

# Eco-Homes Workshop

*A schools & centres project -raising awareness  
and supporting actions for sustainable living  
amongst householders in the community*



25<sup>th</sup> May 2011, University of Worcester

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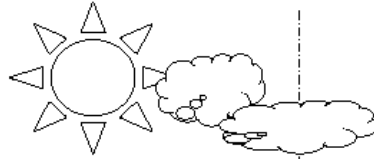


# Outline of workshop

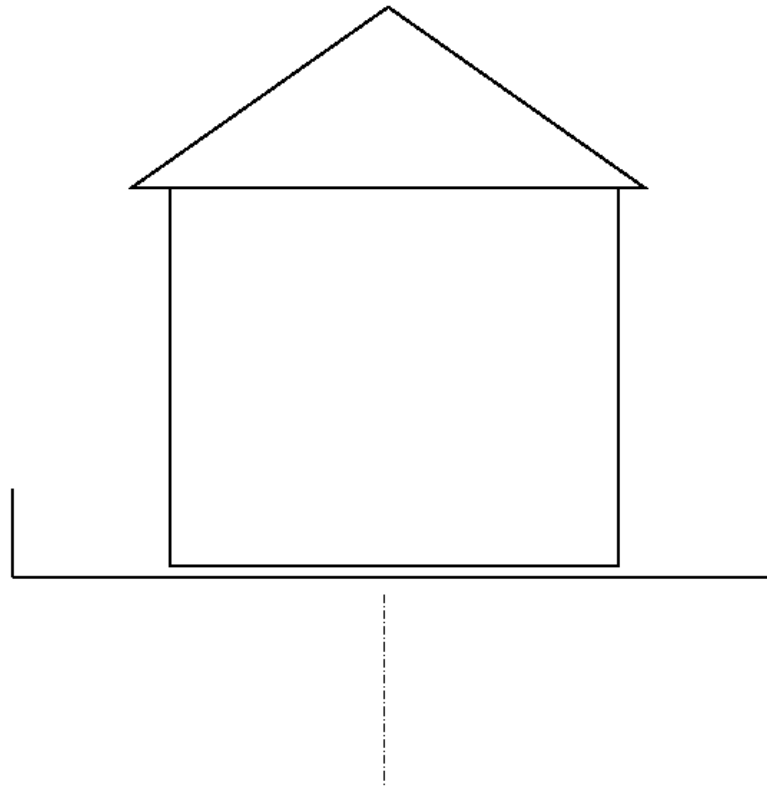
- Introductions
- Warm up activity
- Why, how and case studies
- Key learning from the pilot
- Group activity: planning an Eco-Homes project
- Resources

# Activity

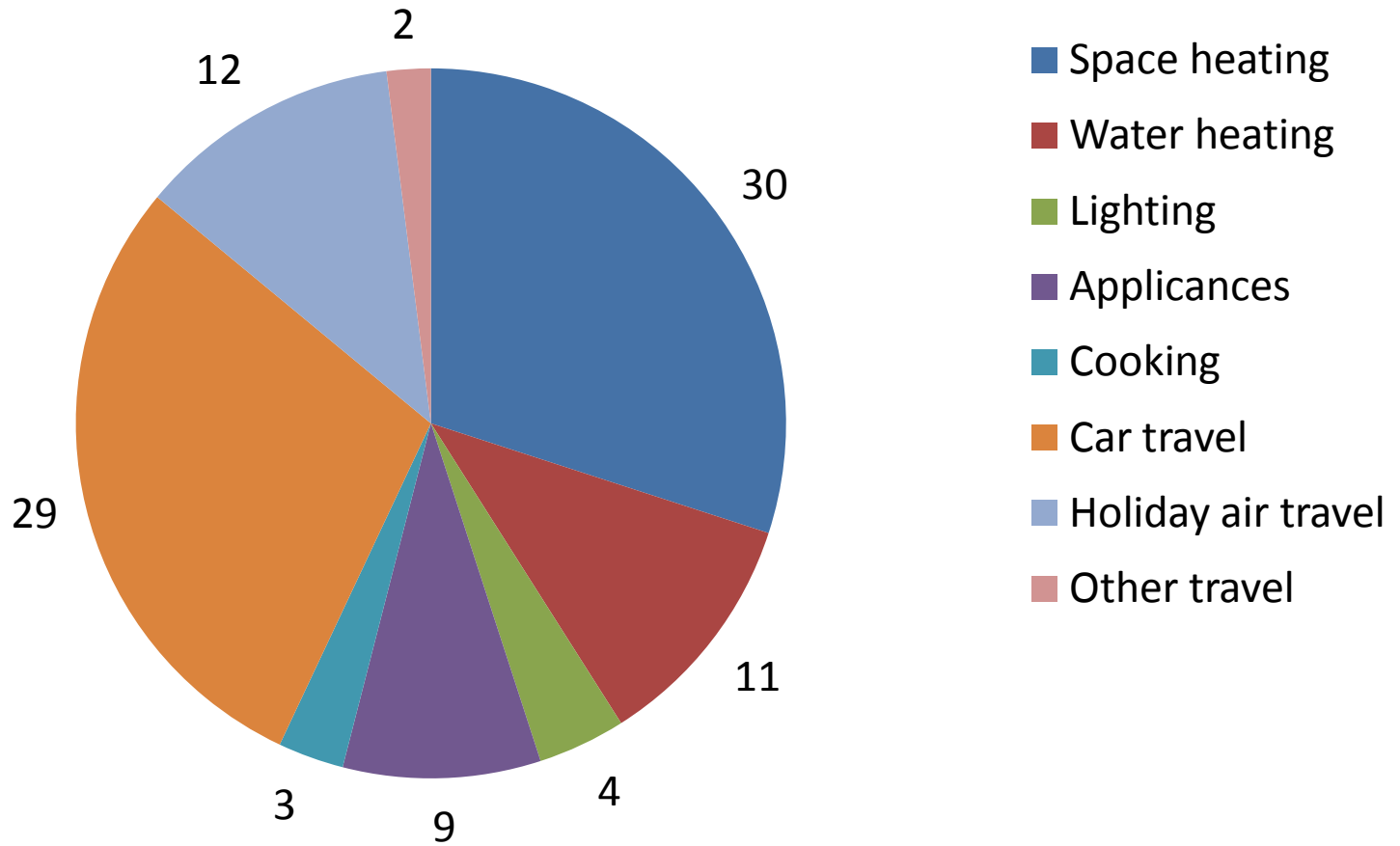
What goes, flows, comes in to a house? (inputs)



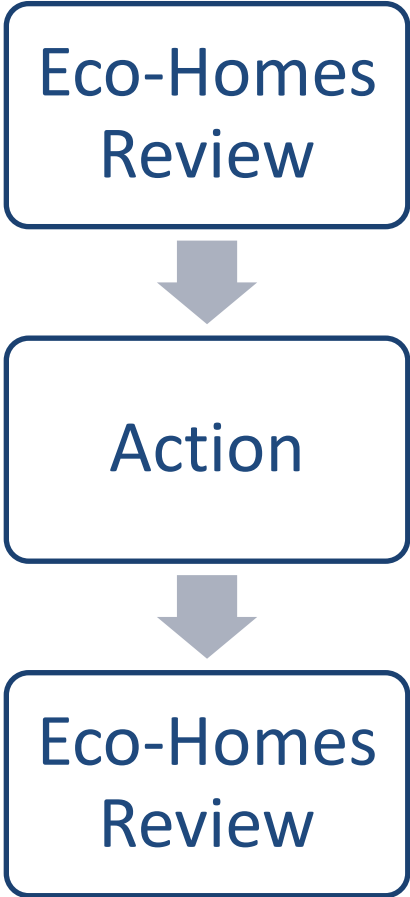
What goes, flows, comes out of a house? (outputs)



## Average UK citizens direct carbon emissions (per activity %)



# Eco-Homes



Eco-Homes Environmental Review		ENERGY			
Eco-Action	Always/ Yes	Sometimes	Never/ No	Not Sure/ n/a	
<b>ENERGY</b>					
We turn off lights when not in use					
We turn off electrical equipment fully - at the wall, not on stand-by (not including fridge / freezer and other items that must be left on)					
We set our heating to be efficient (using the timer and thermostats)					
We have loft insulation that is at least 270mm (11 inches) thick					
We have cavity wall insulation					
There is insulation on the hot water cylinder					
We monitor our gas/electricity use by checking bills / reading the meter					
We have the boiler serviced					
We have draft-proofed our home					
We use renewable energy in the home (including green tariffs)					
At least half of our light-bulbs are 'energy saving' light-bulbs					
We buy 'energy efficient' or A-rated appliances					
We use the washing-machine/dishwasher only when full					
We wash our clothes at 30°					
We dry clothes naturally whenever possible (avoiding tumble dryer)					

How important do you think it is for your household to become an Eco-Home? (please circle)

1   2   3   4   5   6   7   8   9   10

1 = Not at all important      10 = vital

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**COMPLETING THIS SECTION IS OPTIONAL**

**NOW GO TO**  
<http://carboncalculator.direct.gov.uk/index.html>  
 and measure your carbon footprint!

What were your scores?  
 in tonnes per year

HOME       APPLIANCES       TRAVEL

TOTAL

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**NOW HAVE YOUR SAY!**

ANY COMMENTS \_\_\_\_\_

ANY QUESTIONS \_\_\_\_\_

ANY SUGGESTIONS \_\_\_\_\_

ANY IDEAS \_\_\_\_\_

Your Name: \_\_\_\_\_ Date: \_\_\_\_\_

Name of School / Centre / Group: \_\_\_\_\_

Where did you get this survey? \_\_\_\_\_

*Eco-Homes raising awareness and supporting actions for sustainable living amongst householders in the community- a schools and centres project*

# Benefits?

Support in gaining  
Eco-Schools/Centres  
Awards



Engaging  
teaching & learning  
opportunities

A new way of  
engaging broader  
range of people

Pupil involvement,  
participation



Enable parents  
to get further  
involved

Identify  
unsustainable  
behaviours



Potential  
changes in  
behaviour



# Why? Teachers said...

## School

- Teamwork
- Challenges not only in schools
- Cost savings
- Children WANT to be engaged and are willing
- Support wider agendas...ECM etc
- Responsibility...shared with parents
- Exploring viewpoints and perspectives
- PLTs – higher order thinking
- Possibilities through life...transition through education and employment
- Skills and learning for life
- ‘Pester Power’
- Economic wellbeing
- Curriculum

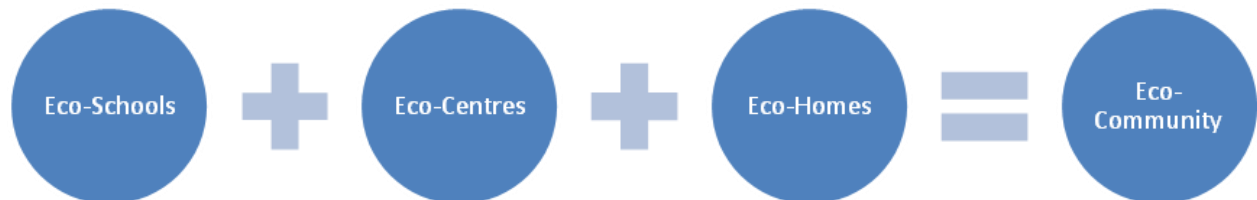
## Community

- Positive contribution- for all, very inclusive
- Raise awareness among the community about what is going on in schools
- Cost savings
- Challenge in one community has impacts on wider world

## Wider World

- Links cause and effects
- CO2 savings
- Unifying threads

*(Notes from Eco-Homes teacher seminar)*



● **At School/centre...**

**Start here**

Schools/  
Centres pick  
priority  
topic/s

Explore/plan  
Curriculum/  
learning  
opps

Announce  
project

Create  
/distribute  
Eco-Homes  
Environmental  
Review  
(‘baseline’)

Collect  
/interpret  
results of  
baseline  
Review

Share  
findings  
with whole  
school and  
community

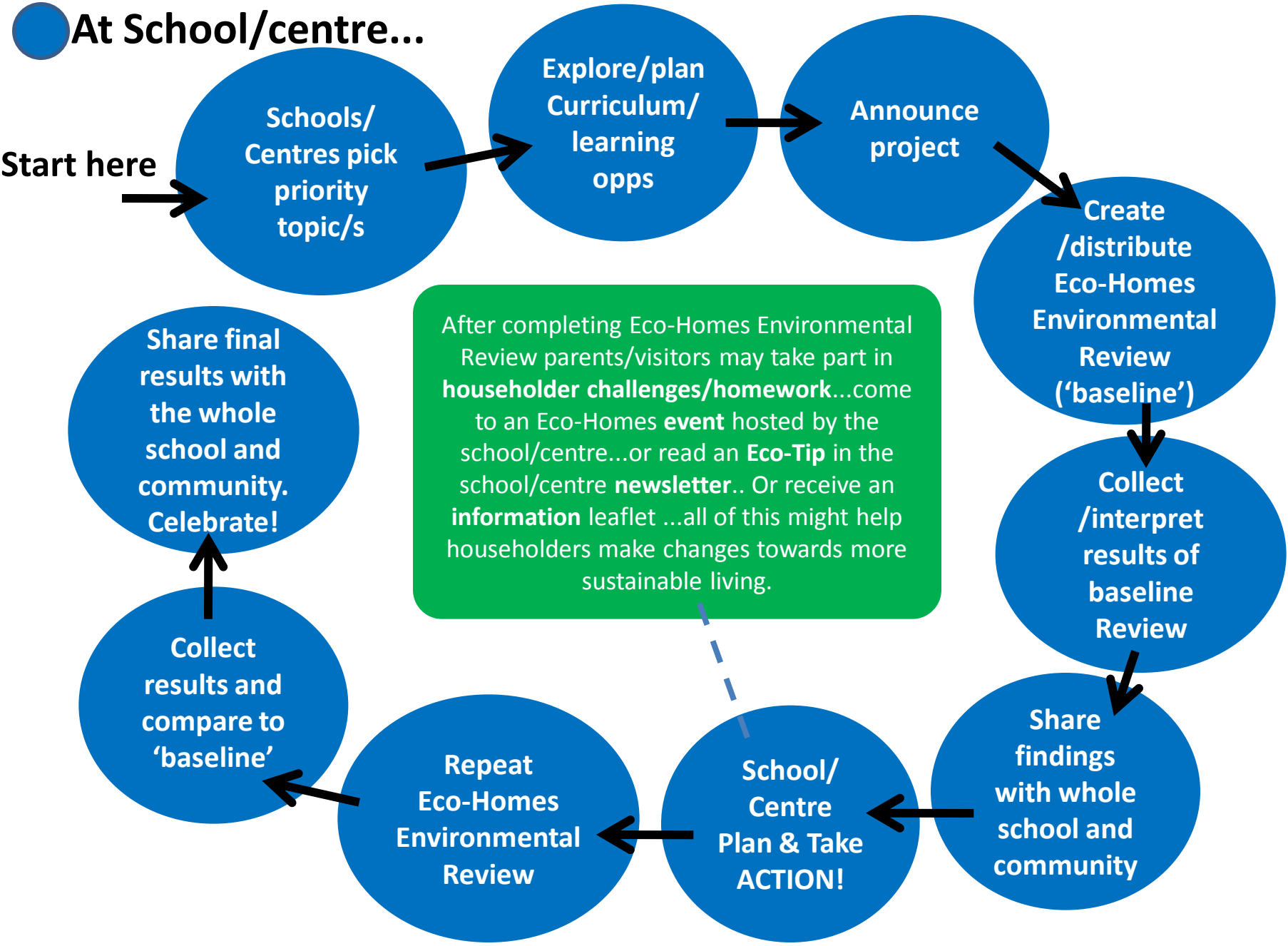
School/  
Centre  
Plan & Take  
ACTION!

Repeat  
Eco-Homes  
Environmental  
Review

Collect  
results and  
compare to  
‘baseline’

Share final  
results with  
the whole  
school and  
community.  
Celebrate!

After completing Eco-Homes Environmental Review parents/visitors may take part in **householder challenges/homework**...come to an **Eco-Homes event** hosted by the school/centre...or read an **Eco-Tip** in the school/centre **newsletter**.. Or receive an **information leaflet** ...all of this might help householders make changes towards more sustainable living.

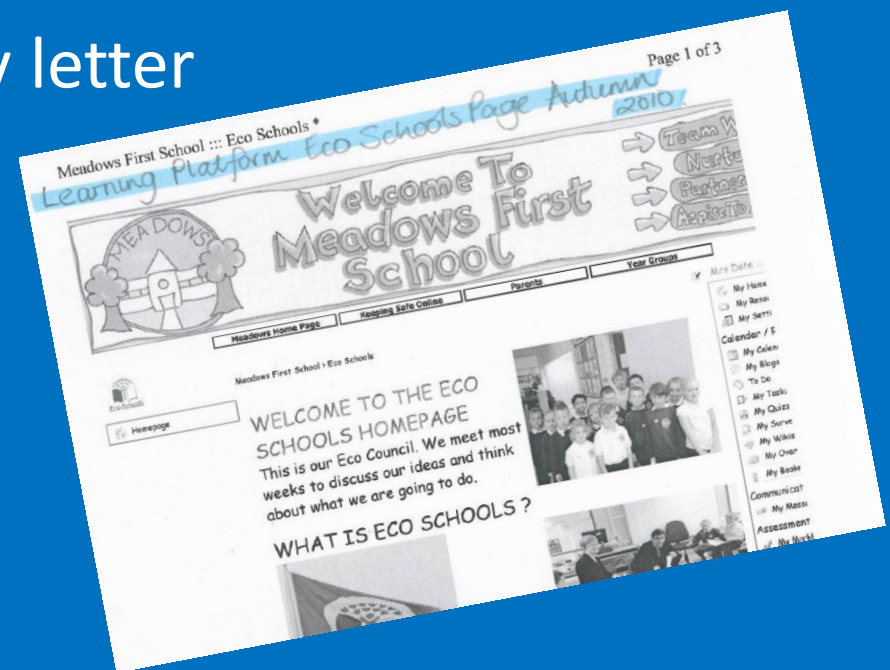


# Meadows First School

- Eco-committees (from 3 schools) met to decide themes
- Energy Theme –term 1, waste term 2
- Announcement of project by letter
- Whole school assemblies

Dear Parents

Meadows First School is an Eco-School. This means we care about the environment as well as caring for our pupils. We have an Eco Council made up of pupils and staff who set actions for our school to be more sustainable and friendly to the environment. The Eco Council help to get the whole school involved. This year we want to go one step further and involve our parents, so during the next school year we are hoping you will join us in a project called **Eco Homes**.



- Initial Eco-Homes Environmental Review sent out as **homework** to whole of KS2 (130 children)

# Meadows First School

- **Curriculum**

- 5 week Energy Challenge as KS2 homework

- EDF POD Energy activities in all classes

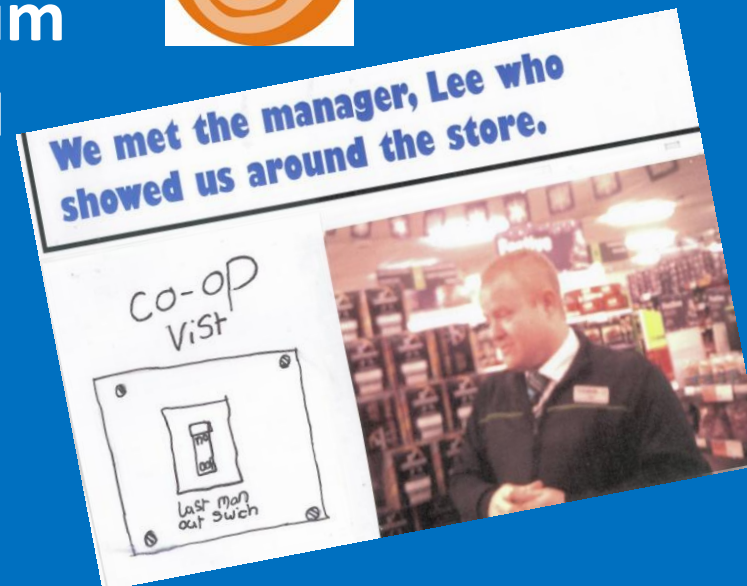
- ([www.jointhepod.org](http://www.jointhepod.org))

- **Other activities/wider curriculum**

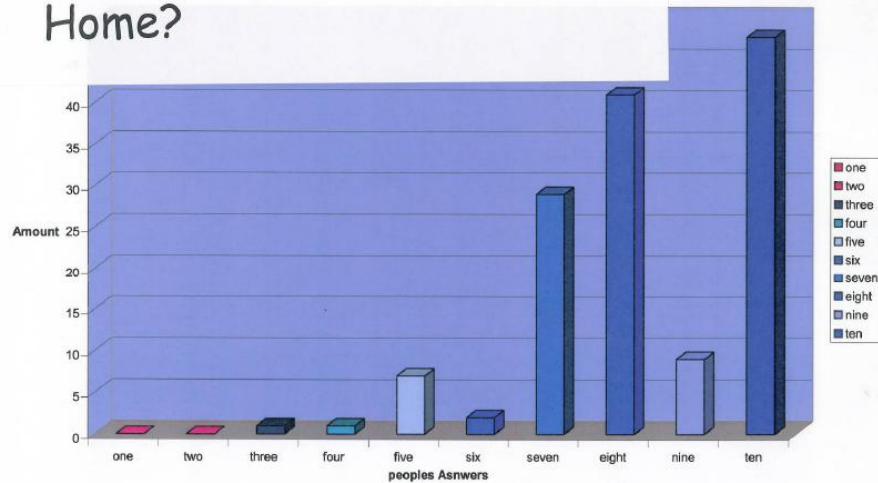
- Ongoing energy monitoring in school

- Switch It Off Fortnight

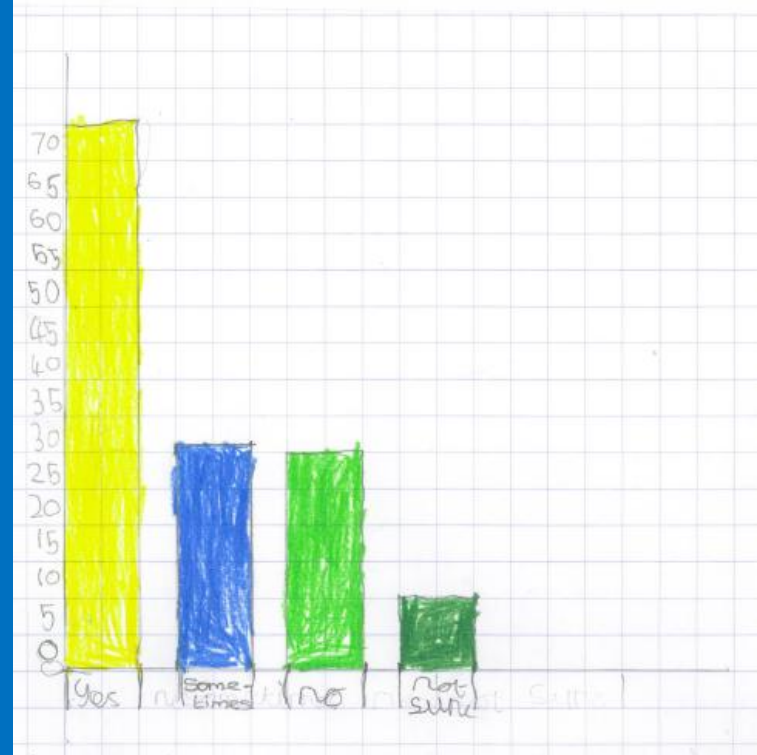
- Visit to local COOP to look at their Energy Management Systems



How important do you think it is to be an Eco Home?



We have draft proofed our home.



- 130 Eco-Homes reviews returned
- YR4s input data: linked to curriculum: numeracy/data handling
- Children created charts from findings
- Eco-committee made further displays
- Findings.... Draught proofing

# Meadows First School

- Energy Event & Waste Events at end of school day hosted by Eco-Committee!
- Energy Event 170 people attended!
  - Results of surveys on display
  - Activities for children- make a draught tester! Etc
- Follow up survey sent out on Learning Platform end of term
- Early findings...



# Centres

Community settings engaging visitors in Eco-Homes reviews, awareness and action

**Eco-Homes Environmental Review**

Q. Have you taken any other Eco-Actions in the last year?  
e.g. replaced your boiler / heating system, bought a fuel efficient car, avoided flying  
*have solar panels installed for hot water*

Q. Have you taken advantage of any grant schemes for energy efficient measures over the last year?  
if yes, please give details

Q. Are there any other Eco-Actions which you are considering?  
*swapping car for more eco friendly ie cheaper to run/tax e*

Do you know your annual consumption of the following fuel from the last year?

Gas: \_\_\_\_\_ (kWh)      Water: \_\_\_\_\_ (m3)  
Electricity: \_\_\_\_\_ (kWh)      Other fuel: \_\_\_\_\_ units

You can find this out by looking at your bills - the metered values are stated. Alternatively, ask your supplier. They should be able to tell you, or provide copies of your bills. They might also be able to tell you about special incentives for customers who want to save energy.

Do you know roughly how much waste is produced in your home each fortnight? (please circle)

Green Bin (recycling)  
Overflowing    Full    Half Full     Quarter Full    Less than quarter full

Black Bin (landfill)  
Overflowing    Full    Half Full    Quarter Full    Less than quarter full

Do you compost?    Yes     No

Do you know your annual household mileage? (all vehicles) *no!* \_\_\_\_\_ miles per year

How important do you think it is for your household to become an Eco-Home? (please circle)

1	2	3	4	5	6	7	8	9	10
1 = Not at all important							10 = vital		



Alvechurch Library, Worcestershire


# Centres engaging families



**Hagley Library, Worcestershire.** The 'Chattertots' help improve the library grounds... and it's a good chance for the library staff to talk to parents about an Eco-Homes review.

# Batchley Community Centre

- Kept Energy Diary for building
- Made available for visitors

**Name:** \_\_\_\_\_ **Home Energy Diary** 

You are going to use the Home Energy Diary to track how much gas and electricity you are using every week.....Just record your meter readings once a week , for 10 weeks, and see what you find!

**Remember!**  
Stick to the same day each week.

**Remember!**  
You can work out how many units you use each week. Subtract this week's meter reading from last week's.


Date	Meter Reading	Total units used this week!
24/10/2010	106205	90
31/10/2010	106295	

In this example:  
31<sup>st</sup> October: 106295  
24<sup>th</sup> October: 106205 -  
000090


The difference between the two readings means that during that week, the family used a total of 90 units.

Which day of the week will you choose?  
\_\_\_\_\_

What time on that day will you read the meters?  
\_\_\_\_\_ : \_\_\_\_\_ AM/PM

**Electricity Meter** 

Date	Meter Reading	Total units used this week!
_____	<input type="text"/>	<input type="text"/>
_____	<input type="text"/>	<input type="text"/>
_____	<input type="text"/>	<input type="text"/>
_____	<input type="text"/>	<input type="text"/>
_____	<input type="text"/>	<input type="text"/>
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**Gas Meter** 

Date	Meter Reading	Total units used this week!
_____	<input type="text"/>	<input type="text"/>
_____	<input type="text"/>	<input type="text"/>
_____	<input type="text"/>	<input type="text"/>
_____	<input type="text"/>	<input type="text"/>
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_____	<input type="text"/>	<input type="text"/>
_____	<input type="text"/>	<input type="text"/>

**An extra challenge...** Why not set a target for your *maximum units per week*?  
Challenge the family to try not to go over the target.

**Spring / Summer/ Autumn / Winter** (circle the season) **Year:** \_\_\_\_\_

# Key Learning

Run an initial meeting for key teachers / staff

Plan properly- to make most of opportunity

Share- e.g. whole school assemblies



Consider timescales

Reviews as compulsory homework

Events can be great!

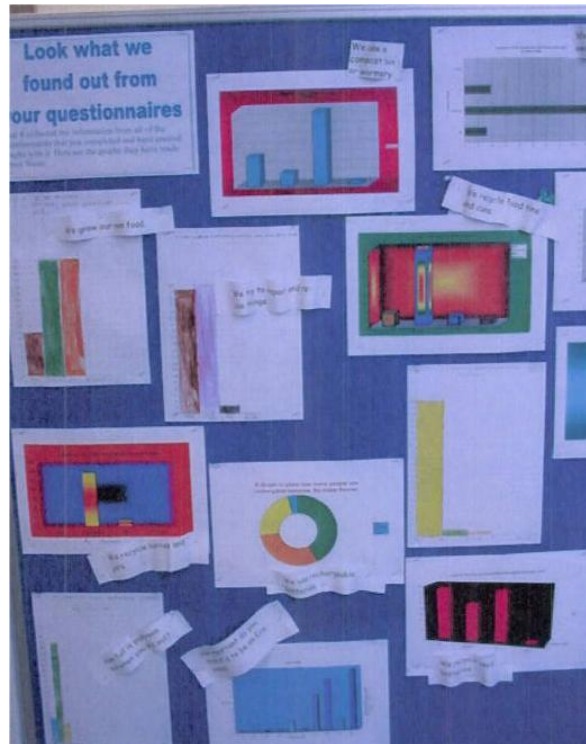
Schools – greatest response: reviews as homework

# Key Learning

Involving different years in data entry/handling

Keep it simple when analysing/acting on results

Schools have engaged large numbers of householders!

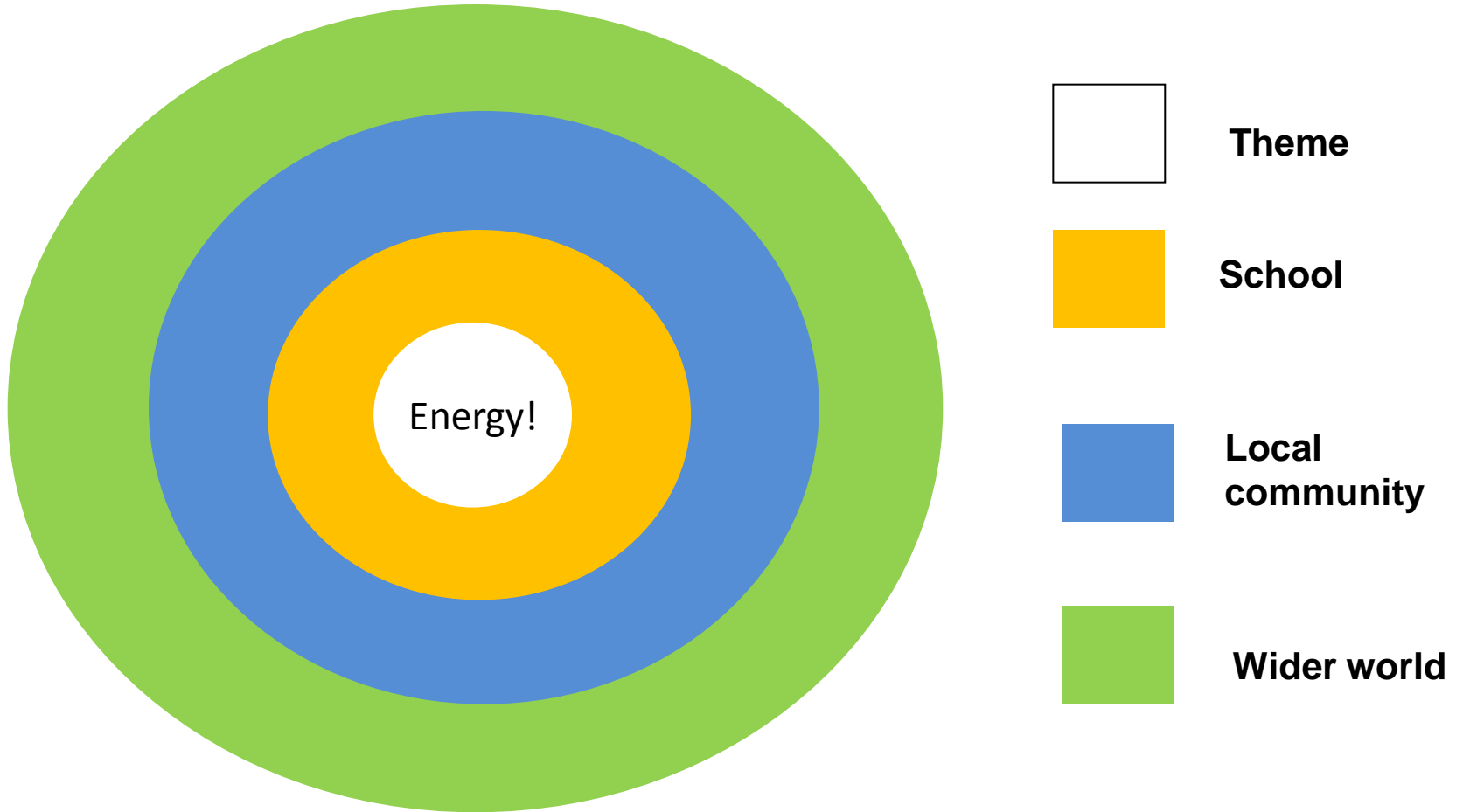


Sometimes results show behaviours already in place

Great to have part of Review 'open' for comments...

Anecdotal evidence of behaviour change at this stage- BUT... great tool for engagement/ new focus for work

# Planning /Supporting an Eco-Homes Project



**Who? When? What? Where? How?**

# Resources...

- Environmental Review
- Thinking/planning tools (e.g. nested circles....)
- 5 week Energy Challenge
- Switch it Off
- Energy Diary
- Teacher seminar- session plan
- Web resources...lots out there!
- Locally- Act on Energy [www.actonenergy.org.uk](http://www.actonenergy.org.uk)
- Energy Saving Trust [www.energysavingtrust.org.uk](http://www.energysavingtrust.org.uk)
- Recycle Now [www.recyclenow.com/schools](http://www.recyclenow.com/schools)
- POD [www.jointhepod.org](http://www.jointhepod.org)