

Your name:

Group name:

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Transition

St Albans

Designed by:



Adapted for use by:







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1. Getting started







Welcome to the Transition Streets programme

You are about to embark (or for some, continue) on your journey to reduce the environmental impacts of your lifestyle. This will help you save money, reduce your energy use and associated carbon dioxide (CO_2) emissions and help to minimise your household's reliance on fossil fuels.

The support of your fellow group members, and people in other Transition Streets groups, will help keep you motivated and make the experience pleasurable as well as effective.

This workbook has been developed to help you, and the people you live with, to make simple, practical changes to your home and to your habits. It brings together in one place over 35 money-saving actions. Each action gives clear, specific advice about how to carry it out including lots of useful hints and tips.

It is not the intent of this programme to duplicate all the sound, practical advice that is already available, but rather to bring it together into one simple place with a very local feel. Other sources that have been used are referenced for further information.

This programme is offered to residents of Abbots Langley and Kings Langley thanks to funding from UK Power Networks

Transition Streets was created and first run by Transition Town Totnes.

The Langleys Transition Streets is run by Grand Union Community Energy Ltd., a Community Benefit Society registered in England (32056R)







Transition Streets 1.2 HOW IT WORKS



The programme is based around 7 group sessions. The first and the final sessions start and close the work, and the other five cover areas of our lifestyle where we can easily reduce energy use, and save money: energy use in the home, water, food, waste and transport.

How it works

Usually the group meets about every 2-4 weeks for 2 hours, and people in the groups take turns to host this at their home. We send a facilitator to help you with the first meeting, and after that people take turns to facilitate each session, so that it is truly a group effort and not all driven by one person. Ideally, the host is not the co-ordinator too, or it's a bit too much to take on.

It is important that the co-ordinator for the session keeps good time, as it's easy to get off track, and not get through everything you mean to. At each of the 5 core sessions, the group can follow the suggested meeting outline provided at the end of this section. It's also useful to have a note-taker at each session and to keep a record of decisions.





If you're reading this, you're at the first meeting of your Streets group. Welcome! The first session will cover:

- Thinking about your main objectives
- Completing the initial evaluation form (at the very back of the book)
- Agreeing the group schedule for the rest of the sessions (section 1.4)
- Sharing contact information (1.5)
- Making an agreement about how your group will work together (1.6)
- Finding out about other support available from the Transition Network and your local Transition group (1.7)
- Reviewing the outline agenda for future sessions (1.8).

Cost and saving estimates:

Each action has a set of boxes at the top that give an indication of the potential costs, savings, effort and CO_2 savings. These should be seen as an indication only and useful for comparing different actions. They are based on various credible sources of data, including the Energy Saving Trust and Waterwise.

Where we have quoted a specific potential cost saving for an action, this is based on average prices at the time. These can vary widely over just a few months, so please see these as indicative rather than precise.

Some actions, particularly related to food and transport, are difficult to estimate at all due to the wide range of factors involved. However, where we could, we have converted actions into both CO_2 and financial savings.

Notes:

Transition Streets 1.4 AGREE A GROUP SCHEDULE



Things to decide up-front (and record on the schedule below):

- 1. How often will the group meet?
- 2. Do you want to arrange all the meetings now, or just the next one?
- 3. Where will it meet?
- 4. Who will be the co-ordinator for each meeting? The co-ordinator will run the meeting and will ideally contact everyone before the next session to confirm attendance.

Date	Time	Co-ordinator	Venue

Transition Streets 1.5 SHARE GROUP CONTACT DETAILS



Name	Phone	Email	Address

Notes:

8



It is important to agree some guidelines for how your group will work, so it will be a more satisfactory experience for everyone. The following agreements are suggested to help ensure the overall success of your group. They aim to support the unity and stability of the group, and to create an atmosphere of mutual support and trust.

Commitment: We commit to attend all the sessions where possible and to let the other group members know where not possible. Someone else can attend in our place if we cannot come, but it is important that s/he knows what's been discussed previously. We also commit to have read the relevant workbook section before each session and to seriously consider taking on some actions each time.

Confidentiality: We agree to respect the privacy of any personal information shared within the meetings and to not discuss this information outside the group in a way that would mean a person could be identified.

Punctuality: We agree to arrive in time for each session to start promptly so that everyone can benefit from the full two hours.

Respect: We will endeavour to ensure that the time is shared equally between group members in terms of speaking and listening, and that differences of opinion can be allowed for and respected. Our abilities to change will vary, whether it be related to income or time, age or disability.

Support: Where possible, all group members will offer practical and personal support to other members who are experiencing difficulty in attending the sessions (or achieving the actions!). If we encounter problems in maintaining the group, we will ask for guidance from the Transition Steets Project Coordinator.

Your own ideas:



The Transition Streets programme is just one part of the worldwide Transition Towns movement in response to the challenges of rising energy prices, climate change and economic uncertainty. Started in Totnes, Devon, in 2006 there are now more than 1,000 Transition initiatives in over 40 countries, and the movement is growing rapidly. Local Transition groups focus on practical steps that enable communities to become stronger and more resilient through activities such as:

- Food-growing groups Transition groups often start with growing food on allotments, community gardens or garden share schemes. These lead on to new food-related enterprises such as farmers markets and co-operatively owned businesses such as bakeries, breweries and food box schemes.
- **Community-owned energy** Renewable energy co-operatives (such as GUCE, TriCE and LCCC) offer huge potential for communities to create cleaner electricity for homes, schools and businesses, generating income and providing a safer place for investments, as well as encouraging more efficient and sustainable use of energy.
- Local Economy Transition groups aim to create new local jobs and livelihoods by building vibrant, viable new enterprises that keep money local and boost resilience.

All Transition groups are open and would welcome your involvement. To join our mailing list and receive information about local events, please give us your contact details at the first meeting.





Abbots Langley Transition Town Association (ALTTA): www.altta.org.uk

Transition in Kings (TiK): <u>www.transitioninkings.org</u>

You can find information about other local groups through the Transition Network website at: <u>www.transitionnetwork.org</u>





You can also visit the Transition Streets website for useful advice www.transitionstreets.org.uk



Please write down the contact details of your local Transition Streets Co- ordinator here:

Website

Your co-ordinator is willing and able to give advice to groups if you are concerned, frustrated or perplexed about the way your group is operating.



Suggested agenda

This suggested agenda can be used at the next 5 sessions. You can adjust it to suit yourselves: e.g. by spending more time on 'The Bigger Picture' discussion topics, and less on discussing the actions.

For the next session on energy, try the proposed timing below and see how it works for the group. Given that you are not starting your action plan until then, the first agenda item is not needed for the next session. It's a good idea to nominate a time-keeper and someone to take notes.

Section	Timing (2 hours total)
Review actions & progress from previous session	15 minutes
Discuss the facts & the actions for this session	70 minutes
Write personal action plan	10 minutes
The Bigger Picture – discussion	20 minutes
Re-confirm next meeting	5 minutes

Before next time

At the end of your first meeting, look ahead. Your next meeting is

on **Energy**. Between now and then try and do the following things:

- If you have borrowed one, install the electricity monitor and start having a look at what it tells you
- Read the Energy chapter and make notes of any changes you want to make in your home.
- Be aware of how you use energy (electricity and gas) at home;
 - do you spot any energy being wasted?
 - what is your thermostat set to?
 - how much does energy cost you each year?

2. Spend less on energy



Transition Streets 2.1 SPEND LESS ON ENERGY



Energy prices are going up. Using less electricity, gas or oil in your home will save you money. Energy is wasted without realising it, therefore there are significant savings to be made without having to go without. Each action in this section has a 'Potential Savings' section. However, it is not just you and your pocket that will benefit.

Using less energy will also reduce the amount of carbon dioxide (CO₂) emitted from fossil fuels as they are burnt, either in your home's boiler for your heat and hot water, or in a power station for your electricity. CO_2 emissions (our carbon footprint) need to be reduced if we are to minimise the potentially devastating effects of climate change.

The people who will feel the impacts of climate change most are not here in The Langleys – they are living on flood plains and low lying islands, in hurricane-prone countries and in areas of drought and famine. Each action you take will have a positive impact on your global community.

Finally, there is a finite supply of fossil fuels on this planet and our current cheap supply of them is dwindling. Worldwide oil reserves are going into decline – while demand is growing. Those who minimise their reliance on coal, oil and gas now will be less exposed to higher prices and supply restrictions in the not-too-distant future. Being more energy efficient in your home is one of the easiest ways to reduce your costs, your personal contribution to climate change and your vulnerability to fluctuating and increasing energy prices.

Note: for all sections the following estimates are used. They are based on a 3 bedroom semi-detached home; the figures for your home will be higher or lower depending on the size and age of your home.

	Low	Medium	High
Cost/ £ Savings:			more than £100
Effort:	¹ / ₂ day or less	about a day	more than a day

Each of these actions can significantly reduce the amount of energy a household typically uses. Some will cost you little or nothing, some will cost you money (but this should be offset by the reduction in your energy bill sooner rather than later), and some may be fundable through the "Green Deal" loans or "ECO" grants.

- Know how much you are using (2.2)
- Be a real turn off (2.3)
- Appliances (2.4)
- See the light (2.5)
- Control your heat (2.6)
- Lagging (2.7)
- Draught proofing (2.8)
- Loft insulation (2.9)
- Cavity wall insulation (2.10)
- Other energy saving options (2.11)
- Loans available under the Green Deal (2.12)
- Grants available under ECO (2.13)

Each action is explained on the following pages. In your group, have a brief chat about all of them and then decide which ones <u>you</u> want to tackle and when. Record your own action plan on the page at the end of this section (maybe just 1-2 actions for now).





Transition Streets 2.2 KNOW HOW MUCH YOU ARE USING



Cost: none

£ Savings: med

Effort: low

CO₂ saved: med

Most people are not very aware of how much energy they are using (i.e. the number of 'units'). Frequent price changes confuse the picture, as your bill could go up even though you are actually using less. Even if you take a look at your electricity or gas bill, things like kWh (kilowatt-hours) may not mean much to you.

Often readings shown on bills are estimated and they may give an inaccurate view of your usage. If we pay by direct debit, our regular monthly payment may not reflect how much energy we actually use, leading to a shock when this gets adjusted. If we don't know how much we use, then we won't be able to tell if we are using less, or to plan how we can. Nor will we know if we could get a lower price elsewhere.

To help reduce your energy use, you first need to measure it so you will be able to tell if it goes down. There are two ways to monitor your energy use:

1. Read your own electric & gas meter(s) regularly and keep a record. There's a wide variety of meters around - older ones with numbers on dials or newer digital versions. Read the numbers from left to right. This tells you how many units (kWh) of gas or electricity you have used. These units can mean different things depending on whether it's electricity or gas, and if it's the latter, depending on the type of meter (whether or not it measures in 'metric' gas units!)

2. Use an electricity monitor - you can buy simple, safe devices that easily clip onto your meter's cable. They give you up-to-the-minute info about how much electricity you are using and how much it is costing you (along with CO² emissions info).





Potential solutions

The Streets Project has some energy monitors available to borrow.

You can also borrow energy monitors from most libraries if you are a library member.

Some energy suppliers give free monitors with certain tariffs. Ask yours!

There are several brands of electricity monitor currently on the market. Commonly used ones are:

- OWL energy monitors (lots of kinds, starting at around £30 for the Micro) <u>www.theowl.com</u>
- Efergy energy monitors (again, lots of kinds starting from the Elite Classic at around £40 <u>www.efergy.com</u>)

And they are sold by many stores (for example www.ethicalsuperstore.com).

When you first install your meter, you will probably wander around the house turning things on and off and marvelling at the information at your fingertips - it is quite addictive.

If you don't have an electricity monitor, you can simply take a note of your meter reading every week or month and look for changes.

Some energy suppliers allow you to submit frequent meter readings online and then provide graphs and tables of the data and year-on-year comparisons.

You can also buy a simple plug-in monitor for about £15, which you plug in between your appliance and your wall socket (like a plug adaptor you take on holiday) to see how much energy it's eating up. Use this to go around the house noting down how much power any appliance with a plug uses when switched on and when it is on standby. Do this once and you will have a much better idea of where you are wasting energy, and where you are not.





Sample meter reading reco	rd
---------------------------	----

Date	Electricity Meter Reading	
	Usage	
01/12/2013	1037	n/a
08/12/2013	1101	64
15/12/2013	1199	98

Understand how to measure energy use:

Kilowatts (kW) measure *power* – the rate at which we use energy. Kilowatt hours (kWh) measure *energy* consumed. Power is akin to speed, and energy is akin to distance; as we all know, the faster you go, the more quickly you cover a given distance. Similarly, the more power you use, the faster you consume a given amount of energy. So, if you consume power at 1kW, you will have consumed 1kWh after one hour. The units on your electricity meter measure kWh: one electricity 'Unit' is equal to one kWh.

Approximately every 40W of power you use on standby (i.e. being used 24 hours a day) consumes 1kWh a day, which costs about £50 a year. On average households in UK spend £45-£80 a year powering appliances that are on standby [1].

Gas is more complicated because the units that the meter measures are for a volume of gas. The number of kWh per gas unit depends on whether your meter is metric or not – it will say on the meter if it is a metric one. Your gas bill will show the conversion factor your supplier is using.

For old non-metric meters, one gas unit = 31.375kWh For newer metric meters, one gas unit = 11.151kWh 2.2 KNOW HOW MUCH YOU ARE USING (cont.)



Your savings

Government estimates put the average saving from seeing your energy usage at £23 per year, however many households will save much more. [2]

Notes:
Save £20 or more of your electricity costs per

year.

Next steps, hints & tips

- Start recording your gas and electricity meter readings.
- Write them down at the same time each week or month.
- Subtract the previous reading from the new one to see how many kWhs you have used.
- Compare it to previous periods to see if and why it has changed.
- Call your supplier or check their website if it is not clear how to read your meter(s).
- Borrow an electricity monitor from the Streets project or your library or buy one.

• Log on to

www.energysavingtrust.org.uk and complete their online Home Energy Check for a personalised report of potential savings for your home or you could also call them on 0800 512012 and ask for a paper version.

 Once you know your usage, shop around for the best prices and consider 'green' energy.

Yes but... I can't read my meters. If you are disabled, chronically sick or of pensionable age you can ask your supplier to read your meter every 3 months. You could also be eligible for the repositioning of the meter. This should be free of charge.

Transition Streets 2.3 BE A REAL TURN-OFF

Cost: none

£ Savings: med

Effort: low

CO₂ saved: med

Leaving lights, TVs, computers and radios on when there's no one in the room is an obvious waste of money and energy. But even when we switch things off, some appliances go to standby mode, which can still consume a lot of energy. Even phone chargers, if left plugged in, will use a little energy, whether or not you're charging your phone.

In the UK around 15 million TVs alone are left on standby for 20 hours per day. If they were all switched off, we'd save enough energy to decommission an entire power station. [3]

Unplugging one electric toothbrush or phone charger might not seem such a big deal: but what about that DVD player... and the microwave, and the printer, and the games console, and the digital radio? This adds up to significant savings over a year, if you have a lot of equipment on standby, particularly if they are older appliances. Have a look at www.sust-it.net for the energy consumption of many electrical appliances when in use and on stand-by.









Solution

Turn things off when you leave the room for more than a few minutes. Turn them off at the plug when not in use. If you need to leave lights on, such as an outside light, use an energy efficient bulb. You can buy remote control 'standby savers' from about £10 which cut power to all connected devices with the press of a single button.

Yes but... I can't turn off my TV's set-top box. Many Freeview boxes can be turned off but the boxes which can record programmes must be left idling around the clock, costing you up to £15 per year. Integrated digital TV sets or



Your savings

In a typical home, turning your appliances off rather than using standby can save £45 to £80 per year. [1]

Using less energy eg drying clothes in the sun, using the washing machine only for full loads or cooking double batches of food, will save even more.

> Turning off appliances saves £45-80 off an average electricity bill per year.

Notes:



Next steps, hints & tips

- Talk to everyone in your home try a competition to help motivate them.
- Keep a scoreboard on the fridge for every time someone finds a light or TV on, with no one there.
- Then motivate your kids with a potential share of the savings!
- Buy a standby saver (many stockists, including OWL and Efergy mentioned in section 2.2)
- You can use an energy monitor to see exactly how much power each item is using when on, or in standby mode.
- And try using things less. Dry clothes in the sun not the tumble dryer, turn lights off in the daytime, only wash full loads etc.

For more information download 'Rise of the Machines' from www.energysavingtrust.org.uk – fascinating insight into the growth of energy-using products in the home since the 1970s.

Transition Streets 2.4 ELECTRICAL APPLIANCES

Cost: med

£ Savings: med

Effort: low

CO₂ saved med

Appliances are responsible for a significant proportions of a typical home's electricity bill:

- Televisions, set-top boxes, digital TV recorders, DVDs and DAB radios combined are responsible for around a fifth of a typical home's electricity bill.
- **Computer Equipment** household computers, printers, monitors and laptops on average make up around a further 13%.

When you need to replace an appliance, you will have an opportunity to replace it with a more efficient one.

Energy ratings labels on appliances are generally given to products based on size categories. The idea is to enable you to compare two similarly sized products.

This means two differently sized appliances with the same energy rating may use quite different amounts of electricity. For instance an A rated 180-litre fridge freezer could cost only £39 a year to run whereas a larger 525-litre fridge freezer with a better A+ rating would cost £51 a year to run. That's £12 a year more for a fridge freezer nearly three times the size.

- Use your appliances less, eg doing full loads of washing or dishwashing, using a clothes line to dry clothes
- Cooking appliances will be discussed in the Food Section [4.8]

Yes but where would I start? And how much can I save? The Energy Saving Trust web site gives more information http://www.energysavingtrust.org.uk/Electricity/Products-andappliances. Also remember to take electrical appliances to the Recycling Centre - they can recycle the metals within them. [4]

Solution

Transition Streets 2.5 SEE THE LIGHT

Cost: med

£ Savings: med

Effort: low

- CO₂ saved med
- bill. Cutting your lighting bill is one of the easiest ways to save energy and money. [5] Energy challenge
 - Houses typically use a mixture of standard light fittings and downlighters or spotlight fittings. Energy efficient bulbs are available for both types of fittings.

• Lighting accounts for 7 per cent of a typical household's energy

- Changing which bulbs you use and how you use them will instantly save your home energy and money.
- Low efficiency tungsten light bulbs for household use can no longer be purchased, so most households will already have started replacing these bulbs.









The following energy saving light bulbs are available:

- Compact fluorescent lamps (CFLs): these are most common, and come in stick or candle shape, small or medium screw and bayonet fittings. The new generation are much faster to respond and cheaper. (Also cheaper if you buy a multi-pack online rather than individually at shops.)
- Energy-saving halogen light bulbs / lower wattage bulbs: a good option if you have halogen lights in your home. They consume around 30% less electricity than standard halogen bulbs. All halogens are about 25% more efficient than tungstens. You can often replace 50W halogens with 20W ones.
- LED light bulbs: these are even more efficient, and the prices are continuing to fall. GU10s are the cheapest LED bulbs available (a 4W or 5W will replace a standard GU10) and you can buy a converter to enable eg bayonet fittings to use GU10 LED bulbs [6].

Yes but... I have dimmer switches. If you have a dimmer switch you can buy special dimmable LEDS (though they can be quite expensive). There are even candle-shaped energy saving light bulbs to fit in chandelier light fittings. Some CFLs are also dimmable.



Do you want CFL or LED?

As mentioned, there are two main types of energy efficient light bulbs ; Compact Fluorescent Lamps (CFLs) and Light Emitting Diodes (LEDs).

- CFLs are what you typically think of as an energy efficient light bulb.
 CFLs are a cost-effective option for most general lighting requirements.
 Replacing a traditional light bulb with a CFL of the same brightness will save you around £3 per year, or £45 over the lifetime of the bulb.[7]
- LEDs are particularly good for replacing spotlights and dimmable lights. They are more expensive initially, but they are more efficient than CFLs and will save you more money in the long term. By replacing all halogen downlighters in your home with LED alternatives, you could save around £40 a year on your electricity bills. [7]

Recycling bulbs

Low-energy bulbs are also recyclable (unlike filament ones). All Hertfordshire Recycling Centres will take them; the hazardous components are treated and the glass and plastics recycled.

Notes:

Next steps, hints & tips

- Switching lights off when they are not needed is the quickest way to reduce your usage!
- Then look at the lights in your house. Starting with the brightest and those used the most, consider replacing filament or halogen bulbs with a low energy Alternative.
- Buy the 'Transition Streets Low Energy Bulb Sample Box' and try before you you buy - Phone 07413 932 380.
- You can buy them at DIY stores like Homebase and online at stores like

www.energybulbs.co.uk.

 Or when a bulb goes – see if you can live happily without replacing it all!

> Save £3 per light bulb per year. Cost about £2 each. Lasts much longer!

For more info:

http://www.energysavingtrust.org.uk/Electricity/Lighting

Transition Streets 2.6 CONTROL YOUR HEAT



Cost: none

£ Savings: med

Effort: low

CO₂ saved: med

Energy challenge

Boilers and heaters account for two-thirds of the energy used in our homes, so changing the settings just a little can have a big impact. However, many of us don't know how to use the heating controls effectively – mastering them can make a big difference to our pockets.

Government research shows that in the UK we've increased the temperature of our homes by 5°C since the 1970s - so there's plenty of scope for improvement [8].

Solution

You may already have a full set of heating controls in your home - but are you getting the best from them? Take a little time to find out what each control does by referring to the instruction manuals that came with them. If you don't have any manuals to hand, copies can usually be downloaded from the manufacturer's website, or call and ask them to send you a printed copy. (See the summary guide of common controls systems in section 2.6iii-iv).



Yes but...I like being cosy at home. At what price? You can often achieve the same effect by wearing more clothes. You could also try draught-proofing or fitting additional insulation to keep more of your heat inside: see later actions. It's amazing how quickly your body gets comfortable at a slightly lower temperature, especially if you lower it gradually.

Heating controls – an overview

What is a programmer?

Programmers allow you to set when the heating and hot water come 'On' and go 'Off' again. By installing a programmer, and heating your home and hot water only as and when necessary, you will save energy and money. If you have a hot water tank, many timers don't allow you to set different on/off times for water and room (space) heating. It may be worth replacing it with one that does, particularly if you live alone.

What is a room thermostat?

This constantly measures the air temperature of a space and can be set to whatever temperature suits you best. They are usually in halls, stairs or landing areas. When the temperature falls below the setting, the thermostat switches on the central heating: once the room reaches the set temperature, the thermostat switches the heating off. Please note that the timer or programmer needs to be switched on for the thermostat to work.

What is a programmable room thermostat?

A programmable room thermostat lets you choose the times you want your home to be heated and the temperature you want it to reach. In other words, it allows you to heat rooms or the whole house to different temperatures at appropriate times of the day and week. And again, by heating your home and hot water only as and when necessary, it can save energy and money too.











Heating controls – an overview

What is a cylinder thermostat?

A cylinder thermostat keeps a constant check on the temperature of the water in a hot-water cylinder. It switches the heat supply from the boiler on and off as necessary to keep the water at a set temperature.

What are thermostatic radiator valves (TRVs)?

TRVs sense the air temperature around them and regulate the flow of hot water to keep a set temperature in a room. Again, they can help you save money and energy, by allowing different temperatures in some rooms than in others and turning off the heating in rooms that aren't used.

In the majority of cases TRVs cannot turn off the boiler when the whole house has reached the right

temperature. To do that, you will need a room thermostat as well. Radiators in the space containing the room thermostat should not normally have TRVs. But if they do, you should keep the TRVs on their highest possible settings, and set the room thermostat

to the required temperature instead. By installing and correctly using a room thermostat and thermostatic radiator valves you could save £70-£150 and 310kg to 630kg carbon dioxide a year. [9]

HTS3 80 70 50-, -80 °c Drayton



More info: see www.energysavingtrust.org.uk in the home improvements: heating and hot water section or call 0300 123 1234 for help or printed info.





Your savings

For every degree you turn it down by, you can save about 10% of your total heating bill! (About £75 per degree turned down for the average UK home.) [9] Installing and correctly using a room thermostat and thermostatic

radiator valves you could save £70-£150 and 310kg to 630kg carbon dioxide a year. [9]

Save £70 or more on your heating bill.

Recommended temperatures:

- 18°C is the recommended temperature this is the temperature recommended for babies' rooms too.
- Age Concern suggest 21°C for living areas and 18°C for other areas
 [10]

Next steps, hints & tips

• Set your thermostat to 18°C . Of course it depends where the thermostat is - make sure it is not in a cold hallway that maybe you do not need to heat.

- Dig out the instructions for the central heating programmer.
- Set the heating to come on 20 minutes before you get up, & go off 15 minutes before you leave home.
- Your hot water cylinder thermostat should be set at 60°C or 140°F. Any higher is a waste of energy and can scald, any lower and there may be risk of legionella.
- Upgrade to a more intelligent digital thermostat. It will cost around £90. Basic ones cost £35.
- Heat the rooms you use most, rather than the whole house radiator valves (TRVs) will help.
- Turn the heating off when on holiday - in winter set it for twice a day for 30 minutes at a low temp.
- Keep curtains and furniture away from radiators to let heat circulate.
- Set the temperature lower in the bedroom at night; it helps you nod off and promotes deeper sleep.

Transition Streets 2.7 LAGGING



Cost: med

£ Savings: med

Effort: med

CO₂ saved: med

Energy challenge

Many hot water tanks in our homes are not sufficiently lagged. This means that heat is continually being lost, and your boiler has to work harder to keep the stored water to the desired temperature. Heat is also lost from pipes that carry hot water around your house. In some places this is ok (e.g. through a cupboard that is used to dry laundry) but often, it's just more unnecessary and expensive heat loss.





Solution

Both tank and pipe insulation will keep your water hotter for longer by reducing the amount of heat that escapes – by up to 75% [11]. This reduces your fuel bill and saves you money. Wrapping hot pipes in foam sleeves stops them losing heat through contact with cold air. Both tank and pipe insulation is cheap and easy to fit, so this is a DIY option even if you're renting. Measure the diameter of your water pipes, to make sure you get the right size.

Yes but... I can't access most of my hot water pipes. If you can afford it then get professional help. Otherwise just do the ones that you can easily reach. It's often easier to access pipes when you're doing refurbishment work.

Transition Streets 2.7 LAGGING (cont.)



Notes:

Save £30-£45 a year with a one-off investment of £35

Your savings

A hot water tank jacket costs about £15 but saves you about £20 to £35 per year. [12]

Insulation for your primary hot water pipes will cost about £20 and save you around £10 a year. [11]

Next steps, hints & tips

- Touch your hot water tank. If it feels warm, it needs a jacket.
- Measure and write down the height of the tank to the top of its dome, and its diameter. (Two standard sizes are 900mm x 450mm and 1,050mm x 450mm)
- Fit a BS Kitemarked insulating jacket (75mm or 3 inches thick) around your hot water tank.
- Feel your water pipes and consider lagging those that are hot – buy foam tubes and fit to pipes.
- See www.diydata.com for guides

More info: see www.energysavingtrust.org.uk in the home improvements: insulation section or call 0300 123 1234 to request printed information.

Transition Streets 2.8 DRAUGHT-PROOFING



Cost: med

£ Savings: med

Effort: med

CO₂ saved: med

Challenge

If you can feel cold air coming in around the windows in your home, it means warm air is escaping. Sitting in a draught doesn't just give you a pain in the neck; in a typical home 20 per cent of all heat loss is through ventilation and draughts. [13]

Draught proofing your doors and windows could save £10-£50 per year. Cost: about £100 to buy.

[14]



Solution

A draughty house is quickly and cheaply remedied by a visit to the DIY shop. Once it's snug, you'll start saving cash and CO₂, as well as feeling more warm and comfortable in your home. Draught-proofing simply fills gaps and decreases the amount of cold air entering your home.

There are several types of materials available from DIY stores including brushes, foams and sealants, strips and shaped rubber or plastic. Check the quality of the products. It will affect their performance and durability. They should conform to the standard BS 7386. There are also many options for insulating between timber floorboards.

Yes but... doesn't my house still need to breathe? Once the draughts are plugged, it's important the house is still ventilated. In kitchens and bathrooms, you might need an extractor fan if condensation is a problem.



Next steps, hints & tips

- Find out where the draughts are coming from. Gaps between floorboards and around door frames, loft hatches, windows and pipes are the main culprits.
- Measure up external doors and windows and buy draught seals from the DIY shop. Seals are usually made from self-adhesive foam, rubber or brush material.
- Get a brush-style draught excluder for your letter box.
- Seal unused chimneys with newspaper or a purpose-made chimney balloon which inflates to block up your chimney. Remember to take them out again should you decide to use your chimney.
- Draw your curtains at dusk for extra draught exclusion, and keep them behind radiators, otherwise you're just heating the window.
- Curtains wearing thin? Sew a layer of heavy lining material inside them or pay someone to do it for you. Charity shops often have cheap curtains. Dunelm Mill (& others) sell ready-made thermal curtain liners that hook on.
- Windows still draughty, but can't afford double glazing? Cover them in a clear plastic film (available at DIY shops) that tightens over the pane when heated with a hairdryer.
- If you have wooden floorboards, fill the gaps between and around them with an acrylic sealant or with tubing that you can put between the gaps (See Nigel's Eco Store) [15]. Timber floors can also be insulated by lifting the floorboards and laying mineral wool insulation supported by netting between the joists (saving you around £50 per year).
- If you don't want to DIY then contact a local handyman like Baskervilles on 07968 814236 / info@baskervilles-handyman.co.uk or an insulation firm.

Notes:

More info: see www.energysavingtrust.org.uk in the home improvements: insulation section or call 0300 123 1234 to request printed information.

Transition Streets 2.9 LOFT INSULATION



Cost: high

£ Savings: high

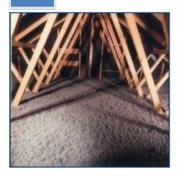
Effort: med

In an un-insulated home a quarter to a half of your heat is lost through the roof [13]. Insulating your loft is a simple and effective way to reduce

your heating bills and you can even do it yourself. Already got insulation? Well, you're getting warmer but more than six million homes in this country have 7.5cm of insulation or less (27cm is the current minimum).

CO₂ saved: high

Challenge







Insulation acts as a blanket, trapping heat rising from the house below. Insulating material is simply laid over the floor of the loft, between and then over the joists if they are visible. Protective clothing, gloves and masks should be worn. Care must be taken to insulate around the top and sides of any cold water tank, as well as around pipe work. Also, try not to compress the insulation in tight corners or eaves. Walk boards can then be laid over the joists to provide safe access from the loft hatch to any water tanks (if present).

Loft insulation can be carried out as a DIY task or by a professional installer. The Energy Savings Trust provides details of the grants that are available for insulating your home.

Yes but...I don't know which materials to use. All the insulation materials listed on the Energy Saving Trust website have their own strengths and weaknesses, and their suitability for you will depend to an extent on the nature of your loft space - but all of them are a better bet than not insulating it at all. There are natural and recycled material options available.



Your savings

If you currently have no loft insulation and you install the recommended 270mm depth you could save around £150 per year on your heating bill [16]. Do it in spring or summer and get ready for next winter.

Notes:

Costs depend on the work needed, but insulation typically pays back in 2-3 yrs.

Next steps, hints & tips

- Check your existing insulation; if it is much less than the recommended 27cm, you should definitely consider topping it up.
- Any electric cables should be lifted above the insulation.
- •You must not cover halogen lights in the loft (protruding through the top floor ceiling) – it is better to replace these if possible
- Decide whether you want to install it yourself or get a professional to do it. Consider which material you prefer.
- If you're opting for DIY, see the Energy Saving Trust (EST) website for a step by step guide.
- Check your eligibility for grants / Green Deal / Energy Company Obligations at <u>www.gov.uk/</u> <u>green-deal-energy-saving-</u> <u>measures</u>, EST, Dacorum and Three Rivers council websites.
- You can still insulate if you have a flat roof. See the EST website.

More info: see www.energysavingtrust.org.uk in the home improvements: insulation section or call 0300 123 1234 to request printed information.

Transition Streets 2.10 CAVITY WALL INSULATION



Cost: med

£ Savings: high

Effort: med

CO₂ saved: high

Challenge

Solution

In most houses built after the 1920s, the external walls are made of two layers with a small air gap or 'cavity' between them. If your home has unfilled cavity walls, a considerable slice of your energy bills will be spent heating the air outside. In fact, about a third of all the heat lost in an un-insulated home is lost through the walls. Cavity wall insulation is a simple, fantastic way to significantly reduce the amount of energy you need to heat your home. Homes without cavity walls can also be insulated using internal or external insulation.

Filling the gap between the two walls of a house with an insulating material significantly decreases the amount of heat which escapes through the walls. It will help create a more even temperature in your home, prevent condensation on the walls and ceilings and can also reduce the amount of heat building up inside your home during summer hot spells.

It can normally be applied from the outside through small holes drilled in the wall. It's a simple process and is normally completed within three hours, without damage or mess to your house or garden. Be sure to get advice from a reputable installer who offers a long-term guarantee.



Yes but... why spend all this when I'm going to sell my house anyway in the next few years? Under the Green Deal, the cost of any eligible work can be paid back gradually by reductions in the energy bill. The requirement to pay back the cost will remain attached to the house if you move, and will not move with you. (See 2.12)

2.10 CAVITY WALL INSULATION (cont.)



Your savings

Cavity wall insulation can save you about £145 per year. It typically costs £330-£720 pounds to install. [17]

Some energy suppliers provide loft and cavity wall insulation for free to those aged over 70 or in receipt of certain benefits. Ask your energy supplier or see www.energysavingtrust.org.uk.

Notes:

Saves 15% on your heating bill. Costs depend on the work needed, but typically pays back in 2-4 yrs.

Next steps, hints & tips

- First of all, find out if you have cavity walls. Indicators include bricks all of the same length, built after the 1920s and walls thicker than 265mm (10 inches).
- If you think you have cavity walls, or you aren't sure, call the Energy Saving Trust 0300 123 1234.
- There is a choice of fillings. Stick to poly bead insulation or similar rather than mineral or white wool. Grey poly bead is more thermally efficient than white.
- Homes without cavity walls can also be insulated using internal or external insulation.

More info: see www.energysavingtrust.org.uk in the home improvements: insulation section or call 0300 123 1234 to request printed information.

Transition Streets 2.11 OTHER ENERGY SAVING OPTIONS



Overview and where to go for more information

This section contains options that you might want to explore if you have done all the options covered in this information pack . They tend to take more effort and/or more investment with a longer payback period. However, they can significantly further reduce your energy use and your carbon footprint. Some of these may be eligible for the loans or grants set out in sections 2.12 and 2.13 below.

Buy a new, condensing boiler

Boilers account for around 60% of the carbon dioxide emissions in a gas heated home. By fitting a new high efficiency condensing boiler and improving your heating controls, you will significantly cut your home's carbon dioxide emissions and could save as much as £300 a year. [18]

Fit double-glazing

Double glazing cuts heat lost through windows by half and installing double glazing can save around £150 a year on your heating bills. [19]

Does your house have double-glazing that needs updating? Windows are a complex subject – triple glazing is now a popular way to replace windows, and maybe well worth considering.

Solid wall insulation

Solid walls can lose heat just like cavity walls; the only way to reduce this heat loss is to insulate them on the inside or (much better) on the outside. It's not cheap, but you will soon see the benefits to your heating bill and it's another way of playing your part in reducing carbon dioxide (CO_2) [20] emissions. There are two types of solid wall insulation: **external** and **internal**.

 Internal wall insulation is done by fitting rigid insulation boards to the wall, or by building a stud wall filled in with mineral wool fibre. (Cont)



Overview and where to go for more information

• External wall insulation involves fixing a layer of insulation material to the wall, then covering it with a special type of render (plasterwork) or cladding. The finish can be smooth, textured, painted, tiled, panelled, pebble-dashed, or finished with brick slips.

Explore options for renewable energy

Renewable energy technologies like solar panels (for hot water or for electricity), wind turbines, and biomass heaters are becoming increasingly popular in the home. These are effective alternatives to fossil fuels and will help you to meet your own energy requirements and reduce your home's CO_2 emissions. They can be expensive, with payback periods of 5-10+ years (at current energy costs). [21]

There are several local suppliers including the Small Solar Company (01727 838 128) and Eco-Kinetics (01727 809 116). For a complete list go to [22]. For advice about renewable energy options, also see [23].

Switch to a renewable/green energy provider

Switching to a renewable energy supplier reduces demand for fossil fuel and creates demand for renewable technologies. It supports new jobs in this industry that is so critical to dealing with climate change. Most energy suppliers offer 'green' electricity tariffs. These seek to support renewable energy in the UK. There are many green tariffs on the market, each supporting renewable energy in different ways.

Find the best green supplier for you at Green Electricity Marketplace [24] One option, very local to here, is Green Energy based in Ware. [25].

Transition Streets 2.12 LOANS AVAILABLE UNDER GREEN DEAL



The Green Deal is a scheme that can help you make energy saving improvements to your home or business, for example: insulation eg solid wall, cavity wall or loft insulation, heating, draught-proofing, double glazing and renewable energy generation schemes eg solar panels or heat pumps. You can make energy-saving improvements to your home or business without having to pay all the costs in advance.

You have to pay back the cost of the improvements over time because the Green Deal is a loan, not a grant. However, the savings on your energy bills after you have made the improvements should cover the repayment of the loan. You can also choose to pay for the improvements in advance using Green Deal providers and certified installers.

The Green Deal website [26] provides more information. It also has a calculator that you can use to estimate the savings that you might make [27].

Getting involved



- 1) Get an assessment of your property; this will tell you what improvements you can make and estimate how much you could save on your energy.
- (2) Choose a Green Deal provider to carry out the work. You discuss with them what work you want done & whether the Green Deal is right for you.

(3) If you go ahead with the improvements you must sign your Green Deal Plan - this is a contract between you and the provider stating what work will be done and how much it will cost. The provider will then arrange for a Green Deal installer to do the work.

(4) Once the work is done you will pay off the money in instalments through your electricity bill. This is so that the Green Deal stays with the house - ie if you move, you no longer benefit from the improvements and you no longer pay for the loan.



What is the Energy Companies Obligation (ECO)?

The Energy Companies Obligation (ECO) is an energy efficient programme that was introduced into Great Britain at the beginning of 2013. It replaced two previous schemes, the Carbon Emissions Reduction Target (CERT) and the Community Energy Savings Programme (CESP). ECO works alongside the government's Green Deal to help people install energy-efficiency measures to their home. Under this scheme the big energy suppliers are legally obliged to help with energy-efficiency measures in three areas. Money from ECO may be available to subsidise your Green Deal. The three schemes are:

1. Affordable Warmth Obligation

To provide heating and insulation improvements for low-income and vulnerable households (social housing tenants are not eligible for affordable warmth). There are complex eligibility criteria for this means-tested scheme. Call the Energy Saving Advice Service on 0300 123 1234 to check whether you might be eligible, and apply if you are.

2. Carbon Saving Obligation

To provide funding to insulate solid-walled properties (internal and external wall insulation) and those with 'hard-to-treat' cavity walls. This is not meanstested but can be used in conjunction with the Green Deal. The aim is to provide enough support to make these relatively expensive measures costeffective.

3. Carbon Saving Communities Obligation

To provide insulation measures to people living in the bottom 15 per cent of the UK's most deprived areas. It is expected that this element of ECO will particularly benefit the social housing sector.

What does this mean for me?

If you are considering solid wall insulation, or may be eligible under the Affordable Warmth Obligation, contact the Energy Saving Advice Service to see if you are eligible for a grant.



Possible actions:

Reminder

- Know how much you are using (2.2)
- Be a real turn off (2.3)
- Electrical appliances (2.4)
- See the light (2.5)
- Control your heat (2.6)
- Lagging (2.7)

Draught proofing (2.8)

- Loft insulation (2.9)
- Cavity wall insulation (2.10)
- Other energy saving options (2.11)
- Green Deal loans (2.12)
- ECO Grants (2.13)

What other ideas does your group have that aren't covered above? Add them below if they are relevant for you...

My actions	Previously done	When I'll do this	Notes

Your next meeting is on **water**. Between now and the water meeting try and do the following things:

- Work on the energy actions you wrote down above,
- Read the water chapter and note any actions you want to explore,
- Try and be aware of how water is used in your home and garden;
 - do you spot any water being wasted?
 - do you have a water meter?
 - how much does water cost you each year?



If your group has time, talk about some of these wider questions.

As we have seen, most energy is wasted in heating inefficient buildings, not on devices on standby. But all these actions together play a significant part in saving us money, as well as reducing our energy consumption – which means fewer power stations being built to supply us with energy, be they coal, nuclear, oil, or gas.

Just by turning off appliances on stand-by, we can save £45 to £80 per year. That may not sound like much but if we all cut this out, we would save enough electricity to power well over a million homes every year.

- What are the real reasons for us continuing to do this?
- Why is it so difficult to stop?
- What do you think you will need to do to change these habits in your home?

Notes:

Transition Streets 2.16 REFERENCE INFO



References in this section have been numbered in the text and are from:

- Energy used by appliances left on standby http://www.energysavingtrust.org.uk/Take-action/Energy-savingtop-tips/Changing-your-habits-room-by-room/Energy-saving-tipsfor-the-living-room
- Government estimates put the average saving at £23 a year by 2020 on combined gas and electricity bills. https://www.ofgem.gov.uk/ofgempublications/64023/consumersmartmeteringfs.pdf
- 3. http://www.nigelsecostore.com/acatalog/Standby_Savers.html
- Recycling appliances http://www.energysavingtrust.org.uk/Electricity/Products-andappliances#what
- 5. Lighting. http://www.energysavingtrust.org.uk/Electricity/Lighting
- 6. Converters for eg bayonet to GU10: http://www.homewatt.co.uk/74-accessories-and-fittings
- 7. http://www.energysavingtrust.org.uk/Electricity/Lighting
- 8. http://www.telegraph.co.uk/finance/personalfinance/householdbills/10603400/Homes-heated-at-least-4C-warmer-than-in-1970study-finds.html
- 9. Using thermostats for your heating: http://www.energysavingtrust.org.uk/Heating-and-hotwater/Thermostats-and-controls#how much
- 10.Room temperatures http://www.npower.com/spreading_warmth/home/advice/index. htm
- 11.Hot water pipe insulation: http://www.energysavingtrust.org.uk/Insulation/Insulating-tankspipes-and-radiators
- 12.Hot water jacket: http://www.energysavingtrust.org.uk/Heatingand-hot-water/Thermostats-and-controls#how much

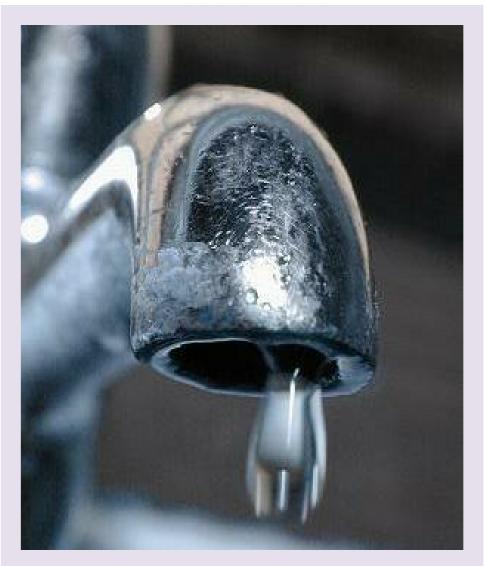
Transition Streets 2.16 REFERENCE INFO (Cont'd)



- 13.http://www.nia-uk.org/householder/index.php?page=did-youknow-facts
- 14.http://www.energysavingtrust.org.uk/Insulation/Draught-proofing
- 15. Insulation for timber floors is available at: Nigel's Eco Store: http://www.nigelsecostore.com/
- 16.http://www.energysavingtrust.org.uk/Insulation/Roof-and-loftinsulation
- 17.http://www.energysavingtrust.org.uk/Insulation/Cavity-wallinsulation
- 18.http://www.energysavingtrust.org.uk/Heating-and-hotwater/Replacing-your-boiler#how much
- 19. http://www.energysavingtrust.org.uk/Insulation/Windows#benef its
- 20.http://www.energysavingtrust.org.uk/Insulation/Solid-wallinsulation
- 21.http://www.energysavingtrust.org.uk/Generating-energy/Gettingstarted-with-renewables
- 22.http://www.microgenerationcertification.org/
- 23.http://www.yougen.co.uk./
- 24.http://www.greenelectricity.org/
- 25.http://www.greenenergy.uk.com/get-in-touch
- 26.https://www.gov.uk/green-deal-energy-saving-measures
- 27.https://www.gov.uk/green-deal-energy-saving-measures/get-anassessment

3. Saving water





Tonight's meeting is on saving water.

But first!

Discuss how you have all got on with your actions from the Energy chapter. (Your action plan is in Section 2.14).

What have you all achieved? What was hard? What do you still want to get done?

Notes:

Transition Streets 3.1 INTRODUCTION - SAVING WATER, WHY BOTHER?



On average, households in UK use around **174** litres of water per day. We need to reduce this to more sustainable levels. The Government has set a target for each of us to reduce our consumption to 130 litres per day. What's shocking is that many people in the world exist on less than 10 litres per day. This is how much we use to flush the toilet just once! (1)

This consumption level is not sustainable in the long-term. If we do not take action now, climate change, population shifts and wasteful behaviour mean facing increased water stress in the future.

Although it seems to rain here a lot, in fact the South East of England has less water available <u>per person</u> than many Mediterranean countries. The South East had already been designated as an area of serious water stress in 2007 by the Environment Agency.⁽²⁾ In early summer 2012 we were in "drought zone 3" (i.e. hosepipe bans, etc) and preparing for "drought zone 4".

About 1/3 of the water we use each day runs down the plughole or toilet without being used.⁽³⁾ This is what we want to cut by making small behavioural changes and choosing water efficient products.

Benefits of reducing your water consumption:

<u>Reduce energy use and greenhouse gas emissions</u>: It takes energy to abstract, treat and supply water to our homes. We then use energy to heat that water. For every drop of water you don't use, you are saving energy and reducing greenhouse gas emissions.

<u>Save money</u>: By reducing your water consumption and fitting a water meter you could save money on your bills.

Support the natural environment and wildlife that depends on it: Many rivers and water bodies have been damaged because too much water is being taken from them. The current system for managing abstraction was not designed with the natural environment in mind.

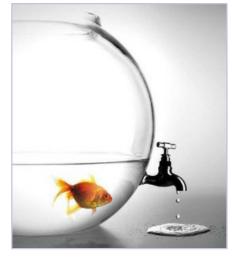


Each of the actions in this section can significantly reduce the amount of water that your household uses. Even if you are not on a meter, it is important to conserve this most precious resource, and to consider the related CO_2 emissions that come from the processing and pumping of all the water that we waste.

Some of these actions will cost you little or nothing, and some will cost you a little money (but this should be offset by the reduction in your water bill).

In your group, have a brief chat about the items and then decide which ones you want to tackle and when. Record your own action plan in section 3.10.

- 3.2 Water meters
 3.3 Know how much you are using
 3.4 Feeling flushed
 3.5 Taps, drips & leaks
 3.6 Showers & baths
 3.7 Washing clothes
 3.8 The kitchen sink
 3.9 Outdoors
- 3.10 Your action plan



If you have time left, discuss the "bigger picture" of your water footprint (section 3.11)

Notes

Transition Streets 3.2 WATER METERS



Do you have a water meter? Would it be cheaper for you?

The next section assumes you have a water meter. People who have metered water are more motivated to reduce waste, because they are paying directly for the water they use. However, there is no simple answer to whether a particular household is better off with a meter. **Here is the answer from the Affinity website:**

"Having a water meter is a really good idea. It's free to fit for our domestic customers and could save you money. We can't tell you exactly how much you might save because non-metered bills vary a lot and we don't know how much water you might use.

"As a simple rule of thumb, though, if you have more bedrooms in your property than people, you are very likely to save money if you change to a metered supply. So, for example, a single occupier in a 3 bedroom house should definitely consider having a meter. You may also benefit if you live in purpose built accommodation which may have a high rateable value.

"We can't tell you exactly what your bill will be but we've devised a simple calculator to help you work out whether changing to a metered supply will reduce your bills. Bear in mind that the calculator is based on average use of water. How you use water may be a little different, so it may vary from the average but the calculator gives a good indicator in the majority of cases.



"If you decide, within a year of the meter being fitted, that you are not making the savings you'd hoped, you can revert back to being non-metered, without any charge"

The calculator is at www.affinitywater.co.uk/how-much-will-isave.aspx

Transition Streets 3.3 KNOW HOW MUCH YOU ARE USING



Cost: none

£ Savings: low

Effort: low

CO2 saved: low

Challenge

As we saw in the energy section, we can't manage something if we can't measure it. Relying on twice yearly meter readings from Affinity Water does not give us much information about our water consumption, or if it is going up or down as a result of the actions we are taking.

Plus once you know how to read your meter, you can also do regular, simple checks for leaks.



Read your own water meter regularly. Just being more aware of how much water you use will have a positive impact on your household's water wastage. It shows you the actual results and savings from all your efforts with the other actions in this section.

This is generally a little more hassle than reading your electricity or gas meter, as water meters tend to be located in the pavement outside your property. They are usually in a special meter box, under a metal cover that you need a screwdriver to lever up. Or your meter may be inside your property close to where the water service pipe enters it. See Overleaf for advice on reading your meter.

To check for leaks, read your meter just before you go away for a few days, then read it again as soon as you get back. Assuming nothing in the house should have been using water, you can quickly tell if there's a leak somewhere as your meter will have gone up in your absence.

Yes but... I have no idea where my meter is. If you can't find your meter then call Affinity Water on 0845 769 7985 who will tell you where it is.



Guide to reading your meter, from the Affinity website:

Step 1 - Locate your meter

Your meter should be in your front garden, at the boundary to your property or in the public footpath; it will be located inside a small box compartment. Occasionally meters are fitted internally, usually under the sink.

Step 2 - Lift the lid

You may need to use a wide screwdriver for this. Remove the polystyrene frost cover if one is present and pull up the inner meter lid to view the meter face.

Step 3 - Read the numbers

You need to note the white numbers on black which show cubic metres. Ignore the white numbers on red. Some of the dials may be moving. Do not worry about this unless they fail to stop when no water is being used.



Or, watch the Affinity video on reading your meter:

https://www.affinitywater.co.uk/how-to-video-reading-your-watermeter.aspx

Transition Streets

3.3 KNOW HOW MUCH YOU ARE USING (cont.)



Sample water meter readings log

Date	Water Meter Reading (m ³)	Usage (m ³)
01/12/2012	3785	n/a
08/12/2012	3792	7
15/12/2012	4000	8
22/12/2012	4007	7

Notes

Next steps, hints & tips

- Complete a water usage calculator like the BBC one (news.bbc.co.uk/1/hi/in_depth/629/629/5086298.stm) to estimate your annual consumption. Compare it to the average of 150L per person per day.
- Affinity suggests that you check your meter at least monthly, particularly if your meter is located outside your property. You pay for leaked water.
- If you are making changes to reduce water use, try reading your meter weekly for a while and see what difference it's making. Use the sample water meter readings log provided above.
- Keep the log visible stick it on the fridge so everyone in the household can see it. You may consider rewarding everyone for their efforts by sharing some of the savings.
- If there's more that one meter outside your house, check the meter number against the number on one of your bills to make sure you're reading the right one.

More info: see Affinity Water's guide to reading your water meter. Contact Affinity on 0845 769 7985 or www.affinitywater.co.uk.

Transition Streets 3.4 FEELING FLUSHED

Cost: none

£ Savings: med

Effort: low

CO2 saved: low

About a quarter of all the clean, drinkable (expensive!) water we use in our homes is flushed down a toilet. (7)

An old style single flush toilet can use up to 14 litres of water in one flush. New, more water-efficient dual-flush toilets use only 6 litres for a full flush, and four litres with a reduced flush.⁽⁸⁾

The easiest solution is to flush less often! You would halve your water use from flushing if you simply flushed every other time.

If your toilet is pre-2001 (see guide over page), consider installing a cistern displacement device (CDD) such as a 'Save a flush' bag or a Hippo/Hog. They are simply put in the toilet cistern where they displace about 1 litre of water every time you flush.

Save-a-Flush are available free to Affinity Customers via

www.savewatersavemoney.co.uk/affinity/fr ee-water-saving-products).



Yes but... our loo doesn't flush well anyway, won't this make it even worse? Don't use a CDD on cisterns of 6 litres or less. Try a smaller device if you need to flush twice. Remove it altogether if even the smallest one causes a problem – the idea is to reduce flushing, not increase it!

Challenge





Your savings

Considering the average household flushes 5,000 times per year, savings of up to 5,000 litres per year could be achieved just by simply installing a cistern displacement device. (9) With Affinity this saves you about £8 per toilet.

Some people even use their toilet as a dustbin; flushing food and rubbish away. The system isn't designed to cope with this and it wastes water.

> Flush less and fit cistern displacement devices where suitable to save on your water bill.

Next steps, hints & tips

 Flush less often - if it's yellow let it mellow, if it's brown flush it down! This can drastically reduce usage and costs nothing.

• Use the table on the next 2 pages to identify what type of toilet you have, and what type of cistern displacement device or CDD (if any) you should probably be using.

• Also assess the capacity of your cistern by counting how long it takes to flush: 9 seconds or more fit a hippo, 7-8 seconds - fit a Savea-flush, less than 7 - leave as is.

• Get your free Save-a-Flush from Affinity (see earlier)

 Make your own from a large plastic bottle filled with water, or filled with sand and seal it well.

•Check the water level in your cistern is set correctly to the mark which will be about 25mm below the overflow. If it is just below the overflow it will be flushing about one litre more than the designed amount.

More info: see www.waterwise.org.uk or give Waterwise a call on 0203 463 2400 and they will be happy to help with any questions.

Transition Streets 3.4 FEELING FLUSHED (cont.)



Photo	Year	Туре	Flush	Water consumpti on	CDD
	Post 1 Jan 2001	Modern continental style push button cistern	Dual	Full - 6 litres Half -4 litres	Not required
	Pre 1 Jan 2001	Close coupled WC	Single	7.5 litres	Save-A-Flush bag
	1980- 1970	Close coupled double trap syphonic pan	Single	9 litres	Save-a- flush
	1970 - 1950	Close coupled	Single	9 litres	Hippo or Save-A-Flush bag or Freddie Frog

Transition Streets 3.4 FEELING FLUSHED (cont.)



Photo	Year	Туре	Flush	Water consumpti on	CDD
	1950 - 1940		Single	10 litres	Hippo or Save- A-Flush bag or Freddie Frog
	Pre 1940		Single	12 litres	Hippo or Save- A-Flush bag or Freddie Frog
	Pre 1940		Single	12 litres	Hippo or Save- A-Flush bag or Freddie Frog

Transition Streets 3.5 TAPS, DRIPS & LEAKS

Cost: none-low

£ Savings: med

Effort: low

CO2 saved: low

Often our water bill is higher than it needs to be, and we're not even using the water we're paying for! For example, a running tap wastes over 6 litres per minute.

Dripping taps are not just annoying, they add up to staggering water losses as you can see in the table below [based on approx. Affinity costs]. Dripping taps often just need a new washer, which cost only pence. Leaky pipes are also just dripping away your money, inside or out.

Rate	Litres lost / year	£ lost / year
1 drop per second	5,000	£8
Drops breaking to a stream	31,000	£50
2mm stream	146,000	£237
5mm stream	526,000	£854

Solution

Check regularly for drips and leaks. To fix a dripping tap, first of all try changing the washer. Also make sure your water pipes and external taps are lagged in time for the cold winter months. Burst water pipes can cause serious damage as well as waste a lot of water.

Yes but... I changed the washer and it's still dripping. A dripping tap usually means that the tap washer needs renewing, but it can also be caused by a damaged valve seating. If the drip is from a mixer nozzle, then change both tap washers.



Challenge



Your savings

You can save about £14 if you stop leaving the tap running while you brush your teeth (assuming you do this for 2 minutes twice a day) or wash the veg, or rinse the dishes...

Notes

Fix a dripping tap and save £8 per year. Turn tap off when brushing, save £14 per year.

Next steps, hints & tips

- See www.diydoctor.org.uk for an online 'how-to' guide for fixing drips.
- Search for a www.youtube.com video called "Collins DIY Survival Demos - How to fix a dripping tap"
- See your local hardware store. They often offer written guides or will give you specific advice.
- If you're not into DIY, contact a local plumber or handyman to do it for you.
- Check your pipes regularly for visible leaks (also see section 3.5).
- Use the left over water from your night time drinks to water houseplants – this saves new water being poured into the plants and your drink being poured down the plughole.

More info: see www.waterwise.org.uk for useful information or contact Affinity www.affinitywater.co.uk/contact-us.aspx.

Transition Streets 3.6 SHOWERS & BATHS

Cost: none-med

£ Savings: med

Effort: low

CO2 saved: low

Solution

The average Brit spends 7.2 minutes in the shower and this average is increasing. Power showers are very popular and can easily use more water than a bath (watch your electricity meter reading shoot up while this is on, it is almost equivalent to boiling a kettle). While invigorating, they pump as much as 20 litres of water a minute, more than the average person living in the developing world gets through in a day. In fact, even a five-minute power shower can use more water than a bath. (14)

Baths typically use 80-100 litres of water, whereas an ordinary shower uses about a third of that amount. Over a year, if you have 4 baths a week, this equates to an extra £20 worth of water (not including all



- Take showers rather than baths
- Reduce the amount of time you spend in the shower
- Be aware of the increased flow rate for power showers
- Fit a shower head with a reduced flow rate
- Shower heads and shower timers are free from Affinity www.savewatersavemoney.co.uk/affinity/free-water-saving-Products Got a young child? Try a Bath Buoy free from Affinity and save 30L per bath.

Yes but... I really do need to shower every day. If you need to shower every day then focus on reducing the volume of water used and the time you spend in the shower.





According to the Energy Saving Trust:

- Replacing one bath a week with a 5 min shower saves a family of 4 up to £40 in gas and water bills.
- Replacing an inefficient shower head with an efficient one saves a family of 4 up to £160 in gas and water bills. (16)



Next steps, hints & tips

- Saving water costs you nothing, cuts your bills and helps the environment.
- Talk to your family about reducing the number and length of baths/showers and see if you can make changes.
- Go to the Affinity website to order free water saving devices.
- Even better, you can get a free home audit from Groundwork who will then fit the right devices for you. Call Groundwork on: 01707 260129 or email Hertfordshire@groundwork.org.uk.
- In summer, to avoid using the hose, save in a bucket the cold shower water that runs while waiting for the hot.
- If you do have a bath, you can siphon out your bath water and use it to water your garden. The WaterGreen siphon is one product, at about £20.

More info: see www.waterwise.org.uk and www.biggreensmile.com/water/affinity/

Transition Streets 3.7 WASHING CLOTHES



Cost: none

£ Savings: lowmed

Effort: low

CO2 saved: low

Solution

The average water consumption of washing machines is about 50 litres per wash - although now less than it used to be, it's still quite a bit of water. Clothes washing accounts for about 13% of the water that we use in our homes, so by reducing wastage in this area we can make significant water savings – the average family does 274 loads a year. (17) Washing machines vary tremendously in how much water they use per wash: when adjusted for capacity, some use as much as 20 litres per kilogram while others use as little as 6 litres. (18)



- Only wash clothes when they are dirty. Try and get everyone in the family to think about whether something *needs* washing before it goes in the basket.
- Use water efficient settings on your washing machine. Read the manual and see if there is a more efficient option.
- Use a full load every time or use the half-load setting.
- If you plan to buy a new one, make sure that it's water efficient.
- Washing at a lower temperature doesn't save water, but it will save on your energy costs. Many powders and liquids are designed to work at 30 degrees, and they work well.

Yes but... I have to keep up with the washing, else it becomes a mountain in this house! Consider how often you really need to wash your clothes. After every wear? We often wash things that don't need it, out of habit – try a quick wipe for any dirt or airing them overnight.



"Eco" options

- There are many "eco" washing powders and alternatives out there. Do they work and does it matter anyway?
- For a great summary, read this webpage: http://www.theecologist.org/green_green_living/home/1222057/how_ green_is_your_washing_powder.html
- They suggest Ecover Fragrance Free Non-Bio Washing Powder
- For allergy sufferers, they recommend the Ecoegg
- For sensitive skin, **Simply Sensitive Non-Bio Washing Powder**
- For vegans, Bio-D Washing Powder
- And you could try using eco-balls rather than liquid or solid detergents this works out at around 3p per wash and they really do clean (some whites may need extra help).

Notes	Washer-driers		
	• Did you know that washer- driers, as well as using a lot of electricity to heat the air, also use a lot of water in the cooling cycle? Onaverage, 36L.		
	 Try and avoid using the drying cycle whenever possible, to save energy and water, or use it for the minimum time you can. 		

More info: see www.waterwise.org.uk or give Waterwise a call on 0203 463 2400 and they will be happy to help with any questions.

Transition Streets 3.8 THE KITCHEN SINK

STREET

Cost: none-low

£ Savings: lowmed

Effort: low

CO2 saved: low

The kitchen tap and dishwasher account for about 8-14% of water used in the home, so there's a huge opportunity here to reduce water wastage. Kitchen taps vary tremendously in flow volume, from 2-25 litres per minute, and behaviours such as how much you twist the tap, and for how long you leave it on, influence how much water is used when you wash up. (19) Challenge

For example, washing up or rinsing dishes under a running tap can use dozens of litres of water, but if you use a washing up bowl or plug your sink, you can reduce water wastage by 50% or more. (20)

A common misconception is that dishwashers use more water. In fact, these machines can be water savers – if used wisely. In the 1970s, dishwashers used as much as 50 litres per cycle, but modern models can use as little as 10 litres – sometimes even less than washing up by hand. (21)





- Avoid washing up under a running tap.
- If you buy a new dishwasher, ensure that it is water efficient.
- If you have a whole load, use your dishwasher rather than wash by hand

Yes but... sometimes I have to wait for ages for hot water to arrive at the tap, which wastes lots of cold water down the sink. Collect all the waste cold water in a watering can that you leave by the sink, then use it on the garden or your houseplants.

Transition Streets 3.8 THE KITCHEN SINK (cont.)





Next steps, hints & tips

- Consider installing a more water efficient tap, or a tap aerator aerators in particular are cheap and simple quick fixes that you can do yourself.
- When washing up by hand, either use a washing up bowl or plug your sink. Then you can use what's left over to water your houseplants
- Try to avoid having to thaw frozen foods under running water.
- Keep a jug of water in the fridge so that you don't have to run the tap for ages while waiting for cold water to flow.
- Avoid installing a waste disposal unit in your sink they require lots of water to operate properly. Compost your food waste or recycle it via your green bin.
- When using your dishwasher, make sure to use a full load every time. Two half loads still use more water and energy than one full load.
- Become familiar with your dishwasher cycle options for lower temperature / duration cycles. Check your user manual or contact the manufacturer.
- Most modern dishwashers are so effective that you don't ever have to pre-rinse.
- Use the minimum amount of water required when you boil water in saucepans and kettles you'll save energy as well as water.

Transition Streets 3.9 OUTDOORS



Cost: low-med

£savings: medhigh

Effort : low

Outdoor water use accounts for around 7% of the total water use, but

in the summer this can rise to over 50% of demand.⁽²²⁾ Many of us still use drinking quality, very expensive, cleaned and treated tap water on our lawns and gardens. However this option can be removed from us by

CO2 saved: XX

Challenge



law during times of drought.





Consider what you plant and look for more drought tolerant varieties. By practising water efficient gardening practices, you can still have a beautiful, living garden even in times of extreme drought.

Try to avoid having to use tap water to water the garden. Instead, collect rainwater in a water butt (rain water is also better for your plants) and/or consider re-using dirty water, or grey water (from anywhere but the toilets) on the garden. See reference section at end for more info on greywater and on rainwater harvesting systems.

There are many on-line guides to low-water gardening. Try the Environment Agency's one: http://www.environmentagency.gov.uk/static/documents/Leisure/cwb_ch6_gardening_880746. pdf.

Yes but... I can't use my old bath water for the garden due to all the bubble bath. Soil and potting composts are generally ok at filtering out soap and detergents – sometimes the residue even acts as a mild fertiliser. The eco varieties are generally better than regular. The Royal Horticultural Society does not recommend using grey water on edible crops.

Transition Streets 3.9 OUTDOORS (cont.)

Your savings

Your hosepipe uses as much as 18 litres of water per minute. A watering can, if filled from your water butt, saves £135 per year (if you typically use the hose for 15 mins/day for, say, 4 months of the year). (22)

Next steps, hints & tips

- If you must use a hose, consider fitting it with a trigger gun to control the flow (although during a hosepipe ban you will need to use a watering can).
- Invest in a butt. Your roof collects about 85,000 litres of rain per year. This could fill 450 water butts with free water for your garden or car-washing. (24) Try looking at www.affinity.savewater.co.uk or local garden centres.
- Sprinklers can use as much as 1,000 litres of water per hour! If you really must, use it early in the morning or late in the evening.(25)
- Rather than washing your car with a running hosepipe, try using a bucket and sponge instead; ideally fill the bucket from the butt.
- Mulching will not only keep away water-loving weeds, but will also keep the soil cool and decrease evaporation by up to 75%. (26)
- Giving your plants' roots a good soaking once or twice a week in dry weather is much better than lightly watering them every day.
- Think about mixing some drought resistant bedding and perennial plants in to your garden to add diversity and increase resilience.
- Don't overwater there is no need for hanging baskets and containers to drip after watering.
- Water should be directed underneath the foliage. There should be enough to wet the top 30cm (12in) of soil, where most plants' roots are.
- It's OK to let your lawn go brown; it will recover immediately after rainfall. Even the Queen had a brown lawn during recent hosepipe bans!
- Use pressure washers sparingly if you must use one to wash your patio furniture or bike, do it on the lawn so the water gets recycled.



Transition Streets 3.10 YOUR WATER ACTION PLAN



Reminder

Possible actions:

- Know how much you are using (3.3)
- Feeling flushed (3.4)
- Taps, drips and leaks (3.5)
- Showers and baths (3.6)

- Washing clothes (3.7)
- The kitchen sink (3.8)
- Outdoors (3.9)

What other ideas does your group have that aren't covered above? Add them below if you think they are relevant for you...

My actions	When I'll do this	Notes

Before next time

Before the Food meeting try and do the following things:

- Do the water actions (above) and keep working on energy (2.14)
- Read the Food chapter and note any actions you want to explore
- Try and be aware of what food you buy and how you use it;
 - do you spot any food being wasted?
 - how much food packaging to you recycle / throw away?
 - how much does food cost you each year?

Transition Streets 3.11 (*OPTIONAL*) BIGGER PICTURE- WATER FOOTPRINT Transition

If your group has time left, then stop to consider your "water footprint".

This means the water that has been used in the production of everything you buy and use; for example the water used in farming for the meat you buy and the water used to make the cotton in your T- shirt. This is called "embedded water".

Each Briton uses about 150 litres of tap water a day, but if you include the amount of water embedded within products, our water consumption is actually around 3,400 litres every day. About 70% of the embedded water that we consume comes from other nations, as we import goods and services into our country. (27)

About 2/3 of the water that we consume is embedded in our food. For example, a tomato has about 13 litres of water embedded in it; an apple about 70 litres; a pint of beer about 170 litres; a glass of milk about 200 litres; and a hamburger about 2,400 litres. (28)

• So, what else can we do to reduce our overall water consumption?

• Do you feel you have enough information to make informed choices about the water impacts of what you buy, from t-shirts to hamburgers? How could you find out more?

Notes:

Transition Streets WATER CHAPTER - REFERENCES



R	1.& 3	- www.waterwise.org.uk
References	2	- Environment Agency
ere	7 to 14	- www.waterwise.org.uk
inc	15	 Energy Saving Trust
Se?	17 to 28	- www.waterwise.org.uk



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4. Spend less, eat well





Tonight's meeting is on

Food : Spend less, eat well.

But first!

Discuss how you have all got on with your actions from the Water chapter. (Your action plan is at section 3.10).

What have you all achieved?

What was hard?

What do you still want to get done?

Notes:

Transition Streets 4.1 INTRODUCTION - SPEND LESS, EAT WELL



Having a strong, local food system is essential if our community is to be more self-reliant, less oil-dependent, and less exposed to the global price fluctuations that affect how much we pay for our food.

In times of global shortage or local supply disruption (remember the problems caused by the fuel protests a few years ago?), it's important that we can feed ourselves healthy, tasty food, for a reasonable cost.

In the past, towns and the surrounding villages were much more selfreliant in food. Most of our staples such as grains, vegetables, meat and dairy produce were grown and produced in the area.

Nowadays, it is mostly brought to us by lorry, ship and plane from across the world, or at least across the UK.

We are much more vulnerable in terms of 'food security' these days. An example is our dependence upon the national supermarket chains, who have only a 3-5 day supply of food in them at any one time.

Most supermarket food is travelling by road freight, so any disruption of that supply will impact us very quickly. In the UK, the big 4 supermarket chains control 80% of our food market. (1)

Local food systems create and protect local jobs and support our local economy. We don't have to ship food hundreds of miles, emitting CO₂, needing extra roads, contributing to traffic congestion, and burning up oil in the process.

Instead we can eat a great range of fresh, tasty, seasonal food within hours of it being picked, with no processing or excessive packaging required. It is often cheaper than the alternative. This doesn't mean that everything can be produced locally, or even regionally (bananas are unlikely to thrive in the United Kingdom) but it makes sense to grow the stuff that can.

Thinking a little more about the true costs of eating strawberries all year round makes them taste, well, a little less good.



Each of these actions can give you tasty, fresh food for less, cut CO₂ emissions and other environmental and social impacts and/or help build a strong local food system. All will cost you little or nothing.

In your group, have a brief chat about each item and then decide which ones you want to tackle and when. Record your own action plan in section 4.9.

- 4.2 Buy local, seasonal foods
- 4.3 Reduce food packaging
- 4.4 Reduce food waste
- 4.5 Why try organic?
- 4.6 Grow your own
- 4.7 Caring carnivores
- 4.8 Cooking efficiently

Food prices

At a time when British farming is in crisis, with competition from international markets and the stronghold of the supermarkets and international food cartels, we still hear a lot about the rising cost of food for UK households.

Yet in real terms, in the last five decades, spending on food basics has declined sharply.

In 1957 we spent 33% of our household income on food; we now spend 15%. (2)





Transition Streets 4.2 BUY LOCAL, SEASONAL FOODS



Cost: none

£ Savings: lowmed

Effort: low

CO2 saved: lowmed

Solution

Food is travelling further than ever before. In Britain, the distance food is transported has increased 50% from 1978 to 1999.⁽³⁾ Family farms, local abattoirs, processing plants, local food distribution systems and small shops are all disappearing, unable to compete in today's global market. Over-centralisation of food systems through supermarket chains has meant the loss of local distinctiveness, traditional varieties, and a sense of local food culture. Moreover, money leaks out from local economies as it is siphoned off by distant food businesses, and CO₂ emissions rise as our food is shipped further from its source.



Local food is not just about 'food miles'; it is also about food that is produced and distributed in ways that contribute positively to local communities. Ideally, communities should be easily able to buy as much locally-produced food as possible. Locally organised food systems can help their communities to thrive by:

- Providing jobs and supporting business networks,
- Distributing food directly in our area, not sending it to distant supermarket depots before it can head back to us in Hertfordshire,
- Creating positive social connections whilst providing healthy, fresh, seasonal food for the community.

Yes but... some food can't be produced locally. Trade is vital and very rarely can a local region be completely self-sufficient. Trade, if carried out in a fair way, also has many positive impacts, including education and improved quality of life. It's fine to buy things that can't be produced locally, but we *can* try to buy Fair Trade goods.



Your savings & benefits

Eating local food from a nearby farm is more likely to be healthy, fresh and in season when it tastes best!

It can be cheaper and there is no plastic packaging or tray attached. Why not go to the next farmers market and compare prices with your supermarket shop?

Kings Langley Farmers Market is held every third Saturday each month.

You get the pleasure of getting to know shopkeepers and stall holders. Also, box delivery schemes can save you carrying heavy loads of shopping.

Notes:

Next steps, hints & tips

- Begin with just a part of your food shop -why not try a local butcher? In Kings Langley High Street there is The Langley Butcher, in Abbots Langley there is Simon East at 47 High Street, and Bradmill Meat in Adrian Road.
- Or try a local bakery: Redbournbury Mill in Redbourn also sell their bread at local markets.
- Local shops might surprise you; The Langley Butcher also sells fruit & veg for example.
- Have fresh local food delivered to your door (see next page) or use a wheeled trolley to help ease the shopping load.
- Support local, independent food shops such as Clare James in Kings Langley High Street and ask them for local produce.
- Buy your food directly from the farm, farm shop or farmers market.
- Visit Hemel Food Garden, run by the Sunnyside Trust, at Two Waters Road, Hemel Hempstead.
- Check which foods are in season and how to use them at www.eattheseasons.co.uk .
- Ask for more local organic food in your school, hospital, work place.
- When you eat out, ask restaurants and pubs whether they source locally & sustainably. The Rose & Crown in Kings Langley supports local food.



Food box schemes

There are as many varieties of box schemes as there are wonderful vegetables in them. However, the majority sell only organic produce, which can range from set-content boxes of seasonal vegetables to others that let you choose from a selection of meat and dairy, even wines and washing-up liquids.

A few schemes sell only home-grown produce, others source additional stock from other local, organic growers. Some fruits are imported. These are usually shipped in rather than air-freighted. And most good schemes ask for a list of up to three vegetables you don't like which they swap for something else.

Box schemes are very competitively priced, coming in cheaper than organic supermarket produce, and often conventional supermarket produce too. Most basic boxes of six or so types of fruit or vegetables start from about £10. Some schemes ask for a minimum order and/or charge a delivery fee.

Some examples are:

- The Seasonal Food Company, theseasonalfoodcompany.co.uk
- Riverford, <u>www.riverford.co.uk</u>
- Abel and Cole, <u>www.abelandcole.co.uk/</u>





Local farm shops & specialist suppliers

- Carpenters Nursery, St Albans Road, AL4 9LJ (veg.)
- Willows Farm Shop, Coursers Road, AL4 4PF (wide range of food, some local and some organic, including butcher on site)
- Hedges Farm, AL2 2ET (own beef & lamb, local range of foods and delicatessen)
- Woodlands Farm, Nash Mills, HP3 HRZ (beef/lamb)
- Battlers Green Farm Shop, Radlett, WD7 8PH (wide range of foods and delicatessen)
- Childwickbury Goats, AL3 6JX (goats cheese)
- Nine Wells Watercress Farm, Whitwell, SG4 8JP

Local farmers markets

Farmers Markets take place around the district. The same stall holders go to each market. Expect to find local specialties, cheeses, seasonal fruit & veg, top quality meat and game, fish, dairy produce, freshly baked cakes & bread and hand crafted goods.

Hemel Hempstead: Thursday, Friday & Saturday St Albans: 2nd Sunday of the month, 8am-2pm Harpenden: 4th Sunday of the month, 10am-2pm Kings Langley: 3rd Saturday each month

Also the main St Albans market on a Wednesday and Saturday has a wide range of fruit & veg, fish, bread, cheese, olives, and whole foods.

Pick Your Own

Hawkswick Lodge Farm, Harpenden Road, AL3 6JG (range of soft fruit, June to August)









Transition Streets 4.3 REDUCE FOOD PACKAGING

Cost: none

£ Savings: none-low

Effort: low

CO2 saved: lowmed

Our shopping bags are bulging, bins are overflowing, and we're running out of landfill sites to dispose of it all. We're being swamped by packaging - and food packaging is a major culprit.

In fact, one-sixth of the average household food budget goes on packaging and it makes up a third of our household waste. (5)

Yes but... what about the supermarkets and suppliers – what are they doing? The amount of pointless packaging has to be reduced. Shrink-wrapped swedes and cucumbers, apples in polystyrene trays and tubes of tomato purée in cardboard cartons are examples of unnecessary packaging.

Businesses are under Government orders to recycle their packaging waste, and now many food producers have signed up to a voluntary agreement to reduce the amount of packaging used, called the Courtauld Commitment. If progress is not fast enough, the government promises to intervene.

To understand better the ethics & environmental impact of supermarkets, have a look at the (slightly dated, but still interesting) article on the comsumerwatch.org.uk website "What's wrong with supermarkets".

Otherwise, until such a time as <u>they</u> all act, <u>we</u> can take responsibility for reducing the amount of packaging waste that we bring into our homes.

- Take your own bags and tupperware to the shops with you
- Don't buy food with excess packaging
- Avoid packaging that can't be recycled
- Recycle or reuse everything you can





Your savings

Bagged produce tends to cost more than loose. For example, bagged onions in Sainsbury's cost £2.22 a kg whilst loose they are only 90p a kg. Apples cost £2 for a tray of 4 but only £1 for 4 when bought loose.

Ready-chopped food stuffs last less time & cost more; lettuce leaves sold as bagged salad costs £1, a lettuce costs 80p for twice as much.

It all adds up; why pay for packaging you just throw away? Taking your own bags will save you money and reduce waste.

Notes:

Next steps, hints & tips

- Buy fruit and vegetables loose or in paper bags from local shops and markets.
- Take bags with you to the shops.
- Always carry a spare bag for spontaneous shopping!
- Choose larger sizes rather than individually packaged portions.
- Buy a single larger size container (e.g. yoghurt) and decant it.
- Buy re-fills e.g. for washing powder and other detergents.
- Look for biodegradable packaging, e.g. cardboard or cornstarch based.
- Use the local milkman who will deliver in glass bottles (www.milkandmore.co.uk).
- Look for products that come in recycled or lighter materials.
- Ask shop managers and takeaway outlets what they're doing to reduce packaging and insist they step up their efforts.
- Re-use or recycle all the waste packaging that you can.

More info: see www.recyclenow.com for more info on the Courtauld agreement and what manufacturers are doing. See Chapter 5 of this info pack on waste . Go to www.wasteaware.org.uk for recycling

Transition Streets 4.4 REDUCE FOOD WASTE

Cost: none

£ Savings: lowmed

Effort: low

Around a <u>third</u> of all the food we buy ends up being thrown in the bin and most of this could have been eaten. Wasting food costs the average family hundreds of pounds a year and has serious environmental implications too.

When food is disposed of in a landfill site, it rots and becomes a significant source of methane. Methane is more than 20 times more potent than CO2 as a greenhouse gas. So it very important to reduce methane emissions as well as CO2. If we all stop wasting food that could have been eaten, the CO2 impact would be the equivalent of taking 1 in 5 cars off the road (england.lovefoodhatewaste.com).



A number of issues lie at the heart of this problem:

- A lack of planning when food shopping we buy more than we need, and then it goes off (often seduced by special offers).
- Poor food storage knowledge things go off sooner than they would if we knew how to keep them fresh.
- A lack of confidence around cooking e.g. how to make tasty food from leftovers, portion control.
- Confusion over food date labels e.g. best before versus use by.

Of course, some food waste is unavoidable. Home composting or using your "green bins" from the Council minimises the impact.

Yes but... I love my food and don't want to do without! Reducing food waste and saving money does not mean cutting down on the pleasure of eating. If anything, planning well, eating well, saving money and reducing CO2 will leave us with a small glow of self-congratulation.

Food challenge



CO2

saved:



Your savings

The average household wastes £480 a year, rising to £680 for a family with children. Save on your food bill by following these simple steps >>>

Notes: spend less. degrees).

Next steps, hints & tips

- We often waste carbs rice, pasta, potatoes & bread. Keep bread in the freezer & take out half a loaf at a time. Freeze left overs for a lazy day...
- Measure portions more accurately e.g. portion of rice = ¼ of a mug. Use the online portion calculator at www.lovefoodhatewaste.com
- Plan meals ahead, and write a shopping list accordingly. You will save time and spend less.
- Share favourite recipes with friends. Swap ideas with your Streets Group.
- Keep essentials in the cupboard, fridge and freezer and you will always be able to make a meal.
- Know about dates Use-by : never eat products after this date. Best-before: you can still eat them but they might not taste as good.
- Keep an eye on dated produce & eat it in time, or else freeze it.
- Ensure your fridge is cold enough (1-5 degrees).
- Learn how to use leftovers. Try www.bbcgoodfood.com/content/recipes /favourites/leftovers/.

More info: www.lovefoodhatewaste.com – government funded website

Transition Streets 4.5 WHY TRY ORGANIC?



Cost: none-med

£ Savings: none-low

Effort: low

CO2 saved: lowmed

- Some organic food has been shown to have higher nutritional values than non-organic; milk for example. Organic milk is on average 68% higher in Omega 3 essential fatty acids. (6)
- Organic food is grown without pesticides and fertiliser. The production of these chemicals makes a large contribution to the greenhouse gas emissions caused by the food & farming industry. To produce just 1 tonne of fertiliser takes 1 tonne of oil, produces 7 tonnes of greenhouse gasses & takes 100 tonnes of water. (7)
- Non-organic leafy greens, potatoes and strawberries are particularly heavily-sprayed with chemicals, and washing cannot remove all the residues. You are therefore eating a residue from these chemicals with your food.
- Organic animals are not subjected to routine use of antibiotics. These drugs can end up as residues in the food we eat and in the water system. Eating organic meat avoids these residues.
- Plant, insect and bird life is up to 50% greater on organic farms. Organic farming relies on wildlife to help control natural pests, so bugs, birds and bees flourish.







Yes but... it's much more expensive. Organic food can cost more, but if you prepare your own meals it still works out far cheaper than buying prepared convenience foods.

Why not consider eating a few vegetarian meals a week, made with organic vegetables, and this could help to offset the additional cost.



Your savings

It can be cheaper to buy organic produce using a box delivery scheme rather than supermarkets (and there is a <u>lot</u> less packaging).

In December 2012 we compared prices for boxes against the same goods from the supermarkets:

(1) large fruit box

- Abel & Cole :
- (1) £13
- Riverford :
- (1) 13.45
- Sainsbury's :
 Waitrose :
- (1) £15.33 (1) £15.82
- (2) a medium veg box
- (2) £15.50 + £1 delivery
- (2) £11.95
- (2) £16.07
- (2) £17.04

Notes:

Hints & tips for paying less for your organic food

- Bulk buy with friends or neighbours (or your Transition Streets group).
- Buy a weekly vegetable/meat box (see earlier).
- Grow some of your own organic food (see later page for ideas).

More info: www.soilassociation.org

Transition Streets 4.6 GROW YOUR OWN (GYO)



Cost: low

£ Savings: med

Effort: low-med

CO2 saved: lowmed

Food challenge

Solution

By growing your own food you are starting to become less reliant on the big shopping conglomerates. Rising food costs, supply disruption and concerns over food quality all raise questions about the source of the food we eat. For example, if we have another fuel protest and supermarket shelves quickly empty, do you have any means to supplement what's in your freezer and cupboards with fresh, healthy produce? As food prices continue to rise, can you help protect your weekly food budget?



Anyone can grow their own fruit and vegetables, even when space is limited. Pots, window boxes and hanging baskets can all be turned into mini-food gardens, and give you months of delicious produce. Plus it's a wonderful, empowering feeling to eat what you have grown. Here are some easy to grow food items:

- Potatoes can be in tubs or old sacks, top them up as leaves grow
- Garlic store what you don't eat for a year round supply
- Mixed salad leaves cut and come again varieties are great
- Strawberries stick a few plants in a hanging basket
- Runner beans they look lovely climbing up canes or sticks
- "Trained" fruit trees take up almost no space against a sunny fence
- Rhubarb needs little attention and gives fruit early in the season

Yes but.... I do want to grow things but have no outside space at all.

Join TiK Food Group; do a couple of shifts a month and share in the produce. Or share with a neighbour who struggles because of age, illness, or busyness? Or you could register for your own allotment with your local parish council (see next page).



Your savings

Depends what you grow – but for example, a lettuce can cost £1 in the shops and a packet of seeds gives you about 250 lettuces for a similar price. Share seeds amongst your Streets group?

According to one study if you grow 5kg of tomatoes instead of buying them in a shop you could save around £20.

Yes but... It's a lot of work! Yes, it takes some effort to set up your kitchen garden (which can help you keep fit) but when designed well, it can also be very low maintenance. Research 'permaculture' principles for inspiration.

Notes:

Next steps, hints & tips

- Have a look at your outside space; what could you fit in? Containers? Hanging baskets? One flower bed becoming a veg bed instead?
- Visit the demonstration garden outside the Courtyard Café on Hatfield Road for inspiration and a nice cuppa.
- Get some seeds, plant them, water them, wait a while, then eat!
- Come along to one of the "dig" sessions at Rectory Farm in Kings Langley, WD4 8HG to join and learn about food growing
- Find out more about basic skills online at sites such as the RHS grow your own section at <u>www.rhs.org.uk</u> or <u>www.allotment.org.uk</u> or <u>www.bbc.co.uk/gardening</u>.
- Join a local gardening course, or get a book from the library.
- The recycling centres and garden centres often have 2nd hand pots Available; ask when you're there

To register for an allotment: write to Odilia Kirst -odiliakirst@yahoo.co.uk for a Biodynamic allotment on Chipperfield Road, or for a council allotment www.abbotslangley-pc.gov.uk/allotments-primrose-hill.html

Transition Streets 4.7 CARING CARNIVORES

Cost: none

£ Savings: lowmed

Effort: low

CO2 saved: lowmed

STREET

Recently, the UN made the headlines by suggesting that we all eat less meat, in order to help tackle climate change. They estimate that meat production accounts for nearly a fifth of global greenhouse gas emissions. Livestock farming can also cause deforestation & loss of biodiversity.

Generally, the higher up on the food chain you go – from plants to animals, say – the bigger the energy trail left behind by their production. It's not only what went into raising the animal you are eating, but also what went into producing its food. Compared to the amount of vegetarian food you can produce on the same piece of land, livestock reared for meat exacts a very heavy toll.

According to the World Health Organisation, Britons eats twice the amount of protein they need. Given we don't need to eat so much meat, replacing some of it with vegetarian options can save money on the weekly shop, and help the environment at the same time.

Food challenge

Choose the type of meat more carefully. For example, it takes 4 calories of plant protein to make 1 of chicken protein, while the ratio for pork is 17:1; for lamb, 50:1; and for beef 54:1. Red meat production takes lots of energy & diverts grain from other food uses.

have signed up for Lots of people "Meat Free (http://www.meatfreemondays.com/). Try starting Mondav" day week. to have meat free per and increase 1 it

Yes but.... I'm a vegetarian so I'm OK. Vegetarian diets that include lots of milk, butter and cheese would probably not noticeably reduce emissions because dairy cows are a major source of methane, a potent greenhouse gas released through flatulence.





Your savings

In addition to money saved on your weekly shop (from buying less meat), you can improve your health. Of course, these savings will depend on what meat you buy and how often. Some people choose to eat less meat, but to buy organic quality when they do purchase it.

A diet with less meat generally boosts the intake of fibre, fruit & vegetables, & generally lowers the intake of saturated fat. This dietary pattern helps to reduce the risk of chronic diseases such as cardiovascular disease and some cancers.

Notes:

Next steps, hints & tips

- You don't have to give it up! Gradually reduce the number of days you eat meat per week.
- Eat more white meat (chicken and pork) rather than red. They have less impact in some ways as they come from animals that don't produce methane!
- Eat local meat, preferably pasturefed, to avoid emissions from long distance transport.
- Consider alternatives to dairy there are lots of options available for cheese, milk, cream, yoghurt etc.
 – although know that soya may have travelled thousands of miles, from where it is grown in what was the Brazilian rainforest.
- Try new vegetarian, dairy free recipes. Plenty of choice online e.g. www.vegsoc.org/cordonvert/recipe s or www.bbc.co.uk/food/recipes or see cook books in the library.

 The next time you decide to go out for dinner, try a vegetarian restaurant or the veggie options – see for yourself how good it can be.

More info: The Vegetarian Society www.vegsoc.org.uk www.guardian.co.uk/food/environment pages for both sides of the



Energy saving tips when cooking

- Only boil the water you need in your kettle, and de-scale it occasionally.
- Cut food into smaller pieces to speed up the cooking time.
- Use the right sized pan for the job and right sized hob ring for each pan.
- Keep lids on pans as much as you can, to reduce heat loss turn the heat down when it reaches the boil.
- Keep the oven door shut as much as possible; make sure the glass door is clean so you can see what's going on.
- Cooking big batches of food at once is more energy-efficient. Storing spare portions in the freezer gives you a supply of ready meals.
- Defrost food in the fridge overnight rather than micro-waving it.
- Cover food with a microwave-safe lid or pierced cling film to hold moisture and speed up cooking times in the microwave.
- Is a microwave better than the hob / oven? It depends;
 - If you are cooking something small to medium sized (e.g. baked potatoes, vegetables, ready meals, lasagna), a microwave is always more efficient in terms of energy consumption.
 - . If you are cooking several things at once (like a roast + veg + potatoes) then a conventional oven is probably better.
 - A good rule of thumb is to compare the time. If it takes less time in the micro, then it takes less energy.

Notes:



Transition Streets 4.9 YOUR FOOD ACTION PLAN



Reminder

Possible actions:

- Buy local, seasonal foods (4.2)
- Reduce food packaging (4.3)
- Reduce food waste (4.4)

- Why try organic (4.5)
- Grow your own (4.6)
- Caring carnivores (4.7)
- Cook efficiently (4.8)

What other ideas does your group have that aren't covered above? Add them below if you think they are relevant for you...

My actions	When I'll do this	Notes

Between now and the Waste meeting try and do the following things:

- Work on the food actions (above) and keep working on your energy and water actions (2.14 & 3.10)
- Read the waste chapter and note any actions you want to explore
- Try and be aware of what you buy & how you dispose of the waste;
 - how much is in your black bin when you take it out to the kerb?
 - is anything in it that could be recycled? Or not bought at all?
 - how full are your green & recycling bins?
 - is anything in them that could be avoided?



If your group has time left, then discuss the bigger picture.

We saw in the first action that buying local, seasonal, organic food from independent shops and markets has environmental and financial savings, as well as helping our local economy to thrive. However, most of us shop at Tesco, Aldi, Sainsburys and Waitrose etc.

- What benefits do these large supermarket chains offer us?
- What are the downsides?
- How important is a strong, local food system to our town and our community?

• How might you overcome some of the barriers to supporting local shops and markets, and buying organic produce?

Notes:

Transition Streets FOOD CHAPTER - REFERENCES



- [1] www.corporatewatch.org.uk
- [2] BBC NEWS : Food prices across the ages http://news.bbc.co.uk/1/hi/business/7213462.stm
- [3] www.corporatewatch.org.uk
- [4] Eating Oil: Food in a changing climate (2001) published by Sustain and the Elm Farm Research Centre
- [5] www.wrap.org.uk –
- [6] www.soilassociation.org
- [7] www.soilassociation.org & www.globalhealthandfitness.com/organic
- [8] http://www.confusedaboutenergy.co.uk/index.php/energy-saving-tips/cooking/120microwave-cooking-vs-conventional-cooking#.VA4cTfmwJcQ

5. Wasting away





Tonight's meeting is on Waste

But first!

Discuss how you have all got on with your actions from the Food chapter. (Your action plan is in section 4.9).

What have you all achieved? What was hard? What do you still want to get done?

Notes:

Transition Streets 5.1 INTRODUCTION - WASTING AWAY



The facts about waste are shocking (1);

- In 2010, total waste generated in England was estimated as 177 million tonnes.
- The waste that we produce costs UK businesses £885 million to manage. Waste management costs to local authorities for 2011-12 are estimated at £3.2 billion.
- UK householders spend £12.5b every year on food that is wasted.
- It is estimated that £140m p.a. of used clothing goes to landfill
- Almost 25% of used electrical products taken to household waste recycling centres each year could be reused, with a value of £200m.

The facts

The good news is that household recycling has risen from 11% in 2001 to 43% in 2013, and more than half of business waste is now recycled. (2) This figure is over 50% in Dacorum and Three Rivers district, with a target of 60%. (3)

Reducing the amount of waste we produce will:

- Save resources many discarded products contain resources that are running out. Using them longer saves digging up even more.
- Save energy making new goods takes energy better to keep the old ones in use as long as possible.
- Reduce climate change rotting rubbish produces methane, a greenhouse gas 21 times more potent that CO2.

Recycling is important, but it is even more important that we try to use less stuff in the first place. The options for dealing with waste, in order of preference, are:



- 1. Avoid do you really need it?
- 2. Reduce do you need as much of it?
- **3. Reuse** can it be fixed, used by others?
- **4. Recycle** can it be broken down and used again?

5. Landfill and incineration – the last resort.



Each of these actions will help you reduce the amount of waste that you produce. In your group, have a brief chat about each item and then decide which ones you want to tackle and when.

5.2 The Story of Stuff (don't need it? don't buy it) – learn more about the impacts of our <u>excessive</u> consumption (of course, we all need to buy the essentials) and see if this affects your buying decisions.

5.3 Reduce & reuse – ideas for making things go further.

5.4 Recycling – make sure you know exactly what we can recycle, when and where, in Dacorum and Three Rivers districts.

5.5 Make your own compost – for anyone who loves to grow things and is ready to take care of their own compostable waste.

5.6 Waste-free celebrations - how do you enjoy Christmas, birthdays and parties without creating loads of waste? Record your own action plan in section 5.7.





Please watch the Story of Stuff

The "Story of Stuff" can be watched free on-line at <u>www.storyofstuff.org/movies-all/story-of-stuff/</u>.

"From its extraction through sale, use and disposal, all the stuff in our lives affects communities at home and abroad, yet most of this is hidden from view.

The Story of Stuff is a 20-minute, fast-paced, fact-filled look at the underside of our production and consumption patterns. The Story of Stuff exposes the connections between a huge number of environmental and social issues, and calls us together to create a more sustainable and just world.

It'll teach you something, it'll make you laugh, and it just may change the way you look at all the stuff in your life forever." The film is American but entirely relevant for the UK too.







Having watched the DVD, discuss the following questions in your group (but do keep an eye on the time – spend no more than 15 minutes on your discussion):

1. What are some ways that we could change our economy to work less and live more? How can we hasten those changes?

2. How can we, our community, and our government focus less on consumer goods and more on things that really matter?

3. For those of us with children, how do we bring them up so they don't want lots of "stuff" that they don't need.

At just 22 weeks old, an average UK citizen will be responsible for the equivalent emissions of the greenhouse gas carbon dioxide as someone in Tanzania will generate in their whole lifetime. - Andrew Simms (2006) UK Interdependence Report, New Economics Foundation

Notes:

Transition Streets 5.3 REDUCE & REUSE

Cost: none

£ Savings: lowmed

Effort: low

There are so many things we can do to reduce what we buy and reuse it. Share ideas in your group. Here are just a few:

- Get off the junk mail hit list register at www.mpsonline.org.uk
- Buy things from charity shops toys, books, clothes... this means you are also supporting good causes and saving money. Donate stuff too.
- Use rechargeable batteries instead of throwaway ones.
- Give your magazines and comics to your local surgery or neighbour.
- Avoid buying anything "single use" like paper plates, plastic cutlery.
- Save plastic bottles and refill them with water to take next time.
- Get milk delivered to your door each bottle is reused 12 times try www.milkandmore.co.uk or www.findmeamilkman.net.
- Get rid of things online! Try www.freecycle.org or www.eBay.co.uk
- Take re-usable shopping bags wherever you go.
- Buy or get free 2nd hand stuff on freecycle, MySkip, Ebay, Vskips etc
- Buy things with little/no packaging; leave it at the shop if you dare!
- Use microfibre cloths rather than kitchen towel and hankies rather than tissues
- Some charity shops welcome plastic bags
- Using disposable nappies? Try washing and re-usingcloth ones

• Set yourself a one week challenge to buy no "things" all week except for food and health essentials. How did you do? Was it easy or hard?

Notes:



CO2

saved:

Transition Streets 5.4 RECYCLING

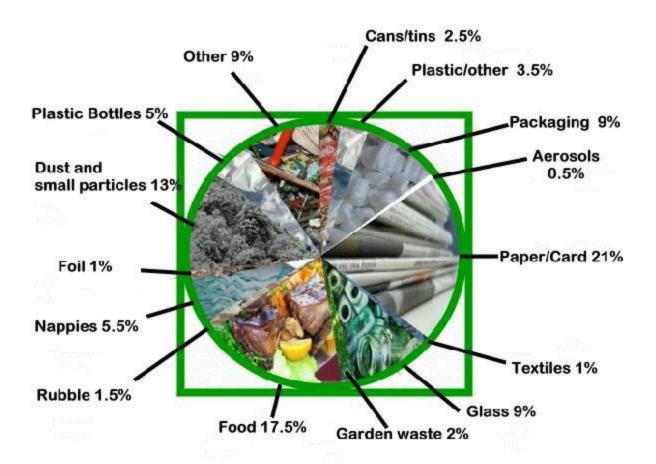


(3)

A large percentage of UK households still don't recycle enough, and throw everything that they consider "rubbish" into their ordinary bin.

Much of this waste can be recycled and should be disposed of separately from general household waste. Look inside this rubbish bin to see how much of the contents should actually have been recycled.

What does your bin look like today?



Transition Streets 5.4 RECYCLING (Cont.)



£ Savings: none-low

Effort: low

CO2 saved: lowmed

Now we have thought about not buying as many things in the first place, let's look at how best to dispose of the stuff we do actually need. Recycling helps conserve important raw materials, energy and natural habitats for future use. It also reduces greenhouse gas emissions, which helps to tackle climate change.

The precise benefits of recycling depend on the material you're Recycling; for example, recycling aluminium saves 95% of the energy of making it from scratch, while recycling glass saves 25%. That said, glass can be recycled again and again without losing its clarity or purity. Recycling saves the UK 10 to 15 million tonnes of CO₂ annually, equivalent to taking 3.5 million cars off the road. ⁽⁴⁾

What to recycle and where you can do it can be confusing, so this section tries to gives you all the information that you need.



Yes but... doesn't everything we 'recycle' end up in landfill somewhere in the UK anyway? No - the government's Waste & Resources Action programme (WRAP) states that it is all recycled in the UK, or elsewhere. Even if it's recycled in China there's significant carbon savings to be had. (Recycling in China can make real sense; since the ships that bring us "stuff" would otherwise return empty, and the materials are needed in China to be recycled into more "stuff".)

I just don't have room to put it all. Find a system that works for you. Most of it lives outside, in the boxes supplied by the council. In the kitchen/utility, some people have one mixed recycling box that they then sort to the boxes outside; others have several small bins so they sort straight away. It takes up room but it's worthwhile.







Refuse collection in Dacorum and Three Rivers districts follow the same general principles, although they use different coloured recycling bins and boxes:

	Dacorum	Three Rivers
• Food waste	Green caddy	Grey food pod
Garden waste	Green wheely	Brown wheely
 "Dry refuse" including: 	Blue lidded	Blue lidded green wheely bin
 newspapers, magazines and cardboard 	grey wheely bin	
 cans, foil, plastic bottles Tetrapaks and aerosols 		
3) Glass bottles and jars		
 Anything else that doesn't go in the above bins or boxes 	Black or grey wheely bin	Green wheely bin
For a full list of what can go in		

each bin or box, read on ...

- Make space next to your bin for recycling containers then it's as simple to recycle as it is to throw it away.
- Make a visit to a recycling bank part of your routine there are recycling facilities in many supermarket car-parks, Homebase, public car parks plus the Recycling Centres in Bricket Wood and Hemel Hempstead .
- Glass jars just give them a rinse and recycle them with your other glass. Don't worry about removing labels.
- Shampoo and shower gel bottles are often forgotten rinse out those empty bottles whilst you're in the shower.

For what to recycle and when it is collected see <u>www.dacorum.gov.uk</u> or <u>www.threerivers.gov.uk</u> and the "Rubbish, waste and recycling" section. For general information about recycling see <u>www.recyclenow.com</u>



Paper and flattened cardboard



DO recycle all paper (including **yellow pages** and **envelopes**) greasy, waxed or shiny wrapping paper (put in the "anything else" bin).

No need to remove windows from envelopes or tape and staples from cardboard . These can now be removed in the recycling process.

DO put your cardboard in with your paper waste.

Flatten and **tear** large pieces to fit in your recycling bin **OR** leave very large pieces of cardboard next to your bin.

DON'T put your cardboard in with **garden waste** any longer



Rigid plastics, aluminiun cans, tins, aerosols, cartons



DO put **plastic bottles**, **tubs**, **trays** or **pots** in your blue lidded "dry refuse" bin. **YES** to **margarine** and **ice cream tubs**, **yoghurt pots**, **plastic food trays** and **punnets**.

YES to cans, foils, aerosols and Tetrapaks

DON'T put **plastic bags** out for recycling. You must now take these to certain supermarkets.

DON'T put **cellophane**, **polystyrene** or **film wrapping** in your recycling box.

Glass bottles & jars



DO put all glass bottles and jars in your blue lidded "dry refuse" bin

NO drinking glasses, light bulbs, spectacles, mirrors, plate glass, pyrex or other heat treated glass.

No broken glass please to avoid accidental cuts during collection. You should take broken glass to your local Household Waste Recyling Centre (see later).



Food waste



Your food caddy or pod is collected every week.

DO use **corn starch bin liners**, paper liner or wrap food tightly in newspaper.

DO use paper or kitchen towel to clean your bin regularly.

Corn starch bin liners are available at many supermarkets and online.

DON'T put liquids or very wet food in your caddy, as this will break the paper liner.

DON'T put food waste in with your garden waste

DON'T put **cardboard** in with food or garden waste (it should go in the blue lidded "dry refuse" bin)

DON'T put **soil** in with food or garden waste





YES to everything else that can't be recycled

Except paint, building rubble, metal, electrical goods, construction & demolition waste. Please take these to a Household Waste Recycling Centre

All of this information and more is available on the Council websites: <u>www.dacorum.gov.uk</u> and <u>www.threerivers.gov.uk</u> Look for "recycling"

An excellent site to refer to for advice is the Wasteaware website: http://www.hertsdirect.org/services/envplan/waste/wasteaware/

Notes:



Local Recycling Centres

Bulky items and materials that the District Council can't collect should be taken to the Household Waste Recycling Centres at St Albans Road, Garston (near M1), WD25 OPR and Eastman Way (Cupid Green), Hemel Hempstead, HP2 7DU

They also have ReUse centres where you can donate and buy used furniture and household items at a low cost.

For further information look at <u>www.wasteaware.org.uk</u>

What can be taken to the Household Recycling Centres?

Aluminium foil Batteries (Domestic & motor) **Book ReUse** Cans (Aerosol) Cans (Aluminium) Cans (steel) Car batteries Cardboard **CDs DVDs** Electrical appliances (WEEE) Fluorescent lighting tubes Food and drink cartons Fridges and freezers Glass Green garden waste Low energy light bulbs **Metals Mixed** plastics

Mobile phones Oil (Cooking) Oil (Engine) **Ovens/Hobs** Paper Plasterboard Plastic (Rigid) Plastic carrier bags Plastic food packaging Shoes Soil conditioner Textiles **Toner cartridges** TVs and monitors Tyres White goods Wood **Yellow Pages**



The baffling world of plastics

Is anything harder than figuring out what to do with plastics? (Which is one of the reasons why trying to reduce your use of them is such a good idea.)

The kerbside collection takes: plastic bottles, tubs, yoghurt pots, plant pots and trays, ice cream tubs, meat trays and the like.

The recycling centres take (as of June 2014):

- All of the above, plus
- Rigid plastics (garden furniture, children's toys, crates, storage containers, hard plastic tubs, buckets, waterbutts and dustbins)
- Plastic carrier bags (loose and empty, not in a big ball)

What about all the other stuff that I can't recycle here?

Check <u>www.recyclenow.com</u> to find out what can be recycled locally and where to send the stuff that can't. For example, used mobile phones can be sent free of charge to several charities. Some commercial organisations will pay you for your old phone.

Where else can I recycle?

- Carrier bags can be recycled at supermarkets
- Batteries can be recycled inside shops and supermarkets which sell them e.g. Tesco/ Wilkinsons
- Small electrical items can be taken to some supermarket recycling banks
- clothes and textiles; high quality items go to charity shops for re-sale (e.g. Oxfam, Sue Ryder, Cancer Research, Scope, etc) and worn out items can be placed in the clothes bins in many supermarket carparks

Transition Streets 5.5 MAKE YOUR OWN COMPOST

Cost: none

£ Savings: low

Effort: low

CO2 saved: low

REE

When we throw away food, we waste money and create landfill gas (see chapter 4 on food). Our local councils collect food waste and sends it to the Agrivert plant in South Mimms to be turned into organic compost. (At compost "give-aways" it is then given free to any gardener in the area who comes to collect it.)

However, if you grow anything at all, then with very little effort, you could soon be treating your garden to a nutritious diet of homemade compost - a climate-friendly alternative to store-bought, peat-based versions.

The first benefit of composting that you'll notice is a flourishing garden or window-box. Compost improves the nutrient levels of your garden's soil. It also reduces erosion and increases its water retaining capacity. It will reduce your dependency on expensive, commerciallyavailable products which deplete valuable, carbon-storing peat bogs.





Why use non-peat compost? Lowland peat bogs and their wildlife are threatened through peat extraction for garden composts. Dragonflies, butterflies and birds depend on peat for their survival. Across the globe, peat covers about 3% of global land surface, yet the amount of carbon stored within it is enormous - equivalent to twice that of all the world's forests combined. Peat develops very slowly, and so when peat is mined for garden compost it takes 1,000 years to replace every metre that is taken away. (5)

Yes but... I only have pots and window-boxes, not a garden. You don't need to have a garden to make and use your own compost. Technology has caught up with modern, compact living and today's bins and wormeries are totally sealed and come in a range of sizes. Once the composting stage is over, add the mix to a window-box or give it to a gardening neighbour.



You can make a traditional compost heap, or use a worm bin. There are many containers now on the market for making compost, although perfectly satisfactory ones can be constructed from scrap timber, old tyres, bricks or wire mesh. Advice on making a compost heap is widely available - see references below. The council subsidises compost bins (starting from £16) and they can be bought through <u>www.herts.getcomposting.com/</u> or at garden centres.

A worm bin is a container housing a colony of special types of worm. Worm bins can be kept indoors (with careful management) or out, and are ideal for households with no garden, as they produce only a small quantity of compost and a liquid, which forms a concentrated plant food. There are a variety of worm bins available for sale, complete with "worm starter kits".



Do compost	Don't compost		
Fruit and vegetable waste and peelings	Cat or dog excrement - contains dangerous organisms that won't be killed by the decomposition process		
Tea bags and coffee grounds	Meat - attracts vermin and flies - unless you're using a Bokashi system		
Crushed egg shells	Dairy produce - attracts vermin and flies		
Grass cuttings, leaves	Fish - attracts vermin and flies		
Shredded paper and soft cardboard	Disposable nappies - attract vermin and flies		
Human and animal hair	Shiny card - because of the chemicals used in the printing process		
Vacuum dust (only from woollen carpets)	Hard objects like fruit stones		

For more info on making compost or using wormeries see: www.recyclenow.com or www.gardenersworld.com . Buy them from garden centres or <u>www.herts.getcomposting.com/</u>. (There can be discounts for buying more than one, so why not order with someone in your group?)

10

Transition Streets 5.6 WASTE FREE CELEBRATIONS

Cost: none

The problem

£ Savings: lowmed

Effort: med

It's one thing to cut back our own consumption, but what about special occasions? What about birthdays, Christmas, other religious Celebrations, and parties (especially children's parties)?

Does it matter? Well, according to WasteAware;

 the amount of wrapping paper estimated to be thrown away in the UK at Christmas could stretch around the equator nine times.

• In the UK approximately 250 tonnes of Christmas trees that could have been recycled are simply thrown out after Christmas.

• Every year the UK throws out an estimated 4,500 tonnes of tin foil over the Christmas period. This is enough to cover Suffolk!

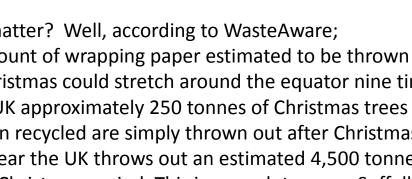
• 13,350 tonnes of glass is thrown out in the UK during the festive season – from champagne and sherry bottles to mincemeat and cranberry sauce jars. Recycling all of them could save the equivalent CO2 to taking around 1300 cars off the road for one year.

We know it's wrong to be so wasteful, but it's hard, socially, to question the rules. Share ideas in your group about things you've done to try and cut down on wasted "stuff" on occasions like this.





Notes:





CO2 saved: low-

med



Ideas to make gifts less wasteful:

- Buy presents that will *last*. This is probably the most important thing; buy gifts that will still be being used in 5, 10, 20 years time.
- Buy experiences rather than "things". Theatre & spa vouchers for adults. Trips out for kids. Gifts of time, like offering to babysit for a busy parent.
- Buy things that are made locally and / or from recycled materials. Buy from local shops. There are loads of lovely gift shops in The Langleys. Yes, you can't "One Click" so you need to plan ahead a little more.
- Club in together for one bigger present not lots of little ones; this is especially true of children's parties where one parent can arrange it on behalf of the others.

Ideas to make parties less wasteful:

- use real glasses not disposable. You can hire them for free, e.g. from Sainsburys
- use real plates and cutlery not disposable
- set up the recycling system at the beginning of the party so nothing needs sorting at the end when you are tired.
- party bags for kids; give one meaningful thing that will last, not lots of little things.



Notes:



Share your tips for a green Christmas. Here are a few ...

Trees and Decorations

- Buy a living tree with roots in a pot, then keep it in the garden during the year. Remember to water it well.
- Make your own decorations (there are lots of ideas on-line) i.e. dried oranges, or biscuits. Use the little trays from your mince pies. Raid your recycling box!
- If you buy decorations, buy ones made from wood or other natural materials
- Buy low energy LEDs or solar lights if you need new ones

Cards & wrapping

- Buy cards made from recycled materials, and then recycle them!
- •Use eCards or email. Buy an Oxfam Good Gift (or similar) with the money saved
- Deliver local cards on foot or bike
- Instead of shiny metallic paper, use recyclable paper, or replace it with pillow cases and ribbon, or newspaper and ribbon.

Food

- Plan ahead and don't over purchase. Plan how to use the leftovers.
- Replace some of the meat dishes with vegetarian ones.

On the day

- Have rechargeable batteries ready and charged
- Have bags ready for recycling and sort straight away

And finally, question the "rules" a little about Christmas. Make it your day, that works for your family.



Notes:

Transition Streets 5.7 YOUR WASTE ACTION PLAN



Suggested actions

- Cut your spending don't buy in (5.2)
- Reduce buy less (5.3)
- Reuse fix it or give it to someone else (5.4)
- Recycle recover materials (5.5)
- Make your own compost (5.6)
- Waste free celebrations (5.7)

What other ideas does your group have that aren't covered above? Add them below if you think they are relevant for you...

My actions	When I'll do this	Notes

Between now and the transport meeting try to do the following things:

- Work on the waste actions (above) and keep working on your energy water and food actions (2.14, 3.10 & 4.9)
- Read the transport chapter & note any actions you want to explore
- Try and be aware of the journeys you and your family make;
 - try and notice car journeys with just one or two people in the car. Was there a reasonable alternative? (See sheet at 6.10.)
 - try and work out roughly how much you spend on travel (bus & train tickets, petrol, flights) each year?

Reminder

Before next time

Transition Streets FOOD CHAPTER - REFERENCES



[1] Prevention is better than cure - The role of waste prevention in moving to a more resource efficient economy

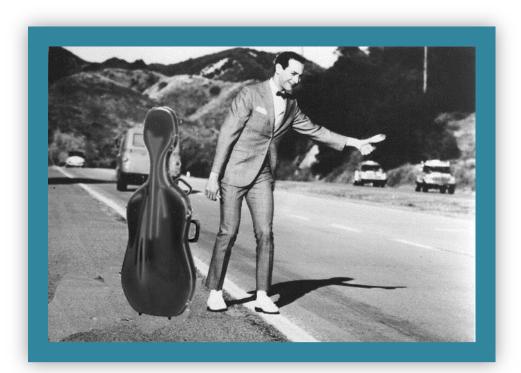
- [2] www.wrap.org.uk/
- [3] Dacorum Council website, or Three Rivers Council website
- [4] <u>www.recyclenow.com/</u> Going greener in the garden
- [5] National Trust Information about going peat-free



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6. Getting around





Tonight's meeting is on **Transport**

But first!

Discuss how you have all got on with your actions from the Waste chapter. (Your action plan is in section 5.7).

What have you all achieved? What was hard? What do you still want to get done?

Notes:



Our decisions about how we get from A to B can have far-reaching effects. Planes, trains and cars all contribute to the growing concentration of climate change gases and pollution. But how do they compare and which is the worst?

The majority of the world's vehicles are powered by oil. Even those trains and cars powered by electricity usually rely on fossil fuels being burned in power stations.

Cars get us around in comfort and at our convenience, and surprisingly perhaps most (57%) car journeys are under 5 miles (1). Fuel prices are generally increasing (due to issues with oil supply and demand among other things) and cars are expensive to run.

Congestion, fumes and parking add to our daily stress. Our cars pollute the air right here where we live. The World Health Organisation estimates that in the UK around 30,000 people a year die prematurely due to air pollution, most of it related to road vehicles (2).

For comparison, a distance such as Kings Langley to Venice is around 1000 miles one way. Let's see the differences between our methods of transport over this kind of distance...

Transport

CO2 Emissions per passenger for 1000 miles

Plane Large Car Small Car Train Coach Bike Walking

275.8 kg 414.2 kg (one person) 138.1 kg (with 3 people) 206.0 kg (one person) 68.7 kg (with 3 people)

85.9 kg 48.3 kg 0 kg 0 kg (3)





If we can all reduce our private car use, then we can save money and our communities, both local and global, will also benefit enormously. We will also be healthier if we walk or cycle instead.

Fewer cars on the road means cleaner, less polluted air to breathe, leading to fewer asthma and breathing problems. Less cars also means more peace and quiet, and sense of space. Globally, reducing our CO₂ emissions will leave many of our fellow humans in their homes, rather than on flooded plains.

Each of the actions below can significantly reduce the cost of running your own car, as well as improving your local and global environment, while still getting you from A to B.

It can be very useful to complete a travel diary to help you understand your own travel needs, especially your regular journeys (see the example at the end of this chapter), and to identify which of the following actions are most appropriate for you.

Some of the following actions will cost you little or nothing, and those costs you do incur should be offset by your savings. In your group, have a chat about each item and then decide which ones you want to tackle and when. Record your own action plan at the end of this section.

6.2 Fuel efficient driving
6.3 Get on your bike
6.4 Walk this way
6.5 Take buses and trains
6.6 Try lift sharing
6.7 To fly or not to fly?
6.8 Holiday in the UK



Transition Streets 6.2 FUEL EFFICIENT DRIVING



CO2 saved: med

REE

Cost: none

£ Savings: med

Effort: low

yo Solution It'

Changing **how** you drive could save more energy than changing **what** you drive. Fuel-efficient driving has a huge impact on our fuel use and hence our emissions; so much so that it has been included in driving tests since 2008.

It's easy to do, in fact it's lots of little actions that add up - everything from checking your tyre pressures to taking a few miles an hour off your motorway speed.

Your savings

The way you drive can cut your annual fuel consumption by 10% translating to savings of around £120 a year for a typical car. It also significantly reduces your CO2 emissions. (5)

In fact just by driving at 70mph rather than 80mph, this reduces your fuel use and CO₂ emissions by almost a third. Also you are less likely to have or to cause an accident at lower speeds.



Yes but... If I close the windows and switch off the air-conditioning in July, I'll cook. If you're overheating on the motorway, it's more fuel-efficient to use air-con than opening the window or sunroof. At lower speeds, opening windows is more efficient.



- Get your car serviced regularly for more efficient motoring.
- Stay at or within the speed limit at 70mph you use about 9% more fuel than at 60mph, and 15% more than at 50mph.
- Keep your tyres inflated to the correct pressures. Under-inflated tyres create more resistance when your car is moving, so your engine has to work harder.
- Improve aerodynamics and reduce drag by leaving the roof rack at home and closing the windows and sunroof.
- Be gentle with your right foot rapid acceleration takes a heavy toll on your fuel tank.
- Anticipate road conditions and drive smoothly, avoiding sharp acceleration and heavy braking.
- Don't idle this uses more fuel in ten seconds than turning the engine off and on. Drive away immediately when starting from cold.
- Check your revs. Move up a gear before 2,500 rpm in a petrol car and 2,000 rpm in a diesel.
- Don't carry around unnecessary weight; empty your boot.
- Use air conditioning sparingly as it significantly increases fuel consumption at low speeds.
- Plan your journeys to avoid congestion, road works and getting lost.
- Try combining your trips; do several tasks on one trip.
- Avoid short trips; a cold engine gets through fuel almost twice as quickly as a hot one. (Conveniently, these journeys are the easiest to walk or cycle.)
- If you're stuck in a jam, switch the engine off if you expect to be there for more than a minute or two.

More info: Watch very useful 'ecodriver.org.uk' video on YouTube.

Transition Streets 6.3 GET ON YOUR BIKE



£ Savings: varied

Effort: varied

CO2 saved: varied

STREET

Solution

Cycling keeps you fit - it's fast, cheap, reliable and good for the environment. The transport of choice for the healthy and the climate conscious, bicycles are almost greenhouse-gas-free, good for the heart, and cheap - yet they account for less than 2% of journeys in the UK compared to 27% in The Netherlands. The emphasis is often put on cycling as a leisure pursuit, or something to do on Sundays with friends & family. That's fine, but the most important thing is utility cycling. It's amazing how much you can do practically with your bike; especially with a good set of pannier bags or basket.



Your savings & other benefits

- Cycling 20 miles/week reduces the risk of heart disease to less than half that for non-cyclists. Also you'll be as fit as someone 10 years younger.⁽⁶⁾
- Beat the queues; often the fastest way to get around town and you can park anywhere for free.
- •A good set of panniers on your bike can mean no more lugging all those heavy bags across town. Pack them up in the shop & pop them straight on.
- It's cheap! A good bike costs around £75/yr or less to maintain. And of course, you save on the petrol and wear and tear costs on a car.
- The exhilaration! Whizz down hills with the wind in your hair...

Yes but... what about safety? It's <u>not</u> necessarily true that you're safer in a car than on a bike. It depends upon training and riding with care. Recent research by UCL suggests that the risks per hour are very similar for driving, cycling and walking. The health benefits of cycling are greater than the fatality risk. (6)



- Buy a bike from your local shop, the free-ads or your local recycling centre, <u>www.watfordcyclehub.org.uk</u>. If you use it for work you can save 30-40% with the government's <u>www.cyclescheme.co.uk</u>
- Get your bike ready for action keep it well-maintained, and somewhere handy and accessible, along with your kit (a lock, lights, helmet, waterproofs and a high visibility vest). You can get it serviced at one of the Hemel Hempstead, Watford bike shops or use the mobile repair service cycletechherts.co.uk. You may want mudguards to reduce spray.
- mudguards to reduce spray.
 Transform your bike into a transport option, not only a leisure bike. Get some bike panniers, baskets and a rack so your bike is a realistic prospect for shopping, work and school trips.
- Work out your regular short trips and try them on your bike.
- Plan ahead leave enough time to get there. Journey times are more predictable on a bike, since traffic congestion affects you less.
- Find a safe bike route to school for your children. Cycling to school, either on a tandem, independently, or with them in a trailer / bike seat, is a great way for kids to learn road safety, and get exercise.
- Join your local cycling group (e.g. South Wests Herts Cycling Group: www.spokesgroup.org.uk) and gain confidence through cycling in a group or 'buddy-up' with someone who does the same route as you.
- Try free local SkyRides at weekends in summer (<u>www.goskyride.com</u>)

Notes:

More info: for cycling trails and courses in Hemel Hempstead visit www.mapmyride.com/gb/hemel-hempstead-eng/ for downloadable cycle routes and maps around Watford visit www.watford.gov.uk/ccm/navigation/transport-and-streets/road-markingsand-signage/cycle-lanes-and-routes/

Transition Streets 6.4 WALK THIS WAY

Transition STREETS

Cost: none

£ Savings: varied

Effort: varied

CO2 saved: varied

 \bullet Only 30% of men and 20% of women in the UK are as fit as they should be for their age. $_{\mbox{\tiny (6)}}$

• In 1971, 80% of children walked to school without an adult, by 2006 the figure was 12%. (7)

• Walking is a healthy form of exercise, burning 150-350 calories per hour, depending on your speed and weight.

Walking is the greenest and healthiest form of transport there is. As so many car journeys take place within a short distance of home, it is the first place to start when cutting back on car use. Away from the roads, there's a network of bike tracks and footpaths that can get you around just as well (and with local traffic, it can be faster!).

Notes:

Solution



Yes but... I don't have time. Are you sure? If you live within a mile of your village centre then time spent walking is a good use of time because it is a much healthier and sociable option and costs less than going by car.

It's raining and cold. There's no such thing as bad weather – just the wrong clothing! For trips to town, all you need is an umbrella and a windproof jacket. For longer walks, invest in a good set of waterproof trousers and a waterproof jacket with a hood, plus good waterproof shoes, boots or socks, then you can walk for hours staying snug and warm.



The first step

• If you travel to work or to take your children to school, try walking part of the journey either there or back. You could get off the train or bus a stop earlier or park your car further away.

• Join a group - healthy walking programmes are often organised by ramblers' groups, medical practices, councils and health authorities.

• Join the walking bus for your children's school run, or organise one.

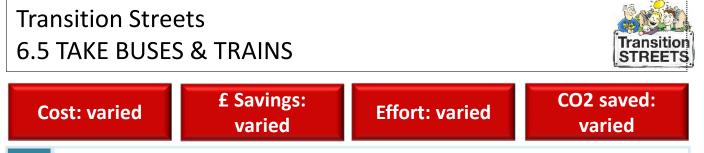
• Get the kit – waterproofs and comfortable walking shoes are essential. Wheeled shopping trolleys help with the shopping load.



Your savings and other benefits

- Walking leads to the release of the body's natural happy drugs endorphins. You'll feel good and sleep better. And save on petrol costs.
- Unlike catching the bus or train, you can set your own schedule.
- Fit walkers are less likely to fall and suffer injuries such as hip fractures because the bones are strengthened.
- Walking keeps your weight down, your heart strong, reduces blood pressure and increases bone density. And you can enjoy your local area.
- You can save 0.8kg of CO₂ by walking a 1 mile trip to the village centre & back instead of driving in a large car (3).

More info: Maps and walks here: www.walkinginherts.co.uk/index.php www.abbotslangley-pc.gov.uk/footpath-walks.htm www.walk4life.info/walk/kings-langley-common-2.5-mile-walk



 \bullet Half of us have never used the bus, yet 87% of us live within a 6-minute walk of a stop. $_{\mbox{\tiny (6)}}$

• 70% of people (outside London) travel to work by car. (6)

Buses, coaches and trains consume a lot of energy. But divide that by the number of passengers on a busy route and they're usually a far more climate-friendly option than cars or planes. We moan about public transport, but we do have local bus services, unlike much of the USA for example.

Taking the Eurostar from London-Paris instead of flying cuts your CO₂ emissions by at least two thirds. Sleeper trains across France to Italy, Spain, Germany or southern France may have fewer passengers per car than Eurostar, but on the other hand they travel at only 100mph or less, and so use far less energy than a high-speed train. (9)

Rail is a fast and relatively carbon-friendly way of getting from place to place. A train from Kings Langley Station to Watford Junction or London could be less than petrol plus car-parking.





Yes but... I don't have time to take the train or bus. It depends on the exact route you are going. Trips into town can be quicker on the bus when you take parking in to account. Long distances can be faster on the train (London to Manchester in 2 hours 7 mins) and less stressful.

The train's too expensive. According to a National Consumer Council survey, 8/10 people said they would travel by train more often if it were cheaper. However cheap deals are often available depending on the destination, and how far in advance you book. (If you have a Gold Card, you can buy a Network Card for another adult for £1 getting big savings.)

Transition Streets 6.5 TAKE BUSES & TRAINS (Cont.)



Get hold of the local bus timetables and keep them handy - there are apps for that: <u>www.catchthatbus.com</u> or <u>www.intalink.org.uk</u> Bus maps and timetables are available online or from libraries. See: <u>http://www.intalink.org.uk/timetables</u>

Try walking to town and getting the bus back; no parking problems and you don't have to carry the shopping home.

• See www.moneysavingexpert.com for ways to cut your train costs further. In fact, this is a great site for saving money everywhere!

- Try never to buy a rail ticket at the station on the day of travel. Use <u>raileasy.co.uk</u> for massive savings on early UK bookings and <u>raileurope.com</u> for the same in Europe. Also group travel on the day (4 people +) into London is much reduced.
- Use <u>www.google.co.uk/maps</u> on-line journey planner to find out how to get to your destination by any transport you chose.

Your savings & other benefits	Notes:
 If you can use only public transport then you could consider selling your car – a cash boost plus ongoing savings. 	
 Buses can certainly be a good option for getting into Hemel Hempstead or Watford and back again, where parking places are not only rare but also expensive. 	
 On trains you can work, relax, doze off and let somebody else take on the stress. 	
 If you have a gold card, you can buy a Network Card for £1 for another adult. 	

More info: <u>www.intalink.org.</u>uk is a good starting place. Traveline on 0871 200 22 33. For rail info see <u>www.nationalrail.co.uk</u>, call 08457 484950 or call in at Kings Langley station..

Transition Streets 6.6. TRY LIFT SHARING

Cost: low

Solution

£ Savings: medhigh

Effort: low

saved:

There are a few online lift-sharing (car-pooling or car-sharing) schemes where you can offer up spare seats in your car – usually on a regular journey - or find others that go your way.

If you don't fancy joining an official scheme you could always set up your own mini system of lift-sharing with friends, work colleagues, or neighbours! Ask around and see who may want to share your trip.

Your savings and other benefits

- Car-sharing commuters save an average of £350 a year compared to driving alone.
- You can also claim 5p per mile per passenger from your employer when you carry work colleagues as passengers on business trips. Read more about it on HM Revenue and Customs website.
- Enjoy the company! You might meet incredible individuals and new friends that you would never otherwise have met.



There is <u>www.hertsliftshare.org</u> using technology to better match peoples' lift share needs.

There are many initiatives using GPS, mobile phones and the web which work together for real-time info on who is going where and when. Look out for new apps which enable easier sharing.





Adopt sensible personal safety rules from an existing lift-sharing scheme (which applies to anyone who shares a car with a stranger):

- Every member is responsible for his or her own safety.
- Avoid exchanging home addresses with your travelling companion before you meet them or arrange to meet in a public place.
- Inform a friend or family member about whom you will be travelling with, when and to where.
- Safety
- Make sure you show each other some official ID so you know you're travelling with the right person.
- You are under no obligation to go ahead with any liftshare. If you have any doubts about your travelling companion, for any reason, you should avoid travelling with them.
- It is your responsibility to check that the person you are sharing with has all the legal driving documents such as driving licence, car insurance, MOT and car tax.

Notes:

More info: see www.hertsliftshare.org run by Herts County Council. There are several others www.shareacar.com/hertfordshire_carshare_about.htm, www.avego.com, www.freewheelers.co.uk and www.liftshare.com.

Transition Streets 6.7 TO FLY OR NOT TO FLY

Cost: varied

£ Savings: varied

Effort: varied

CO2 saved: high

Just one long-haul flight could produce more emissions than <u>everything else</u> you do in a year.

Over 50% of us say we are more concerned about the effects of flying than 5 years ago, but only 8% of us actually fly less.⁽⁶⁾

Challenge

UK holidaymakers find it very hard to compromise when it comes to flying. According to a survey by Loughborough University, fewer than 1 in 5 of us are trying to reduce the number of flights we take for environmental reasons. (6) Long-haul flights have the biggest climate impact of all our travel – but this seems to be a tough luxury to quit, and more of us are flying further than ever before. This makes it one of the world's fastest growing sources of greenhouse gases.

It is really the huge distances covered when we fly that is the problem and by 2050 plane travel looks set to undo all the carbon savings we make elsewhere.







But don't developing countries depend on money from tourism? While it's true that tourism is a major source of income for developing countries, this wealth will not often 'trickle down' to local people. Most of it goes to the owners of the hotels, the safari parks etc. Meanwhile the impact of the flight contributes to, for example, worsening famine in parts of Africa. And in fact 45% of air journeys in Europe are less than 500km – about the distance from London to the Scottish border. ⁽⁶⁾





Who flies? And who pays the true price? Only about 5% of the world's population has ever flown. This minority, flying more and more often, lives mostly in industrialized countries. Climate change consequences, however, mainly affect those who have contributed little to it, i.e. people in developing countries. (11)

It's almost impossible to keep our carbon footprint at a sustainable level if we fly, especially long-haul. (11) Unlike heating or washing, flying is often, after all, a luxury. So what's the alternative?

Taking the train, ferry or coach to Europe, or holidaying in the UK, can substitute for a long-haul holiday. Otherwise taking the time to travel overland can be a good solution. See <u>www.seat61.com</u> or <u>www.railbookers.com</u> for accurate info about how to get to any world destination without flying.

The debate about offsetting flights is ongoing. Friends of the Earth, Greenpeace and WWF-UK have expressed "strong concerns over [offsetting schemes'] environmental credibility". If you want to do it, try <u>atmosfair</u>, <u>climate friendly</u>, <u>myclimate</u> or <u>NativeEnergy</u>.

Your savings and other benefits

If you replace a holiday based on flying with a holiday based on train or car travel, your savings will totally depend on the relative costs of the two holidays. But there are some non-financial benefits to consider:

• The journey becomes more part of the experience, rather than just getting there. You go slower and watch the scenery and culture change. Enjoy the adventure of overnight 'couchettes' and the idiosyncrasies of long-distance travel across other countries and cultures.

- No airport queues, delays, no tiny seats eating bad food, no jet lag.
- Personal satisfaction and massive carbon savings..

More info: www.co2balance.co.uk or www.flightpledge.org.uk www.planestupid.com or www.baa.com's corporate sustainability section for both sides of the debate.

Transition Streets 6.8 HOLIDAY IN THE UK

Cost: varied

£ Savings: varied

Effort: low

CO2 saved: med-high

Solution

The UK can't be such a bad place for a holiday - after all, it attracts around 32 million overseas visitors every year. But is it a tempting enough proposition to make us give up our foreign trips? Overseas travel, as consumer surveys routinely report, ranks alongside such activities as moving house, changing bank account and passing a kidney stone as a source of stress and anxiety. Yet despite this, the environmental impact of flying, and the fact that many of us think Britain is becoming a better place to spend holidays, millions of us would still rather go abroad. In fact more Brits have been to Barcelona than Bath.



Yes but... what about the British weather? I don't want to sit and watch the rain for a week. Of course we are often put off holidaying in the UK by the risk of bad weather, and during heat waves and hotter summers we do book fewer foreign holidays. As climate change progresses over the next 60 years, popular tourist spots such as Spain's Costa-del-Sol may become too hot for us and it's predicted we'll take more holidays at home. Until then, if you want to sunbathe on a beach, the UK may not always be for you.

It's cheaper to go abroad than holiday in the UK. Hmmm can be true, this depends what you do and when you do it – renting cottages with friends, houseboats or camping are generally more affordable options.



Transition Streets 6.8 HOLIDAY IN THE UK (Cont.)



- Walking in the Lake District or the Pennines – check out all 14 National Parks at www.nationalparks.gov.uk .
- 2. Learn to surf take a surf holiday on the Cornish Coast.
- 3. Go see www.guardian.co.uk Top 10 UK lists e.g. 'Best City Breaks'.
- 4. Visit Britain's Heritage Cities such as York, Durham, Bath.
- Go to sleep in London, wake up in the Scottish Highlands on the Caledonian Sleeper train from £19 single.
- Stay in a castle in Scotland's most beautiful youth hostels - see the Scottish Youth Hostels website www.syha.org.uk.
- Hire an historic building with your friends, through the Landmark Trust or National Trust.
- 8. Stay for free on an organic farm in the UK with 'World Wide Opportunities On Organic Farms' www.WWOOF.org.uk.
- 9. Find environmentally friendly holidays at www.greentraveller.co.uk.
- 10. Go camping or caravanning see the Camping & Caravanning Club.
- Stay on a houseboat contact the Inland Waterways Association.
- 12. Volunteer, learn new skills and get a very cheap holiday at <u>www.btcv.org.uk</u>.
- 13. Go on an organised walking or cycling holiday.











Reminder

Possible actions:

- Fuel efficient driving (6.2)
- Get on your bike (6.3)
- Walk this way (6.4)
- Take buses and trains (6.5)
- Try lift sharing (6.6)
- To fly or not to fly (6.7)
- Holiday in the UK (6.8)

What other ideas does your group have that aren't covered above? Add them below if you think they are relevant for you...

My actions	When I'll do this	Notes

Your next meeting is the final one. You will wrap up and evaluate what you have achieved. Between now and then;

- Work on the transport actions you wrote down above and keep working on energy, water, food and waste (2.14, 3.10, 4.9, 5.7)
- Read the final chapter,
- Have a think about what (if anything) you would like the group to keep doing after the final meeting.

Let the Project Coordinator know the date of your final meeting.



The bigger picture

It seems that giving up our cars is one of the hardest things to do. Obviously, this is influenced by the cost and availability of suitable public transport options. Given this may take some time to change...

- What sort of changes would you need to make in your life to significantly cut your dependence on your car?
- What would your friends and family think?
- What would it take for the UK to become less car-dependant?

Notes:



Diary

You could use the form below to record your travel over the next couple of weeks. This information should help you understand more about the kind of journeys you make (especially the regular ones), and why.

Date	From	То	Reason	How I got there

Transition Streets TRAVEL - REFERENCES



- [1] www.dft.gov.uk/about/strategy/transportstrategy
- [2] www.bbc.co.uk/bloom/guides/transportemissions.shtml
- [3] www.transportdirect.info

[4] www.guardian.co.uk/starbucks-ethical-living/ethical-holidaychoices

- [5] blank
- [6] www.ucl.ac.uk/news/news-articles/1212/06122012-cycling-risk
- [7] www.walktoschool.org.uk
- [8] www.about.com:walking
- [9] www.seat61.com/CO2flights
- [10] www.monbiot.com/archives/1998/05/23/go-home/
- [11] www.atmosfair.de/index.php?id=56&L=3
- [12] www.climatmundi.fr

7. Wrapping up





Tonight's meeting is concerned with

wrapping up and looking forward.

But first!

Discuss how you have all got on with your actions from the transport chapter. (Your action plan is in section 6.9).

What have you all achieved?

What was hard?

What do you still want to get done?

Notes:



Well done! You have now completed the main content of the Transition Streets programme. This session is all about evaluating and celebrating your achievements, and deciding whether your group wishes to continue working together.

You may already have formed your own plans about the next steps for your group – for example, going again through the sessions and picking up some new actions, or starting to explore some of the Advanced (often more expensive) options presented at the end of some of the chapters.

If you decide to continue (and we sincerely hope you do) then it's probably helpful for you to agree the purpose of the group moving forward, how often you'll meet and so on.

It may be useful to plan perhaps another 7 sessions and then have another evaluation, rather than agreeing an indefinite programme.

You may wish to get more involved in other community activities that are looking at reducing our energy dependence, such as Transition in Kings Langley (who run this programme). More information is provided later in this section and if you invite the facilitator to this session they will give you more details too.

The following pages cover:

- 7.2 Final evaluation
- 7.3 Ongoing support
- 7.4 Transition Network
- 7.5 Transition St Albans
- 7.6 Your next steps



<u>Please now complete the green 'after' section of the evaluation form</u> <u>at the back of this book.</u> (At the very first meeting you did the blue columns.)

Hopefully, you will clearly see your progress as you add up the number of actions you have completed, or which are still in progress.

Also please complete the feedback section at the end of the evaluation form to let us know what you liked, and what you didn't like about the programme. <u>Many thanks</u>.

The completed forms need to be collected together and handed to the facilitator at your final meeting, or posted to the Project Co-ordinator

They are invaluable for showing the impact of the project, especially so we can feedback to our funders about what their money has achieved. They also help us to secure more funding to keep the project running.

As a group, discuss what you have achieved; what worked well and less well? What are you proud of? What proved hard to do?

Transition Streets 7.3 ONGOING SUPPORT

Transition STREETS

If you haven't already visited our websites, and you have internet access, then please see

Abbots Langley - <u>www.altta.org.uk</u>

Kings Langley - transitioninkings.org

They provide general information about the groups and events run by the local Transition groups, which you might like to get involved with.





Notes:

Nebsite

Would you like to write a 'success story' about your group? Would you be willing to supply us a quote about your experiences of taking part in the project, so that we can tell other people about how it has been for you? We can put these on the website (in anonymous form) and use them to help inform others about the benefits of Transition Streets. Please let the facilitator know at your meeting, or call/email us.

The Langleys Transition Streets is run by Grand Union Community Energy, tel: 01923 400071 email: guceltd@gmail.com web: <u>www.guceltd.org</u>





ALTTA and TiK are part of a network of Transition initiatives. What is a Transition Initiative? It's a place where there's a community-led process that helps that town/village/city/neighbourhood become stronger and happier.

It's happening in well over a thousand highly diverse communities across the world; from towns in Australia to neighbourhoods in Portugal, from cities in Brazil to rural communities in Slovenia, from urban locations in Britain to islands off the coast of Canada.

These communities have started up projects in areas of food, transport, energy, education, housing, waste, arts etc. as small-scale local responses to the global challenges of climate change, economic hardship and shrinking supplies of cheap energy. Together, these smallscale responses make up something much bigger, and help show the way forward for governments, business and the rest of us.

Really, it's the opposite of us sitting in our armchairs complaining about what's wrong, and instead, it's about getting up and doing something constructive about it alongside our neighbours and fellow townsfolk. People say that as a result of being involved in their local "transition initiative", they're happier, their community feels more robust and they have made a lot of new friends.







ALTTA and TiK are groups of ordinary people in Abbots Langley and Kings Langley who are exploring how to make our city more sustainable, together. We want to find positive and creative ways to act together locally to address the challenges of climate change and declining cheap energy supplies.

There are a number of reasons why we think making this transition is necessary, but essentially we are strengthening our communities to be resilient in the face of climate change and dwindling supplies of fossil fuels.

Both ALTTA and TiK have active **Food Groups** growing fresh vegetables, such as the volunteer scheme at Rectory Farm, Gade Valley Close, WD4 8HG. **Grand Union Community Energy** (GUCE) is a local Community Benefit Society started by TiK which is developing community energy in S W Herts, such as solar panels on school roofs. TiK are also researching the concept of a **local currency** like the "Bristol pound", to keep more of the money we spend in our area.

Want to get involved? We have one open event each month (listed on our websites). Please drop in, get chatting, and learn more.

If you haven't already joined our mailing list, just put your details on the end of the evaluation form.

Transition Streets 7.6 YOUR NEXT STEPS



Where to now?

Think about where you will go from here, either on your own or with some or all of your group.

Will you continue to complete the basic actions, come up with some new ones, do some of the optional sessions, get more involved with Transition or other local community groups, lobby the government for better leadership on sustainability issues, grow more carrots..?



<u>As an individual</u>: are there actions you still need to complete? Ones you never started? Things you want to learn more about? What are your next steps, and how will you make sure you do them?

<u>As a group</u>: Do you want to keep meeting? If yes, will it be purely social or will you have an aim? What will it be? How often will you meet? Will you invite others?

In your community: What does your street / community need, to make it more environmentally sustainable? Does this group have a role in that? Where will you start?

Discussion

Transition Streets 7.6 YOUR NEXT STEPS (cont.)





Ideas for what to do next

Different groups do different things next. Here are some options, inspired by other groups;

- have a street party or social occasion that includes other households from the street (perhaps a "Big Lunch" http://www.thebiglunch.com/)
- start some shared veg gardening, or sharing produce you already grow
- start Street Play on your road, so kids can play outside safely (playingout.net).
- Which topics didn't you feel you had enough time to explore? How about a meeting to talk about that more?
- Each work out your carbon footprint and then meet to compare notes (try the www.thecarbonaccount.com/)
- Are there any community buildings in the area which you think could have community-funded solar panels on their roofs?
- Is there an issue you want to work together on; parking, bus routes, rubbish, green spaces? Is there a common interest?

Transition Streets 7.7 HELPING OTHERS TO PARTICIPATE



Would you like to become a Transition Streets mentor? Now you know what it's all about, you could help another group to get started and to get the most from the programme. This is a great way you can give back to your local community. Please contact us to find out more.

Pay-it-forward

Mento

If you have enjoyed participating in this programme and would like others to have the same opportunity, then you could 'pay-it-forward'. Although this programme is funded at the moment, it can only cover the costs for a limited number of participants. If you would like to contribute something to the project, you can donate money that will enable another participant to undertake the programme for free, or rather, as a result of your own generosity. Whether you donate & how much is <u>entirely</u> up to you. If you would like to donate, please contact the Project Coordinator or give them cash/cheque at the meeting (cheques made out to Grand Union Community Energy); <u>many thanks</u>.

And now – take the time to celebrate your achievements so far with your group!



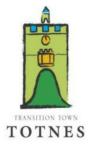
The end

(But we hope it's just the beginning!)

Thanks for your participation, we hope you've enjoyed it.

If you have, tell your friends!

Designed by ...





Adapted for use by:









Acknowledgements

This workbook aims to bring together a wide range of credible, expert advice that covers cost savings, energy reduction, CO₂ emissions reduction and general sustainability, across all areas of our lives. Our intent here is to compile this advice into a single, localised reference source for use by people in the Transition Streets programme – with clear links back to the source material used in each section.

The sources of information used include the Energy Saving Trust, the Soil Association, Waterwise, Sustrans, Affinity Water and countless others we have referenced in each chapter to whom we offer our thanks.

Our thanks go to our funders; the Co-operative Membership Community Fund, Herts County Councillors through their locality budgets, St Albans and District Council, the Big Lottery, and past participants of the Streets programme.

Thank you for taking time to complete our form. It will help you know if it was worthwhile, and it is invaluable to us. It allows us to improve the project further and to feedback to our funders.

At your <u>first</u> meeting: please complete all the <u>blue</u> sections. These show your starting point. At your <u>last</u> meeting: please complete all the green sections. These show where you have got to.

This change between the two will help you see what changes you have made. It also helps us to evaluate the impact of the whole project.

Your name:	Your group's name:				
Date of first session:	Date of final session:				
Home address & postcode:					
Can we add you to the Transition in Kings Langley mailing list, to hear about other local events and activities making?					
Yes / no If yes, please give us your email address.					
	Number of adults living at home:				

Number of children:

	PLEASE COMPLETE THE BLUE COLUMNS AT THE START OF THE PL	ROGRAMME:	AND THE GREEN ONES AT THE END OF PROGRAMME:	THE
1a	How did you hear about Transition Streets and what attracted yo	Did it meet your expectations? Why / w	/hy not?	
1b	What do you hope to gain from being part of Transition Streets (please list up to 3 hings):		Did you meet your objectives (e.g. all, n None)?:	nost, some,
1c	What number of households are there in your street where you know your neighbours' names and would say hello as you pass?		How many are there now?	

	In this section, please rate the following statements:	Strongly agree	Somewhat agree	Somewhat disagree	Strongly disagree	Strongly agree	Somewhat agree	Somewhat disagree	Strongly disagree
2.	I feel positive about the future.	1	2	3	4	1	2	3	4
3.	I feel that a strong sense of community is important in these uncertain times.	1	2	3	4	1	2	3	4
4.	I feel connected to, and a part of, my local community.	1	2	3	4	1	2	3	4
5.	I feel well informed about peak oil and climate change.	1	2	3	4	1	2	3	4
6.	I understand how these 2 issues affect me, my family, my local community, and the planet.	1	2	3	4	1	2	3	4
7.	I know what practical, effective actions I can take to reduce the potential impacts on me/others.	1	2	3	4	1	2	3	4
8.	It's my responsibility to act in ways that help reduce potential impacts.	1	2	3	4	1	2	3	4
9.	I'm aware there are simple, easy things I can do to reduce household costs - and I know how to do them.	1	2	3	4	1	2	3	4
10.	I am confident that I can & will make changes to my lifestyle that will last.	1	2	3	4	1	2	3	4

Each chapter of the workbook appears below, with each of the main suggested actions. At the first meeting, please tell us if you are already doing them. At the last meeting, tell us if you are now doing them

	SPEND LESS ON ENERGY	Already done/doing this before Transition Streets	Did/doing this as part of Transition Streets (or more than I did before)	I plan to do this in the next few months
11.	Know how much you are using (monitor your usage in your home)			
12.	Be a real turn off (always turn things off at the wall when not in use)			
13.	See the light (install more low-energy light bulbs)			
14.	Control your heat (know how to use your heating system and thermostat)			
15.	Lagging (pipe work and hot water tank)			
16.	Draught proofing			
17.	Loft insulation			
18.	Cavity wall insulation			
	What other energy-related actions have a Transition Streets that are not listed above the street of		And SINCE starting Transition Streets	that are not listed above:

	SPEND LESS ON WATER	Already done/doing this before Transition Streets	Did/doing this as part of Transition Streets (or more than I did before)	I plan to do this in the next few months
19.	Know how much you are using (monitor your water use at home)			
20.	Feel flushed (cistern displacement devices)			
21.	Taps, drips & leaks (don't leave taps running, fix drips & leaks)			
22.	Showers & baths (low flow short showers rather than baths)			
23.	Washing clothes (full loads, low temps, wear clothes longer)			
24.	The kitchen sink (use bowls, don't rinse or full loads in dishwasher)			
25.	Outdoors (water butts, no sprinklers, minimal hose, drought gardening)			
	What other water-related actions have y Transition Streets that are not listed abov		And SINCE starting Transition Streets	that are not listed above:

	SPEND LESS, EAT WELL	Already done/doing this before Transition Streets	Did/doing this as part of Transition Streets (or more than I did before)	I plan to do this in the next few months
26.	Buy local & seasonal foods			
27.	Reduce food packaging			
28.	Minimise food waste			
29.	Go organic (buy organic)			
30.	Grow your own			
31.	Caring carnivores (eat less meat)			
	What other food-related actions have yo Transition Streets that are not listed above the street of t		And SINCE starting Transition Streets	that are not listed above:

	WASTING AWAY	Already done/doing this before Transition Streets	Did/doing this as part of Transition Streets (or more than I did before)	I plan to do this in the next few months
32.	Avoid (don't buy stuff that's not essential)			
33.	Reduce (buy less)			
34.	Reuse (keep things in circulation rather than chuck them away)			
35.	Recycle (food, glass, plastics, tinseverything!)			
36.	Compost at home (make your own)			
37.	Waste free celebrations (cutting down waste at Christmas & birthdays)			
	What other waste-related actions have y Transition Streets that are not listed abov	6	And SINCE starting Transition Streets	that are not listed above:

	GETTING AROUND	Already done/doing this before Transition Streets	Did/doing this as part of Transition Streets (or more than I did before)	I plan to do this in the next few months
38.	Fuel efficient driving			
39.	Get on your bike (cycle don't drive)			
40.	Walk this way (walk don't drive)			
41.	Take buses and trains			
42.	Try lift sharing			
43.	To fly or not to fly (fly less)			
44.	Holiday in the UK			
	What other transport-related actions hav Transition Streets that are not listed above		And SINCE starting Transition Streets	that are not listed above:

FEEDBACK ABOUT TRANSITION STREETS

What things have you done differently because of taking part in Transition Streets?:

The things I liked the most about taking part were:

The things I liked the least:

Suggestions for changes and improvements:

Is your group going to keep meeting beyond the 'official' programme? If so, what will you do?:

And finally, would you recommend a friend to do it? Yes / no / don't know

If you have valued being a part of this project, would you like to make a financial contribution so that someone else can participate in Transition Streets? We have limited funding and each folder costs us about £15, so if you'd like to 'pay it forward' please let us know; you can give cash or cheque to the facilitator at the final meeting (made out to GUCE Ltd). Thanks!