3 months at the other end of the last workshop or show being delivered, so that there's enough time to compile and evaluate feedback forms and Quizzes.</i>
Multi-racial schools – in a few schools there were often children who did not speak much English so when these children were asked to evaluate, often the forms did not say much, or make much sense, due to lack of English language.	<i>This wasn't really a major problem as the delivery of our work is diverse, incorporating visuals, games, shapes, music and physical games in order to appeal to different learning styles. We could create a visual form of evaluation for these schools with pictures and images.</i>
Originally we offered Eco Gadgets to P4, 5, 6 & 7, however differing levels from school to school meant we had to change this.	<i>During the tour we realized it was too hard a workshop for P4, though some P5's coped fine. So now we only offer Eco Gadgets to P6&7 classes. If some teachers express that their P5 will cope, this will be okay.</i>
Eco Gadgets Workshop - too long at 1 hour 30 minutes	<i>There was so much information in this workshop at 1 hour 30 minutes, we decided to cut it to 1 hour 15, and include a Q&A session at the end to make sure there was time built in for this. Next year we would like to revise it further to 1 hour as that is the ideal running time for keeping children's attention.</i>
A bad snow day in late November – 1 Eco Gadgets not done due to van getting stuck in snow in Georgina's driveway. Pollockshields primary p7 x 30 pupils missed out. They had no other free dates to re-schedule.	<i>We solved the problem by Georgina taking the smaller props for Recycling Heroes out of the van and taking them to the school in a car that was able to move in the snow. So 2 classes in Pollockshields got workshops, which was better than none!</i>
Owl Energy Monitors – there wasn't enough time for all pupils in the class to take one home on the intended library share basis towards the end of the project as there was only a short time between classes receiving these having to do the Final Quiz so we could evaluate in time for the project end.	<i>Build in more evaluation time next year so that more pupils have the chance to do the tasks, and that we have the time to evaluate effectively and more fully.</i>
The back of the van was damaged one morning in a school due to Georgina reversing into a recycling bin (!)	<i>Luckily the van was still drivable; however one back light was smashed. Quick action meant it was fixed within 3 days; however, there was no contingency to pay for anything like this. Also, if it had been a worse accident we would have needed to rent a van for the day instead. Build in contingency next year.</i>

Things We Will Do Differently In Future Tours

- **2 Full Time Positions**

This year the workload has been heavy and at times overwhelming, very often requiring evenings on top of normal working hours to meet deadlines throughout the tour and also complete administration. Also, we have been unable to develop a new show, or fully develop the secondary workshop as planned, meaning we haven't fulfilled our aims of producing different work to compliment other areas, such as Food and the Environment & Global Citizenship.

From our learning this year, we need to develop **a more sustainable project** that will assist in the **successful growth & development** of our **education programme** next year. Therefore it is anticipated that we receive further funding to create a second office job so that all responsibility doesn't weigh on the Tour Manager. This would be the Tour Administrator, who would be responsible for booking schools, ongoing tour management and day to day administration. The second position would be a Director, responsible for developing a high quality workshop programme for Secondary pupils, developing the education packages, CPD Teacher Training, contracts, recruitment and training of new freelance staff, overall project management, and directing a new educational performance based around the new Eco Schools topic 'Food & the Environment'.

- **2 New Actors for Isle of Egg**

If we are to increase Eco Drama's strength to deliver a successful project in 2011, we will require 2 new actors to be trained to deliver The Isle of Egg show. Until now, the show has been performed by Eilidh Macaskill and Alistair Edwards. So that the new projects delivery is not dependent on these 2 people, it will be a smart move to train 2 new actors who will be able to perform the show. This means we have a back-up, if other work commitments/sickness gets in the way.

- **Take out Owl Monitors for Primary level Follow-up Activities**

There was high percentage of schools not using the Owl monitors and not returning data. In some schools it was a success and pupils were taking it home, but on the whole, it seems it was not as big a success with all 80 schools as we'd have hoped. Here is a selection of feedback from teachers about the Owl Monitors which helped us arrive at our decision not to include them for this particular age group next year: -

Owl Comments from Teachers:

1. Three children took it home but could not get it to work
2. The owl electricity meter was a hit with some pupils – children conscious of switching game consoles etc off at home
3. The owl went home with four pupils over 2 weeks each. One was able to ‘fit it on the wires’, one completed the form but consumption went up due to Christmas tree lights! One did not complete the form and the fourth did not use it.
- 4 Four of 21 pupils voted yes to the owl meter making them more aware
- 5 Due to lack of time and other commitments, the monitor was not used in term 2 however this activity is planned for term three as is the ‘designing a magic town’ activity. A set of rules for living in the town will also be written by the children. It is hoped that results from these will be emailed to Eco Drama.
- 6 This was far too complicated a device to be used.
- 7 Waiting until new year to tie in with our science topic
- 8 Sorry not used it yet will send it home with pupils
- 9 Owl monitors didn’t work
- 10 It was useful for pupils to see physically how much energy the class used and how we can reduce it
- 11 £9 saved in 1 week!
- 12 Had great difficulty with the Owl monitor. Some children said they couldn’t get it to work or get it attached. Several connected it but forgot to record and some kept forgetting to bring it back! A bit of a disaster I’m afraid – very sorry.
- 13 Only 4 pupils had a chance to take one home, but all have made changes to their use of electricity
- 14 Pupils found monitor difficult to set up and it did not work for them. I took it home and got it working however.
- 15 We decided to keep them for our next session when we will be studying energy. It will be a whole class activity

CO₂ Emissions Reduction

EXECUTIVE SUMMARY

Baseline

3899.619 total tonnes of CO₂

(Total baseline Travel, Energy, Waste & Bio Diesel - 2044+1671.82 +183.2+0.599)

CO₂ Reductions

152.3 Tonnes of CO₂

(Total Travel, Energy, Waste & Bio Diesel – 33.63+0+118+0.599)

Sources of Information used: -

Travel

www.transportdirect.info/Web2/JourneyPlanning/JourneyEmissionsCompare.aspx

Energy

[Energy Route Map](#)

Waste

www.wasteawarescotland.org

[SEPA](#)

['TSCB Programme Support Plan Template – No 7 'Tonnage/Carbon Impact Detail'](#)

Bio Diesel

[DEFRA Conversion Factors](#)

Please See Below For Full Breakdown of Calculations (split over 2 parts): -

1) Baseline

2) CO₂ Reductions

1) Baseline

Eco Drama's project aimed to reduce CO2 emissions in the following ways: -

- ✓ **Carbon reductions made from effective behaviour change**
- ✓ **Carbon reductions from using reclaimed vegetable oil for the tour**

The learning outcomes, and therefore CO2 predictions, for each show or workshop changed depending on the theme: -

- **To increase the number of pupils walking/ cycling to school**
- **To increase the number of pupils reducing energy at school & at home**
(The Isle of Egg & Eco Gadgets Workshop)
- **To increase the number of pupils actively partaking in the principles of Reduce, Reuse, Recycle at school and at home.**
(Recycling Heroes Workshop)

Targets

It was anticipated that by the end of our project: -

- Travel:** 20% who didn't walk/cycle to school now do so on 2 days per week
- Energy:** 30% will take daily measures to reduce energy use at home
- Waste:** 30% will reduce, reuse and recycle 20% of their waste on a daily basis

In order to capture baseline data, each teacher led a Quiz with their pupils before our visit, asking questions about pupil's travel, energy and recycling habits.

Actual Number of Pupils Who Took Part

The Isle of Egg & Eco Gadgets Workshop - attended by 4236 pupils

3666 pupils took part in Quiz Round 1, 570 pupils not accounted for

Recycling Heroes - attended by 2197 pupils

1722 pupils took part in Quiz Round 1, 475 pupils not accounted for

The numerical data which we collected from the 80 schools was logged onto Excel and from that a percentage worked out. We used these percentages in order to work out the following baseline data about pupil's behaviours before our visit.

Baseline Breakdown

Travel Baseline

Of the 3666 pupils quizzed, who took part in Transport related work: -

66% of pupils walk to school more than once a week

6% of pupils cycle to school more than once a week

An average of 72% are not travelling by car/bus/train & 28% use transport

Total pupils who walked/cycled = 2617

Total who take transport = 1049

Of the 1049 pupils taking transport, they will emit 0.4kg of CO₂ per day each, so for a full school week at 5 days it is 2kg CO₂ per week (0.4 x 5 = 2)

<http://www.transportdirect.info/Web2/JourneyPlanning/JourneyEmissionsCompare.aspx>

To work out how much CO₂ is currently being saved by the 72% of pupils, for a full school year of 35 weeks, we do the following calculation: -

2617 divided by 3666 = 0.713857064 (or 0.72) x 2kg = 1.427714128kg CO₂ saved per week

1.4 x 35 weeks = 50kg of CO₂ (Divide by 1000 to get Tonnage = 0.05) 0.05 x 3666 =

183.2 tonnes of CO₂ saved per person per year by the 72% who walked or cycled before our visit

Energy Baseline

Of the 3666 pupils quizzed, who took part in Energy related work, & own a computer:

25% of pupils do not switch off their computer/playstation/wii from standby

75% do switch off their computer/playstation/wii from standby

Total pupils who do not = 899

Total who do = 2767

Using the [Energy Route Map](#), pupils would save 604.2kg per year if they did this.

So to get our baseline of CO₂ currently being saved by the 75% doing this positive action: -

2767 divided by 3666 = 0.754773595 (0.75)
0.75 x 604.2kg = 456.034206 – divide by 1000 = 0.456
0.456 x 3666 = 1671.82

1671.82 tonnes of CO2 saved per person per year by those who were doing this positive action before our visit

Waste Baseline

Of the 1722 pupils quizzed, who took part in Waste related work: -

69% do recycle glass, cans, bottles, paper and card on average
31% do not recycle glass, cans, bottles, paper and card on average

According to www.wasteawarescotland.org, on average one person in Scotland currently produces **600kg** of waste per year (0.6 tonnes)

SEPA's document, published on the 25th November 2010 states a current recycling (and composting) rate of **37.2%** in Scotland (July 09-June 2010 figure)

To get our baseline of CO2 currently saved by the 69% doing this positive action: -

0.69 x 600kg = 414kg per person (divide by 1000 to get tonnes = 0.414)
0.414 tonnes of waste is currently recycled per person

To calculate the CO2 savings in tonnes of CO2, we have used the waste calculator from the document '[TSCB Programme Support Plan Template – Number 7](#) 'Tonnage/Carbon Impact Detail'

As we only asked questions about the following materials, we are going to assume (for the purposes of calculation) an equal split of recycled materials (20% of each) per person claiming to recycle.

0.414 divided by 5 = 0.0828 tonnes per material (x this by each number below)

Paper and card (x 1.32) = 0.109296

Plastics (x 1.5) = 0.1242

Metal – aluminium (x 9) = 0.7452

Glass (x 0.315) = 0.026082

Packaging (x 2.2) = 0.18216

Add these 5 numbers together = 1.186938 (divide by 1000)
= 1.187 tonnes of CO2 saved per person. $1.187 \times 1722 = 2044$ tonnes

2044 tonnes of CO2 saved by the 69% who recycled their waste before our visit

CO2 Reductions from Using Reclaimed Vegetable Oil for the Tour

By touring in a van run on bio diesel instead of conventional diesel fuel, we have saved **0.599 tonnes** of CO2 during the lifespan of the tour.

Calculations

Eco Drama drove on average 8 miles per day for 80 days of local touring in Glasgow

Total Mileage of Tour = 640 miles & approximate Miles per Gallon = 32

Amount of Bio Diesel used (in litres) = 268 litres

- Using DEFRA conversion factors (for Diesel Litres is $\times 2.630$) using 268 litres of diesel would burn a total of 704.84kg of CO2 ($268 \times 2.630 = 704.84$)
- As Eco Drama used Bio Diesel from Apple Fuels, made from reclaimed vegetable oil, this omitted only 105.73kg of CO2 in comparison (85% less CO2) making a saving of **599.114kg****/1000 = **0.599 tonnes**

** According to the Renewable Fuels Agency in 2009, using bio diesel, specifically made from used cooking oil, has low carbon intensity & makes a carbon dioxide saving of **85%** in comparison to using regular fossil diesel.

Baseline = 3899.619 tonnes of CO2

(Total baseline Travel, Energy, Waste & Bio Diesel - $2044+1671.82+183.2+0.599$)

2) CO₂ Reductions

We will now chart, and evaluate the actual reductions brought about by the changes our project has made by comparing the results from Quiz Round 2 with the original baseline data.

Quiz Round 2

Each class teacher was emailed the Quiz directly approximately 2-3 months after the visit. Teachers were prompted on average 3-4 times by phone/email to return these.

- **Return rate for Energy & Transport Quizzes = 43%**
- 57% not accounted-2075 of 3666 Energy/Transport pupils not accounted for.
- **Return rate for Recycling Quiz = 67%**
- 33% not accounted for –560 of 1722 Waste Quiz pupils not accounted for

C02 Reductions – Travel

Of the 1591 pupils who took part in Quiz Round 2, who took part in Transport related work with Eco Drama: -

The same 66% of pupils continue to walk to school more than once a week
With our 'after' findings, there is a 2% decrease of pupils cycling to school more than once a week from 6% to 4%.

Points to be considered: - during Quiz Round 1 it was summer time, and Quiz 2 was done in winter time when roads were icy and the weather was worse. Also, only 43% pupils took part in Quiz 2 so we can assume during better weather and with more pupil data the figure will still be 6%, or even higher.

To work out how much C02 continues to be saved by the 72% of pupils, for a full school year of 35 weeks, we do the following calculation: -

On average, each pupil will emit 0.4kg of C02 per day each, so for a full school week at 5 days it is 2kg C02 per week (0.4 x 5 = 2)

<http://www.transportdirect.info/Web2/JourneyPlanning/JourneyEmissionsCompare.aspx>

2617 divided by 3666 = 0.713857064 (or 0.72) x 2kg = 1.427714128kg C02 saved per week

1.4 x 35 weeks = 50kg of C02 (Divide by 1000 to get Tonnage = 0.05) 0.05 x 3666 =

183.2 tonnes of C02 continue to be saved per person per year by the 72% who walk or cycle currently

There is a 0% C02 saving made from our Transport data

C02 Reductions - Energy

Of the 1591 pupils who took part in Quiz Round 2, who took part in Energy related work with Eco Drama, and own a computer: -

77% now do switch off their computer/playstation/wii from standby (a 2% increase from 75% baseline)

23% of pupils do not switch off their computer/playstation/wii from standby, a 2% decrease from 25% baseline)

Total who do = 1225

Total pupils who do not = 385

Using the [Energy Route Map](#), pupils would save **604.2kg** per year if they did this.

So to get our reduction of C02: -

1225 divided by 1591 = 0.769956 (0.77)

0.77 x 604.2kg = 465.20741 – divide by 1000 = 0.465

0.465 x 3666 = 1704.69

1704.69 tonnes of C02 is being saved

So if 77% = 1705.45, to find out how much of an increase was made in savings (1705.45 minus the baseline of 1671.82 = 33.63 tonnes)

33.63 tonnes saved

C02 Reductions - Waste

Of the 1162 pupils who took part in Quiz Round 2, who took part in Waste Minimisation related work: -

73% now recycle glass, cans, bottles, paper and card on average, up from 69%
27% do not recycle glass, cans, bottles, paper and card on average, a decrease from 31%

According to www.wasteawarescotland.org, on average one person in Scotland currently produces **600kg** of waste per year (0.6 tonnes)

SEPA's document, published on the 25th November 2010 states a current recycling (and composting) rate of **37.2%** in Scotland (July 09-June 2010 figure)

So to get our 4% increase in reduction of CO2 saved by the 73% now doing this positive action: -

$0.73 \times 600\text{kg} = 438\text{kg}$ per person (divide by 1000 to get tonnes = 0.438)

0.438 tonnes of waste is now recycled per person

To calculate the CO2 savings in tonnes of CO2, we have used the waste calculator from the document '[TSCB Programme Support Plan Template – Number 7](#) 'Tonnage/Carbon Impact Detail'

As we only asked questions about the following materials, we are going to assume (for the purposes of calculation) an equal split of recycled materials (20% of each) per person claiming to recycle.

0.438 divided by 5 = 0.0876 tonnes per material (x this by each number below)

Paper and card (x 1.32) = 0.115632

Plastics (x 1.5) = 0.1314

Metal – aluminium (x 9) = 0.7884

Glass (x 0.315) = 0.027594

Packaging (x 2.2) = 0.19272

Add these 5 numbers together = 1.255746 (divide by 1000)

= 0.0012557 tonnes of CO2 saved per person

$1.256 \times 1722 = 2162$ tonnes

2162 tonnes of CO2 is now being saved by the 73% who recycle their waste

So if 73% = 2162 tonnes, to find out how much of an increase was made in savings (2162 minus the baseline of 2044 = 118 tonnes)

118 tonnes saved

C02 Reduction Totals

CO2 Reduction from the Isle of Egg & Eco Gadgets - Energy = **33.63**

CO2 Reduction from the Isle of Egg & Eco Gadgets - Transport = **0 tonnes**

CO2 Reduction from Recycling Heroes Workshop-Waste Minimisation = **118 tonnes**

CO2 Reduction from using Bio Diesel in touring vehicle = **0.599 tonnes**

(Total Travel, Energy, Waste & Bio Diesel – $33.63+0+118+0.599$)

Overall C02 Reduction = 152.3 tonnes

Factors to consider when reading these results

- The **weather** on the day of each Quiz (Quiz 1 was led during summer and Quiz 2 led during winter, therefore less children would be walking/cycling to school)
- Some schools were **Special Needs**, so if wheelchair users, they have to get bus or be driven in
- Some pupils who took part may have been **absent** on the day of Quiz 1
- At the time of calculating reduction, some teachers were still to return their Quizzes
- It is possible that the 57%, who are unaccounted for in the Quiz data, may be making **similar behavior changes** to the 43% who are accounted for. If we are to make an assumption about the uncharted data, it is possible that the **57% of pupils** potentially are making positive behavior changes that are leading to similar C02 reductions as the 43%. So our figure hypothetically could **double** from 152.3 tonnes reduced to **304.6 tonnes of C02 reduced**.

What has been learned since we made the original C02 assumptions?

- 1) Our predicted reduction in C02 was 114.9 tonnes, and our actual reduction 152.3 tonnes, which means **we reduced 37.4 tonnes more than anticipated**.
- 2) Eco Drama's Targets for behaviour change were quite ambitious in relation to school travel: -

We anticipated that by the end of our project: -

- 20% who didn't cycle to school now do so on 2 days per week

In actual fact there was a 0% increase in the number of pupils walking or cycling – the data stayed the same. However, there are points to consider with this such as weather, please see factors below. Next year, we would aim for a **2% increase in pupils walking and cycling on more than 1 day per week**.

- 30% will take daily measures to reduce energy use at home

We may have under-estimated this as the baseline average for this question was 72% of pupils, and actual total pupils making reductions on a daily basis after the visit was 77%. So there was a 5% rise. Next year our aim will be for **a 10% increase in the number of pupils taking daily measures to reduce energy**. This seems a more realistic target.

- 30% will reduce, reuse and recycle 20% of their waste on a daily basis

With us visiting so many schools, it is very hard to get pupils to actually weigh the amount of rubbish to get a figure for the amount recycled. What we could do this year was get a figure for the amount of pupils taking part in recycling at school and at home.

On average, 69% pupils claimed to recycle plastic, paper, cans, glass and packaging both at school and home. At the end of the project this rose to 74%, making a 5% increase in pupils partaking in recycling at school & at home.

Next year we will aim for **a 10% increase in the number of pupils who reduce, reuse and recycle their waste on a daily basis**

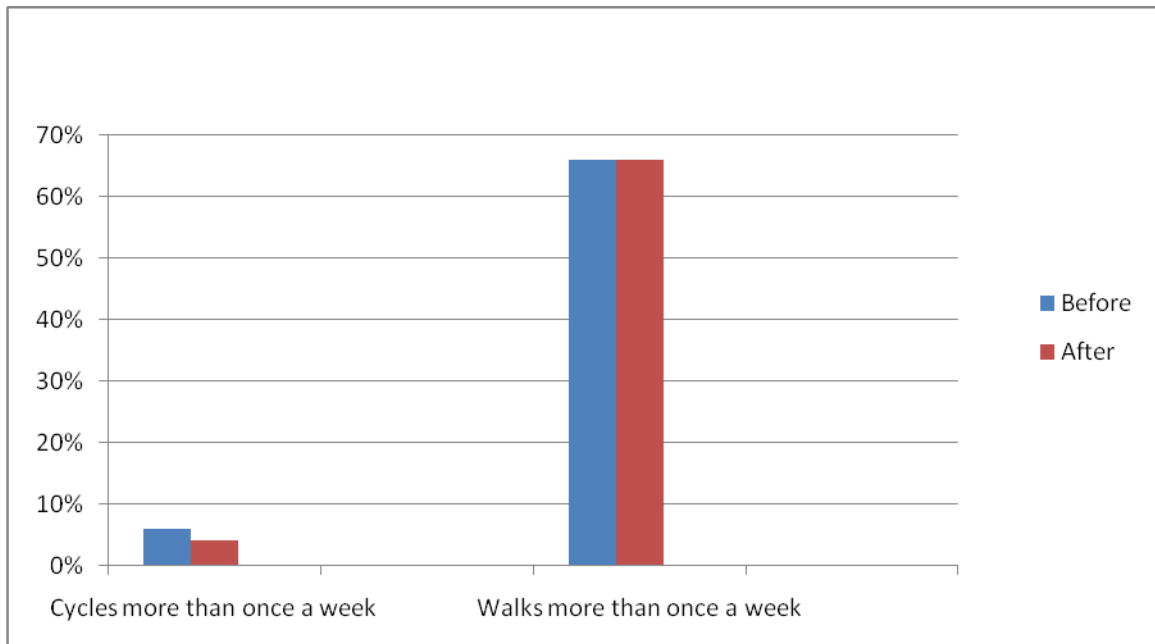
- 3) There were **significant changes in pupil behaviour** from the before & after data, showing our project and community has changed awareness about CO₂

All statistics, with the exception to travel, show a **rise** in the number of pupils partaking in the **positive behaviour change**, showing that the Eco Drama visit, plus follow-up activity work, and general Eco Schools work being done in the school **is** making a difference to pupil behaviour.

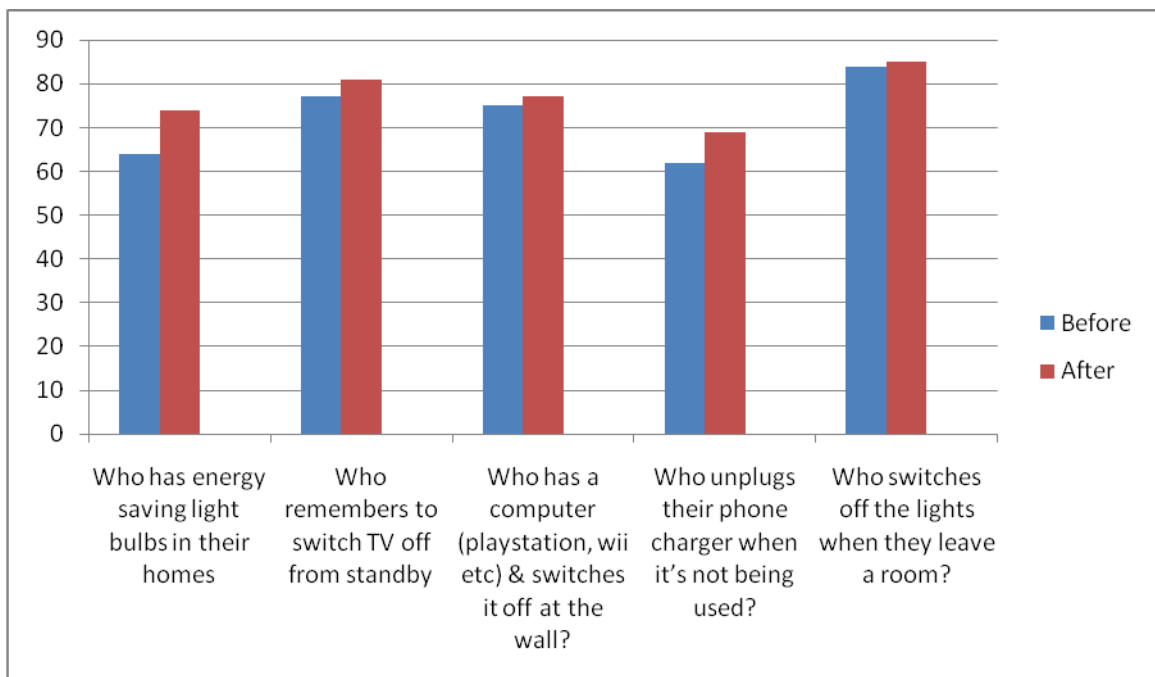
Please see below a bar chart providing in depth detail from our before & after Quiz results: -

Detailed Statistics – *Before and After* Quiz Results

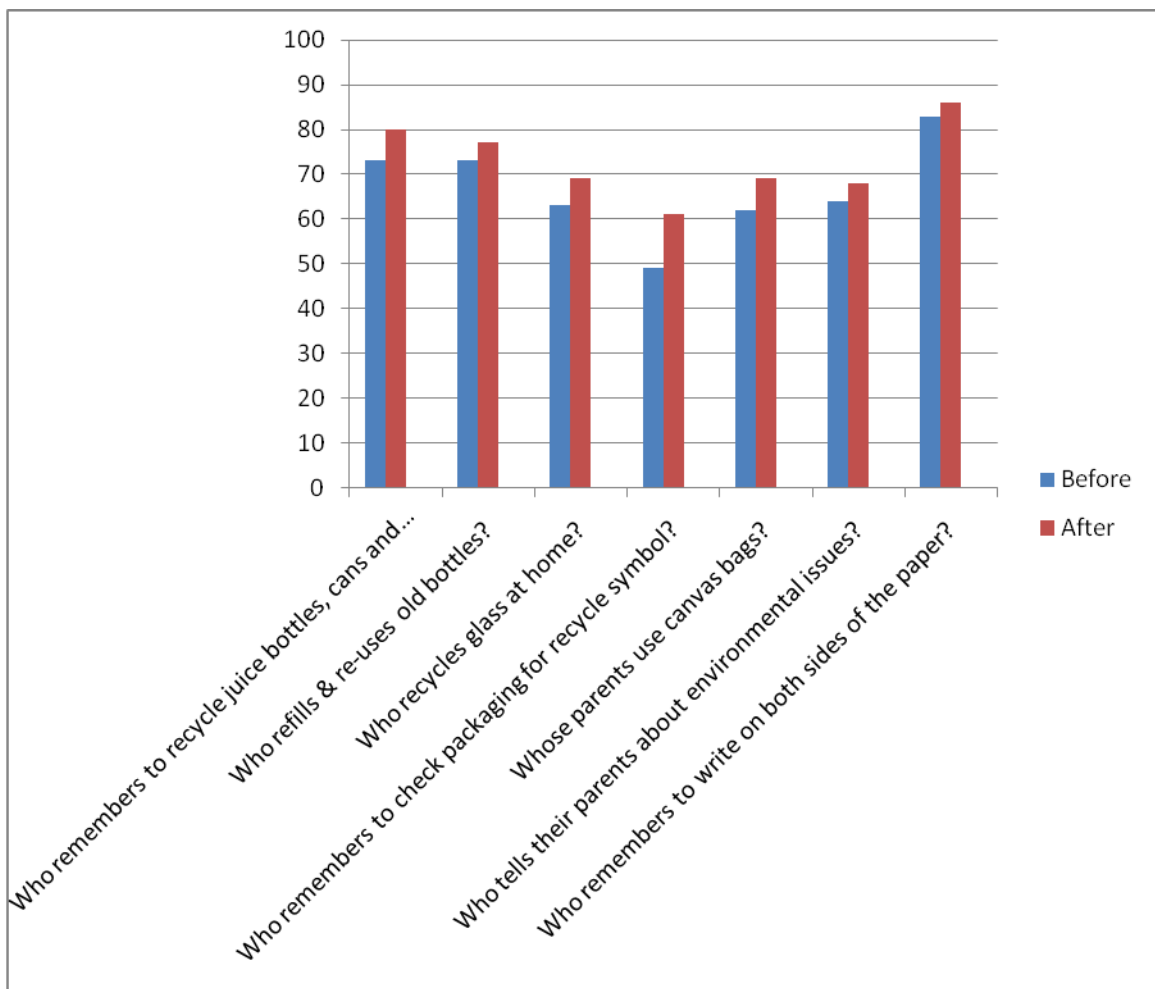
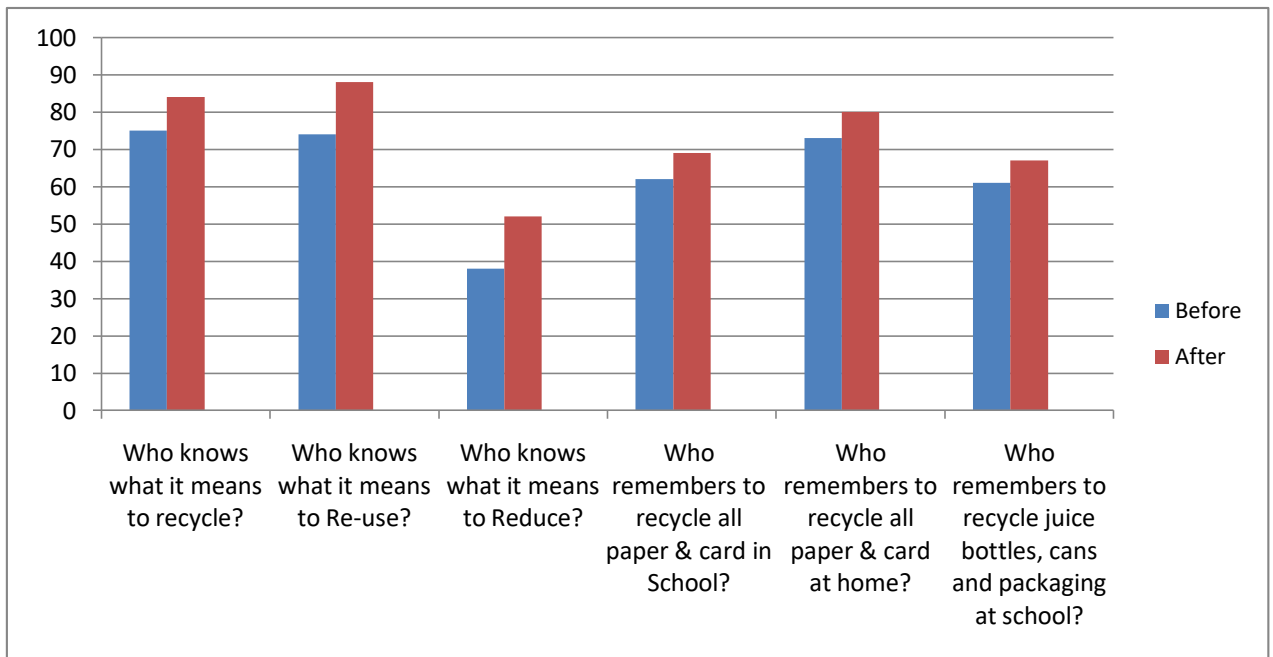
Travel Statistics



Energy Statistics



Waste Statistics



Social, Economic and Environmental Impacts

Eco Drama met several of the social, environmental and economic benefits set out in our original application to the Climate Challenge Fund. Below is the list of them, with a selection of extra supporting evidence from teachers and pupils themselves: -

Social

- We successfully promoted increased respect for the environment and behavioural change through The Magic Van Tour – both through the educational shows and workshops and touring vehicle itself.

“We should never waste energy so we help our planet”. P5 pupil

“We have to stop pollution. Stop using so much oil”. P6 Pupil

“I learned the world can be in danger because of us humans and I can be a green agent by switching off the computer and turning the TV off by the switch Caitlin M, P5 Ruchill

- ✓ With pupils being further encouraged to walk and cycle to school, we anticipate long term health benefits & more active lifestyles, hopefully leading to a reduction in carbon emissions with ‘positive pester power’ from child to parent.
- ✓ Increased social cohesion through performing the shows in schools - theatre is a social event.

*“I liked when I got to help others and when we made the TV advert in groups”
P6 pupil, Eco Gadgets*

“It was fun and entertaining and wished it went on for longer, please can you come back and do another show”, P7 pupil

- ✓ Increased social skills anticipated within schools & classes as the young people interact within the drama workshops and shows.
- ✓ Increased confidence and communication skills anticipated from experiential, interactive learning.

“I feel more confident about recycling”. Pupil, P5

“Bag Girl” engaged the children throughout the workshop. Pace of delivery suited the age and stage of the class and there was a good variety of activities. The themes linked well with the curriculum and reinforced work

already being done through Eco Schools. It was great to have the added dimension of drama to deepen pupils learning. St Conval's, P3 class teacher

- As drama and theatre engages many of the learning styles, increased commitment anticipated from pupils who may be disengaged or isolated from their learning.

"I liked the fabulous enthusiasm. Bag Girl conveyed knowledge very well to children who had little prior knowledge. The children learned whilst having fun and the workshop linked with the school topic 'What a Load of Rubbish' and school eco policy. The sorting activity was great, and showing them simple things like re-using bags, can make a difference. The duration was spot-on, any longer and it would have been difficult to maintain the class's attention; very smart making it so active for visual & kinaesthetic learners. It was fun and informative! Overall a great learning experience for the class"

St Vincent's Class teacher on Recycling Heroes

Environmental

- We enhanced awareness of global and local environmental issues
- We encouraged increased respect and preservation of the environment.
- We encouraged more informed choices about travel and lifestyle.
- We utilized waste vegetable oil, preventing it going to landfill.
- The Magic Van advertising promoted the use of waste vegetable oil & being mindful of car use to Glasgow communities. We were stopped several times throughout the year & asked by interested people about bio diesel, where they could get it, plus information about the economic & environmental benefits.
- The messages within the shows and workshops resonated with the children, for example, conserving energy & minimising waste, as when we evaluated 3 months after the visit, many pupils still remembered key messages when prompted by their teacher. We hope that ultimately this will encourage children and young people to form habits and behaviour patterns that will be more sustainable in the long run.

"Delivering the environmental message in this way is much more interesting for pupils and they remember the message. 3 months on their memory of the characters and moral of the story is still very vivid"

Economic

- Core Staff jobs created for the following: - 1 x Tour Manager & Development Position full time position, plus 1 x touring Workshop Leader & 2 x touring Performers, all freelance positions.
- Eco Drama sourced supplies locally, for example the bio diesel from Apple Fuels in Bridgeton, and also sourced staff locally, thereby contributing to the local economy.
- Eco Drama moved into an appropriate office space within Glasgow City Centre at The Briggait, a charitable building assisting cultural organisations and social enterprises with affordable office space, which we have been renting since April 2010. Having this office space and no longer working from home will assist in our future growth to accommodate other staff members and volunteers.
- Successful funding from the Climate Challenge Fund has helped Eco Drama remain trading in an otherwise tough economic climate. The aid of funding in these initial growth years is greatly helping us to deliver our aims and objectives to schools and communities.

Legacy

Eco Drama's Magic Van Tour will have a lasting legacy in both the Glasgow and wider community, and in the ongoing reduction of carbon emissions.

Lasting Legacy in the Community

- ✓ Using theatre & drama in education has proven to be **memorable** as it appeals to different learning styles and multiple intelligences. Pupils have demonstrated through feedback forms a **great memory of the show and workshops**, increasing the potential for positive behaviour change in future
- ✓ The interactive nature of Eco Drama's work means young people were **involved** and not just passive listeners. They were also involved in decision making within workshops and are encouraged to use their voice, form opinions and become modern ambassadors for the environment. **With heart & mind involvement** they have a better chance of making changes to their lifestyles.
- ✓ The reflective work covered in the Follow-up Packs means the **message was enhanced** further. Schools will have the art work, stories & pictures displayed around their school for a long time after our visit as a reminder of the work done with Eco Drama and the key messages learned.
- ✓ Each pupil received a **badge, stickers and miniature information booklet** to take home, which is also small enough to carry around. These proved a huge success with pupils, and we encouraged them to show parents these mini booklets so that the message may reach them also.
- ✓ We have the designs and templates on file to keep using these next year and some left over **Owl Monitors** which we would like to use in our **Secondary school project** next year.
- ✓ It is the aim that schools **continue** with any individual and whole school **environmental action**, such as recycling and energy conservation. They have also been given the OWL monitors to keep, so in time hopefully these eventually reach all pupils and parents on the library share basis.
- ✓ Eco Drama will continue touring its current programme of work into future years, reaching **new communities** in Scotland, each time with the aim of reducing carbon emissions in the new area. We aim to reduce carbon emissions by **152.3 Tonnes** during our 2011-2012 Magic Van tour.

By 2013, if we grow further, we may be able to run 2 tours alongside each other; this would therefore double our 152.3 tonnes per year target to **304.6 tonnes** in a year.

- ✓ During the Climate Challenge funded project, Eco Drama was able to begin work on one new workshop for Secondary pupils; working title; 'The Oil of Life'. This new workshop will be developed further in 2011 & will include an interdisciplinary education package & CPD Training Event for teachers, making it a **sustainable education package**. This workshop will then go on to have a **touring lifespan** for many years to come.
- ✓ The funded project helped us to buy **The Magic Van**, which will continue to tour for many years, visiting communities and schools all over Scotland with further Eco Drama shows and workshops. We have put the Climate Challenge Fund logo on the back of the van to advertise your support to all who see it. If we are eventually able to expand to the rest of the UK, this means the van's message could be seen nationally.
- ✓ The van wrap will continue promoting the use of waste vegetable oil and the idea of **reclaiming and recycling**, but most importantly, it will continue to help Eco Drama deliver its education to schools all over the country, in the most practical carbon efficient manner.



What Will Be Happening Next Year?

Eco Drama aims to gain 1 further year of funding from The Climate Challenge Fund. Here is an overview of what we expect to achieve in 2011: -

- **Replication** of our 2010 Glasgow tour in **West Dunbartonshire Council**, reaching 30 Primary Schools.
- Continued development of our new **Secondary school workshop** and accompanying education package – **The Oil of Life**. To be ready for delivery to S1 pupils within the 4 West Dunbartonshire Secondary schools.



We decided to create this workshop in order to reach out to the older audience. The secondary pupils may have a greater ability to alter their behaviours and influence greater changes within their households.

Therefore, through The Oil of Life role play, we aim to capture their imaginations first and foremost, give them the facts, explore and debate potential solutions, but ultimately leave it up to them, so that potential change comes from them. If we lead with facts, involve them emotionally through a dramatic process, and have fun, we feel this will be more effective than moral pressure. It's not about telling them what *not* to do. We want to enable them to make their own minds.

- Further reductions made in CO2 emissions through effective behavioural change and awareness raising.
- Development of a **new theatre show**, devised around the new Eco Schools topic '**Food & the Environment**'.
- Recruitment of a second employee to take on the Tour Manager role.
- Emily Reid will therefore be able to take on a **Development** role, to produce the new show & workshop. She will also continue to take on responsibilities; recruitment, training, evaluation, reports, & overall project management.
- In 2011 we seek to employ on a **short term** freelance basis the following positions: - 2 performers to deliver The Isle of Egg, 1 Workshop leader - Primary, 2 Workshop Leaders - Secondary, Designer, Dramturge, and 2 Performers to devise the new theatre show.

Eco Drama beyond March 2012

If successful again in securing the Climate Challenge Fund for 2011, we will deliver the proposed project. If not we will apply to charitable trusts, possible sponsorship, & organisations such as 'Awards for All' to ensure we can continue similar projects.

Eco Drama will also fund activities beyond the CCF project by charging individual schools that make bookings, and increasing the marketing done throughout Scotland so that we continue to fulfil our social enterprise objectives. Where possible, funding will be sought on behalf of the interested schools in order to reduce the cost and reach more schools. The income generation/ additional funding will aid our staff growth, thus increasing our capacity to deliver to more schools and reduce carbon emissions in new local authorities. The project will continue to be managed by Emily Reid and the Eco Drama Board members Lucy Conway and Maggie Fyffe.

P 2/3



Supporting Section: Pupil & Teacher Feedback

Pupil Feedback - Recycling Heroes



I learned to reduce, re-use and recycle. Calum, P4

Plastic can take up to 1000 years to break down. Use canvas Bags instead of plastic bags. Gary, St Benedict's

I like the bit when you play the games – Anthony Wan P4, St. Vincent's

I enjoyed it and it was the best recycling hero thing ever – P4 St Vincent's



I learned that reduce was the most important one - P4/5 Haghill

I loved the superhero Bag Girl, and the comic. P4 St Fillan's

It was fun and active. Aedan, P4

I learned to think before you throw away, how to zip zap boing and not to throw away but use again – P3

I can't believe that people invented the landfill. P4 pupil, St Fillan's



I think I can be a recycling hero too, and make my mum proud by recycling. P4 pupil

I will be able to recycle at home and at school because I know a lot now. Niall, P4

I feel more confident about recycling. Pupil, P5

I liked learning the moves. It was fantastic. "Rhys The Recycling Hero", St Benedicts

I learned that 60% of your bin can be recycled. Shelby, St Benedict's

Animals could get hurt if we leave cans about. Danielle, P5/6

I like when she was telling stories, Jack, P2

I think I can be good at being a recycling superhero because I'm good at it. Kyle, P3

I like to recycle. Carly P3

I want to save the world. Eliza, P3

My Gran will be proud. Jack, P2

I feel I could stay a recycling hero forever – P2/3 St. Mirins



I can tell my mum how to recycle – P5/6 Haghill



Can she come back? Pupil, P4

Yesterday we went to drama to see a super Recycling Hero. We were so excited! When we went in the drama room the super Recycling Hero popped out with loud music. Her name was Bag Girl. We were learning all about Reuse Reduce and Recycle & the waste in the landfill dumps. After we were learning some recycling moves. Yesterday was my favourite and most wonderful day. Story by Chloe Haider P3 St Mirins: *(brilliant school!)*

Pupil Feedback - Eco Gadgets



I learned you can change oil into Bio Diesel, you do not need oil for your car you can use water and the sun gives us electricity – P5/6 Haghill

Oil produces carbon dioxide and all different vehicles are destroying our world. The earth will be destroyed if we don't help it. P7, St Benedict's



I learned how to use solar panels, to spread the word and how to be kind to the earth – Callum P6

Being a Green Agent is COOL!!! Chloe

I learned that science solves problems and that you can save the earth in different ways – P6 Corpus Christie

I have learned about global warming. P7 Pupil, St Benedict's

I learned there are things called fossil fuels. P5 Pupil

I learned that some cars can run on chip oil leftovers; that water can be a fuel and you can build a sci-cycle yourself – P6 Pupil

I close the fridge now when dad leaves it open – Katy O'Neill P6

I learned that pig poo can be made into energy, what energies are renewable and non renewable and how coal was made – P6 Pupil

I learned that oil can be formed from plankton and that almost everything I own has oil in it. 'Sully the Green Agent'

I have started switching my computer off at the wall – Harry McGrena P6

Hopefully everybody uses the renewable fuel – Darren P5 St Convals

I learned the world is giving out too much carbon dioxide. P5 Pupil Bankhead

I learned that you can change how you live, and that being Eco can be great fun. Pupil, 'The Best of the Best'

I liked all the gadgets. St Benedict's

Thank you for making me learn more things. P4 Pupil, St Saviours

I learned that it is very interesting to find out about everything. P5 Pupil

I would love to be a Green Agent – Yusra P6 unknown school

Switch off appliances when I'm not using them

Hope was a great Eco Agent. P5 Pupil

I LOVED the sci-cycle! P5, Bankhead primary

I learned that coal and oil are not renewable. P5 pupil, Bankhead

I can be a Green Agent everywhere. P5 pupil, Bankhead Primary

I think I can be eco at school and at home. P5 pupil, Bankhead

We have to stop pollution, not to drop litter and spread the word of stopping pollution - Sasha, P6 Corpus Christie

Solar panels are good. P5 Pupil Bankhead

I learned that cars can run on bio diesel. P5 Pupil, Bankhead

My favourite bit was when we got a shot on the sci-cycle, I loved it.

I liked the bit when we got to make the TV advert. P6 Pupil

Oil helps make a toothbrush. Oil helps make clothing. Shadez, P6

It was great and Hope was funny. P6 pupil

I liked every bit of the workshop and thank you for coming to St-Josephs

Don't leave TV on standby, Spread the Eco word and help keep the planet green – Grant P7

Can you tell us how we can make a Hydro car? Morgan Nelson P6/7

I learned that there was such a thing as an eco boat and about H2O being a fuel, I never knew anything about it – P5 Haghill

Dear Emily (Secret Agent Hope)

Thank you for visiting Stronsay Junior high. The eco drama was very interesting. So now we are secret green agents we can arrest people for leaving the lights on. My favourite part was putting the bees wax into the little boat but I also liked the sci-cycle. I really liked the eco play. It was funny. I wish I could visit the island of Eigg. Yours Sincerely, Jack Holland

Pupils become **Special Green Agents**

After meeting Agent Hope, the Special Green Agent, pupils sent in their own Green Agent names. Here are a few below from P7 pupils at St Benedict's primary school: -

Greeny

Bob the Green Agent

Eco Guy

Gary the Green Agent

Spy Guy

Sully the Green Agent

Green Agent Yummy Gummy

Agent Greeny

Green Agent – The Best of the Best

Green the Greeny Agent



Pupil Feedback - The Isle of Egg



I think that it was funny but it also put a point across about how hard Eigg works and we should do that too. Lilli, P6, Mount Florida primary

We can make electricity with solar, wind and wave energy. P7 pupil

I learned so much about power. Justin, St Brides

You can drive a car with recycled chip oil. P6 pupil

I learned that we could use different amounts of electricity according to the weather. I think this show was a very good idea because it certainly persuaded me to go green. Lilli, P6, Mount Florida primary

You should walk instead of a car. P5 St Brides

I liked the songs and the experiments, P6a Hillhead Primary

It was amazing, funny and entertaining!!!

The actors were fantastic. They were good at musical instruments. Ellie, p5 Balornock

I learned how to reduce C02. Amisha, P4/5

I learned that oil is a fossil fuel. P5 pupil, Golfhill

If there is no oil there will be no electricity. P5, Yoker Primary

The isle of Eigg is actually a real place. And they use solar power to be an eco friendly place. P7a Pupil

**I learned that the isle of Eigg uses sustainable energy! P5 pupil,
Broomhill Primary**

**I learned that there's future in renewable energy and it's good to be
environmentally friendly. I liked the singing. Pupil, Stronsay**

I learned that electricity shouldn't be wasted. Pupil, St Brides

I learned that it is helpful to use your own energy instead. P7b Pupil

It was interesting and fabulous!

I liked the moral of the story.

Thank you for a wonderful show. It was very funny. Please come again.

I learned that sustainable can mean solar power, water and wind. Nabihah, P6

Don't use so much petrol and diesel.

I liked when Bob & Bob were singing. Isna, St Brides

I learned that when you leave a room you turn off lights to save electricity

**I have learned that 'global warming' is a bad thing. Solar, wind,
wave and hydro power is good if our fossil fuels run out. P5 Golfhill**

I want to be self-sufficient. Amy, P6, Mount Florida

I loved the show and it became a success. P4 Pupil St Brides

I learned that a car can run on hydrogen and different things, not just petrol.

I loved the show and I wish you could do it again. P4 pupil

**I really liked the way that you made everything go without oil. I really liked the
show, it was GREAT! P6 Pupil St Brides**

I should be careful how much electricity I use. P5 pupil, Broomhill

The show was 10/10 thank you. P5 Pupil

I learned not to use so much oil and petrol. Kieren, P5, Golfhill

It was really funny and I hope you make another play. Amy, P5 Golfhill

I learnt that you don't need oil to power anything and it is possible to invent energy with everyday things. P5 Pupil, Broomhill

I didn't know that the isle of Eigg used renewable energy. P5 pupil Broomhill

I learned why it's important to reduce C02 and the consequences of not reducing C02. P5 Pupil Broomhill

You can recycle stuff to make different stuff. Colm, P5 Golfhill

Electric cars don't make any noise.

Can I get a sci-cycle?

I liked the bit about the weather stone. But also everything as I liked learning about saving energy. Penny, P7

It was brilliant and very fun to watch and take part in the show. P7 Pupil

I can use a bike instead of a car. P7b pupil Hillhead

I learned that by changing your mode of transport, you can conserve energy.

I'm going to switch off anything electric from the socket in the wall.

I enjoyed learning while having fun. The actors had good drama skills.

I learned that solar panels can heat your house up.

I learned that using too much energy from the wrong places can really ruin the planet. P7 pupil

I liked that we got to see the hydrogen car move. P4 pupil

Now I want to be careful recycling – it was so funny. Ria, P6 Mount Florida

I'm going to cut down on the power that I use.

I found it very interesting that Eigg makes all of its own electricity itself.

I learned not to waste energy. If we waste stuff we may not have any left.

I learned that a whole island can be eco friendly, about alternative fuels for cars, and I learned a lot more people care about green policies. I thought all characters were equally good. And I liked the musical content. P7 pupil, Hillhead Primary

We should have cars run on water so we don't pollute the city.

I hope you come back, I loved it.

I liked how the Magic Van oil was from a chippy.

Instead of going to school by car I can go by bus.

If we didn't have any electricity we wouldn't have any light in our houses. P4 pupil, Hillhead

I have learned how to save energy - not to waste anything

It was the best thing I've ever watched. P4 pupil

I thought it would be great if we all had electric cars instead of petrol.

I learned that the bees are needing protected so they don't die out.

I liked the song that they were singing on the ukulele. It was funny.

I learned that it would be hard to live without electricity.

I learned not cry when something is turning on bad because what you wish everything come true.

We were learning about stuff we didn't know. The sun, air, wind, rain, makes energy. Chloe, P5

I learned that you don't always need oil. I liked the idea of naming Egg after the real island. Ethan, Blairdardie

I want to use my bike instead of a car.

I loved it when they sang the song 'I know my names not Heather but I can ell the weather'. Heather, P6, Blairdardie

I learned lots of stuff and am proud of myself ☺ Kristian

I learned not to leave the TV on and to always turn plugs off when I'm not using them. Also not to always use a car and that you can do other things. Jack

Loved the show! Jamie Duff

You can recycle chip oil to make less carbon dioxide pollution. P7 pupil

I learned that C02 is bad. If there is no one in the room, turn off the light. Lisa, P5

I learned that when you put your mind to it you can make something really good, like friendship. When you put a candle into a boat with water, it moves. Brooke, P5

A solar windmill is a really good idea!

The show was hilarious with a message. Megan, P5

It was funny and I liked the way a serious message was given. Chantelle, P5

Don't leave things on standby – wash the dishes by hand!

Thank you for coming to our school to do your eco-play on Eigg. We enjoyed listening to you. It was fun and educational. We enjoyed Bob and Bob. Your play was musical and creative. The powered car was fun to watch and so was the steamed powered boat. We were shocked to see how much energy we could save. From Christina, Abbie and Eilidh



Teachers Feedback – Recycling Heroes

“The presentation was thoroughly prepared, engaged and interacted with the class very well and her pace throughout was spot on!

E.Boyle – Corpus Christie Primary”

Just wanted to let you know that all the children really enjoyed the ECO drama yesterday and it was great preparation for our ECO flag visit on 15th. Many thanks. Clare Morgan, St Monica’s



Lively & entertaining; you kept the children’s interest with participating activities. The children learning through dance, drama and games was great. St Mirin’s



The workshop was active and kept the children engaged. The Bag Girl was enthusiastic and was always in control of the class. Well done. St Benedict’s - Recycling Heroes P6/5

Hi Emily - we really loved both your drama sessions. If you are developing any more workshops that you feel would be suitable for us will you let us know as the pupils all enjoyed and were really engaged. Thanks again. Alison, Newhills Primary (Special Needs)

The ‘hands on’ approach was great; very interactive and at a good pace to engage and maintain the children’s interest.

Today’s approach through drama added another dimension to their learning.

Clarification of the term’s ‘Reduce, Re-use, Recycle’ very relevant to pupils learning.

Loved the active, vibrant approach to Eco education!

St Angela’s Primary

We were going for our Green Flag and the workshop was current and related.

It was a fun workshop that got the message across in a motivating and exciting way.

Interactive Drama approach really engaged the children with cross curricular links – art, drama, social studies. St. Monica’s Recycling Heroes Clare Morgan

The children were actively engaged from the start – they were enthusiastic and keen to participate and share their knowledge. It linked with our current topic ‘What a Load of Rubbish’.

Prior learning was reinforced, they were actively involved and they had fun whilst learning!

The workshop was excellent. I would highly recommend it. “Bag Girl” was brilliant – the class loved the whole superhero concept. Thank you! J McGregor, P3B, Shawlands



Most relevant – Learning about landfills / learning to take personal responsibility for actions / actions they learned for 3 Rs made an impact as it helps them to understand the meaning of the phrase.

This was a fantastic workshop, very much linked with class work and whole school ECD programme. The children were enthusiastic and engaged and enjoyed making a recycling hero outfit afterwards. Thank you.

The children really enjoyed the workshop and were fully engaged. Thanks for a really lively and vibrant workshop – what a great way of getting the message across.

It got children thinking about ideas the school could do [recycling]

Most relevant – The important aspect of trying to reduce what we buy / the message that we will run out of landfill sites / the landfill sites can harm animals.

The workshop was fabulous. The children had many opportunities to be active learners. This is in line with our new Curriculum for Excellence as children have to be active in their learning. The workshop was pitched at the right level for the children.

Teacher Feedback – Eco Gadgets

Just to say thanks again for the fantastic workshops that George did with the pupils on Tuesday. The pupils and staff thoroughly enjoyed themselves! George was so organised and clearly knew her stuff!! She had a fantastic manner with the children and really got them enthused. Both of the other staff members commented on her enthusiasm and positive rapport with the children. Many thanks to you as well for organising everything - it made for a fantastic day!

Tommy, Corpus Christie Primary

After our phone conversation yesterday I felt I had to tell you how much my own wee boy enjoyed the Eco Gadget Workshop at Corpus Christi. He spent half the evening talking about it, described everything (except the mystery gadget!), and certainly seemed to have understood it all.

I hope the children here get as much out of it as he did.

Karen, St Clares Primary

The children had hands on learning experiences in a fun environment.

Links especially well with our eco programme as the children are actively involved in saving energy within the school. They have as a result of the workshop been writing (non-fiction) posters for display around the school.

The children were very enthusiastic to share their experiences from the workshop with their parents and the children in neighbouring classes. To make fuller use of the Owl monitor, I think it would be good timing for workshops to be in Term 1.

It was an excellent presentation which stimulated pupils and taught them about global warming. They were actively engaged throughout the workshop and it is proving a very useful resource in class afterwards.

It linked well with our Eco School Mission – to reduce energy. It would be an excellent interdisciplinary topic to plan for future use.

The most relevant to pupils learning were the messages: -

- How much non-renewable energy resources we use and the effect on the environment
- Pupils working collaboratively to achieve goals – when they were creating their TV advert for the eco gadgets
- Learning why it is important to preserve energy and how pupils can do this in school and at home

Hope was really great with the children. A brilliant session - great when they were working in teams for adverts / participation in discussions / having a go on sci-cycle!

Good links with the curriculum and great for wider thinking - global warming and its effect on the whole world. P6/7 Mrs Rowan, Ruchill

The demonstrations were very child friendly and gave children an opportunity to see the different energy sources at work.

Pupils were made very aware of the damage being done to our planet. They were made aware of ways to avoid further damage, and also that they each have a responsibility to play a part in this.

The children thoroughly enjoyed the afternoon which was presented very professionally and enthusiastically. They were involved throughout the afternoon and many of the suggested follow-up activities will be undertaken in Term 3.

Mrs Corr, P5 Teacher St Conval's

It was brilliant how you got the children so interested in the gadgets that used alternative power sources; it really got them thinking about renewable energy. The timeline showing how long it took for fossil fuels to form was great and the bicycle/scooter demonstrating people power was great fun. All in all a great afternoon and the children were very engaged by the workshop. Shawlands Primary

Everything went REALLY well. Children and staff thoroughly enjoyed both types of workshops. Teachers had notes already printed and had done the prior work. I think George was impressed by the teachers' doing the packs – I wanted to make sure that we maximised these workshops and that teachers were well prepared.

Pupils are presently taking home the owl monitors, so I shall get to hear more about his soon, as they gather the evidence. We also took the water and electricity readings for our school during eco Week, so should be interesting when we do "trying to reduce" week to compare the readings.

Any chance of another visit in the future...?

Kind Regards, Eileen, St Denis Primary

Teacher Feedback – The Isle of Egg

The children and the staff all thoroughly enjoyed the show!!

Lorraine, DHT Broomhill Primary

Thanks for the great drama sketch –very much enjoyed and will help further class learning in this area. Miss Smith, Broomhill Primary

Very positive feedback from everyone. The children loved it and you held their attention so well. Thanks again, Fiona Cavin, Eastmuir SEN Primary

Just to say thank you for a great presentation. The children have been talking a lot about it. They were really engaged with the whole event.

Thanks again, Jacqui Whyte, Eco Co-ordinator, St Patrick's Primary

Thank you so much for a really enjoyable and valuable show and workshop. It has given us an excellent start to our work on sustainable energy.

I hope to work with your company again in the near future. Please keep us informed of your future productions and workshop opportunities.

Best wishes, Christine McClandish, Balornock Primary

A big thank you to you and your team for yesterday's production! Pupils and staff agreed they had an enjoyable (and educational) morning.

Hopefully we will see you back in St Brigid's again soon.

Michael, St Brigid's Primary

Thank you so much for the super, educational entertainment! Barbara, Castlehill

Very entertaining and informative! Kirsty Beaton, Blairdardie

Further Teacher Feedback

Comments from the Final Evaluations

- a. It was an interactive and engaging way to learn
- b. They have a better understanding of how energy can be wasted
- c. The children have become more eco-aware
- d. They have become more aware as a result of school input and home input
- e. The drama workshop made the children more aware of energy saving solutions and many of them are now more energy conscious.
- f. The children use the paper recycling bin more often now
- g. More recycling is definitely happening
- h. Children who were less eco aware before the workshop are showing more interest. Those who were already eco aware had ideas and opinions clarified and reinforced by the activities.
- i. Eco gadgets may have been more powerful linked to a whole block of study i.e. if we had tied it into term 3 when we study the rainforest and consider eco-systems and sustainability
- j. The drama workshop was a great introduction to our topic – it brought all of our issues to the children’s attention in a fun, memorable way before we undertook our topic
- k. Children were involved in all the activities and were very enthusiastic and keen to continue recycling at home and at school.
- l. Slightly more aware but lack of facilities is the biggest problem!
- m. Active learning encourages the children to engage in the topic more and sends home the message to them in a meaningful context.
- n. They’re making more of an effort to recycle bottles and paper in school and we all now reuse bottles
- o. Children are very keen to recycle and always remind each other

- p. The children seem to have more awareness following the workshop and from their class topic, 'what a load of rubbish' interactive drama activities definitely helped.
- q. They liked the agent booklet and badges
- r. The children have made changes at home eg unplugging electrical items recycling and have asked parents to buy energy saving bulbs.
- s. They could link the workshop and activities to everyday life, learning through practical experience.
- t. The children really enjoyed the workshop. They're more aware of the need to recycle and they understand that rubbish needs to be 'sorted' before it can be recycled.
- u. Children loved the workshops – very enthusiastic about recycling now
- v. The children are starting to influence parents' choices at home – definitely making a difference
- w. Drama awareness raising in a fun way
- x. Within the class they made a list of energy saving tips to do at home, so hopefully this has had an impact at home.
- y. Children remembered the farmer who used pig manure as fuel!
- z. Many of the activities were very visual and therefore stayed in the children's minds – along with the message they were delivering. By doing surveys at home the children became aware of what was taking place in their own home and were given an opportunity to influence current practices in the home.
- aa. The children were interested and motivated by the workshop. We did our report on renewable energy and it fitted perfectly with our topic, 'This morning I met a Whale'.
- bb. The children loved the badges!
- cc. Absolutely more eco aware. It was relevant and fun! The children's enthusiasm was captured and their attention! They were still playing 'Recycling Heroes' games in the playground day later.
- dd. Hopefully Recycling Heroes will continue
- ee. They liked that they got badges, super hero points and booklets.
- ff. The drama workshop captured attention fully and they continue to be mindful of recycling possibilities

- gg. The children have become more aware of what to do although they don't do it too often! The character of Bag Girl has really stayed with them.
- hh. I think the children learned more about the 3R's due to the fun and active workshop provided by your team.
- ii. The drama workshop was something to remember because it was fun and the children actually performed/took part in eco-aware activities
- jj. Their more aware of the impact that not recycling has on the environment
- kk. Children are so used to watching TV and video games that they want things delivered in performance style. A new face and a new approach captures their imaginations**
- ll. It presented info in a new way and helped them reflect on our environment
- mm. I think it has definitely made them more aware but I don't think anyone has acted upon the advice given
- nn. I feel pupils have not remembered too much
- oo. We remembered the century line explaining fossil fuels
- pp. Pupils have shown a greater awareness of eco related issues and regularly inform me of eco news they have seen/heard/read about.
- qq. The children seem more aware of environmental issues as a result of the workshop and are keen to discuss them in class.
- rr. It was engaging and informative
- ss. The drama really captured their attention
- tt. In general most children are now aware of saving electricity
- uu. It was creative and appealed to children's imaginations. Hard to tell if pupils knowledge increased due to the workshop as their class topic was around Reduce, Reuse, Recycle
- vv. It brought the topic to life by giving each topic a character/phrase/song.
- ww. Pupils more aware of eco issues due to the fun way the subject was presented and the message reinforced constantly throughout the workshop
- xx. They liked the opportunity to sit in the van, the rhymes/chants and the funny dancing at the beginning

yy. I think before the Eco-Drama our children were very Eco aware as it's something we do a lot of focus on throughout the school anyway. However, I think the drama definitely heightened their awareness and educated them more about specific environmental issues. The drama was very detailed and delivered superbly. It was pitched at my pupils' level and they were fully engaged throughout. Additionally, **I think sometimes children take issues like these much more seriously when they're educated by someone other than their teacher as it's a different experience and the drama is very different to ordinary class lessons.**

zz. Many of the class have show they are more aware of energy wastage by switching off plugs and lights

aaa. I think the children have become a bit more eco aware and did learn from the workshop; however constant reinforcement of the issues raised is needed.

bbb. Children are encouraging parents to recycle more. A few managed to persuade the use of canvas bags instead of plastic

ccc. They liked that they got badges/ books

ddd. The children are aware of the benefits and problems of recycling and rubbish

eee. All the people in the world unite!

fff. The children are far more aware of the environment, recycling and making little changes to save the planet

ggg. Active learning – getting the message across in a stimulating fashion

hhh. The children are aware of alternative transport and recycling

iii. The Eco Club work hard in St Brides and we are trying to make every effort to save energy

jjj. The children enjoyed the play therefore leaning took place. However being an Eco School the children are well versed in these ideas so it is hard to measure the impact of the drama alone

kkk. They were engaged so learning was taking place

lll. We were going for our green flag so pupils were already very eco aware

- mmm. Anything that reinforces children's ideas of the environment is a good thing
- nnn. Pupil's are very eco aware are we have worked towards our green flag but this show would have helped
- ooo. Pupils already very eco aware but the show would have helped to reinforce
- ppp. It was a fun activity that got a serious message across in an accessible manner
- qqq. The learning in context (and having fun) meant the children remembered the underlying message of the play**
- rrr. Would depend on costs but very interested in another play on another topic!
- sss. Seeing it in action and being close to the models etc really reinforced the message
- ttt. I believe that they got the message because the play presented some very real issues to pupils in a fun way and the pupils always remember the content from drama productions**
- uuu. They were able to explain a number of ways that they were eco aware – things that they did in school and out
- vvv. They really remembered the model of Eigg made from recycled materials
- www. They learned some new ideas that are used on the real isle of Eigg
- xxx. Children now switch off TV, phone chargers etc as a result of seeing the show
- yyy. They are remembering to use recycle bins, switch off lights –the drama has clearly had a positive impact.
- zzz. The drama gave the children a greater insight into saving energy and how they can make a difference
- aaaa. Pupils are definitely a lot more aware of the environment now
- bbbb. Delivering the environmental message in this form is more interesting for pupils and they remember the message**
- cccc. Pupils say they are making changes at home

dddd. I think our children are very eco aware already so I'm unsure as whether or not the drama influenced this

eeee. They are much more aware of renewable energy sources

ffff. I can tell the children are more eco-aware through their answers

gggg. The children are very keen on eco subjects – they completed some of the follow-up activities. The children remembered the show really well and clearly enjoyed it very much

hhhh. The show is very funny – the catchy songs and great gadgets helped the children to be enthusiastic about eco activities

iiii. They were enthusiastic about the show because it was fun and entertaining but taught them at the same time.

jjjj. Most children are more aware because of a heightened focus on green activities

kkkk. Recalling characters and songs helps as reminders of the theme

llll. As a result of the play, children seem to have good visual memories of the issue and of the humorous characters in the play

mmmm. Seeing live demonstrations made a big impact. They pay more attention to drama. Much more interesting way of exploring these topics

nnnn. Pupils have become more aware, particularly through the idea that all small changes help.

oooo. The drama made saving energy look like fun, the songs were catchy. Anything really memorable like this helps the children to learn better

pppp. Pupils are good at reminding me of what they have to do

qqqq. They enjoyed learning about alternative energy sources and understand that small changes can make a difference

rrrr. As part of our ongoing Eco programme the theatre show has helped raise awareness of alternative sources of energy

ssss. Children have become far more aware of eco-issues as a result of the 'Eco Van Tour'. Children loved the interactive learning experience – it wasn't just about sitting and listening but doing and joining in with songs/games. This ensured interest.