

















# Taking action on climate change

# The Essex Advice Pack







## **Contents**

Climate action top tips	3	
1. Transport	4	<b>66</b> We are
2. Energy and the Home	7	at a pivotal point - a time where every one of
3. Food	11	
4. Waste	14	
5. Outdoors	16	our choices
6. Useful Apps and Resources	19	can make a difference.

Climate Change is one of the most critical issues facing us all– this is what we can all do to help make the difference for us and the generations to come.

This advice pack is a collection of key advice, tips and information to help us all cut our carbon, to reduce our impact on the planet and help us and the next generation have a better future.

The Essex Climate Action Commission has advised the county of Essex on the key steps to get to net-zero emissions by 2050, in its report: **Net Zero, Making Essex Carbon Neutral**. One of its key recommendations is to signpost Essex residents to good advice and help in the transition to a lower carbon lifestyle.

So, what are the most effective individual actions that we can take? Surprisingly, the impact of certain activities can be quite different to what many of us might expect.

A recent survey of Essex residents conducted by **BritainThinks** on behalf of Essex County Council and Essex Climate Action Commission, compared the expected impact of various pro-environmental choices versus the actual impact. Check out the graph below to summarise what counts the most when taking action on climate change – it might surprise you.

# Climate action top tips

In a recent survey, Essex residents were asked what impact they thought certain actions had on tackling climate change – this is what we thought.

So, what are **REALLY** the top things we can do to help tackle climate change?<sup>1</sup>

#### 80%

Recycling as much as possible

#### 69%

Cycling / walking and / or using public transport more

#### 67%

Switching household energy to only renewable sources

#### 66%

Replacing a petrol / diesel car with an electric vehicle

#### 65%

Reducing food waste

#### 59%

Taking one less long-haul flight (7+ hours) per year

#### 53%

Composting food waste

#### 48%

Reducing the amount of new clothes you buy by a third

#### 42%

Installing and using a smart meter to monitor energy usage

#### 360%

Replacing a boiler with a heat pump (25% said "don't know)

#### 35%

Eating a vegetarian diet

(Percentage of residents who believe each activity has a significant impact on tackling climate change (score of 4 or 5))



Replacing a petrol / diesel car with an electric vehicle



Taking one less long-haul flight (7+ hours) per year



Switching household energy to only renewable sources



Cycling / walking and / or using public transport more



Replacing a household boiler with a heat pump



Eating a vegetarian diet



Reducing food waste



Installing and using a smart meter to monitor energy usage





Reducing the amount of new clothes you buy by a third





Recycling as much as possible

11



**Composting food waste** 

1 Derived from Ivanova et al (2020), Quantifying the potential for climate change mitigation of consumption options, Environmental Research Letters Volume 15 Number 9 available at <a href="iopscience.iop.org/article/10.1088/1748-9326/ab8589">iopscience.iop.org/article/10.1088/1748-9326/ab8589</a>

# 1. Transport



Our motor cars are one of the most intensive sources of personal emissions. Driving one long journey, Essex to Edinburgh for example, would emit nearly **four times** the carbon (CO<sub>2</sub>) emissions as a coach or a train. **One mile in an average UK car** can emit around **11 times as much**, compared to public transport per mile travelled – or 88 times the amount of CO<sub>2</sub> compared with an electric bus<sup>1</sup>!

There are over **800,000 cars in Essex**, with **59%** of car journeys under 5 miles<sup>2</sup> – a distance that could be covered comparably quickly by bike, on foot or via public transport – just with far fewer emissions. If every household in Essex replaced a one mile car trip each week with walking or cycling we could save multiple thousands of tonnes of carbon<sup>3</sup>.





Working from home has long been heralded as an effective solution to reduce our carbon footprint, even though its benefits in reducing the spread of COVID-19 have taken the recent limelight. So, if you can **work from home**, it turns out it has multiple advantages!



#### **Alternatives to driving**

• Swapping shorter journeys for **walking and cycling**, on a traditional bike or an e-bike. The campaigns 'Stop, Swap, Go' and 'Safer, Greener, Healthier' both present numerous benefits and opportunities to travel by bike – with inevitable improvements to your physical health and fitness as well as reductions in your environmental footprint. A chance to save money on the gym and petrol, get the legs to work and de-stress!



- Taking public transport wherever and whenever we can is the next best bet. Services
  are improving year on year for this Greater Anglia has vastly improved its fleet to be
  more <u>environmentally friendly</u>, with new trains and <u>cycle links</u> with them. Similarly,
  recent improvements in bus services across Essex as part of <u>Bus Back Better</u> will help
  you to find a journey by bus easier, quicker, cleaner and more practical.
- The Integrated Passenger Transport Unit at Essex County Council (ECC) will be launching a new type of public transport in February 2022. A fleet of fully electric minibuses that work on-demand, at a time that is best for you rather than having set routes and timetables. These electric minibuses will offer an environmentally-friendly type of transport for residents in suburban and rural areas of Essex who may have little or no access to existing public transport links.
- Or perhaps share a journey if destinations are the same, similar or en-route, halving
  your emissions and potentially leading to new friendships and experiences. Check out
  the <u>Essex Carshare</u> scheme, where you can find car share groups across the county
  as part of the 'Liftshare' network.

Or you can download apps, like **Bla Bla Car**, with more information **here**.





#### **Electric Vehicles**

If public transport is difficult where you live, have you considered investing in or leasing an electric vehicle (EV)?

This is one of the most significant reductions in carbon footprint that an individual can make, as well as reducing localised noise and air pollution for yourself, others and the surrounding environment. It's becoming increasingly affordable, and with charging infrastructure popping up all around the county – for example, **Braintree's GRIDSERVE electric forecourt** – it will just get easier and easier to own or lease an EV.

And if an EV is still out of the question, then **driving carefully** can go far – reducing our speeds, not accelerating and braking between speed bumps and concentrating on a more efficient, smoother driving style. It will be **safer, cheaper, less stressful and less polluting!** 



#### Air travel

The vehicle that has allowed us to be able to holiday globally, wherever and whenever we please, has a massive hidden cost.

A return business class flight from London to Hong Kong, for example, is equivalent to **10 tonnes of carbon emissions per person**. To put this into perspective, the **average English carbon footprint is 12.7 tonnes** of emissions per year<sup>4</sup> – and this is a footprint considered **far too high** by scientists and governments worldwide committed to net-zero.

As we come out of the pandemic, we have a new appreciation of our local area, inspiring us to focus on more **local exploration** by rail, road or ferry and really making those longer trips count.

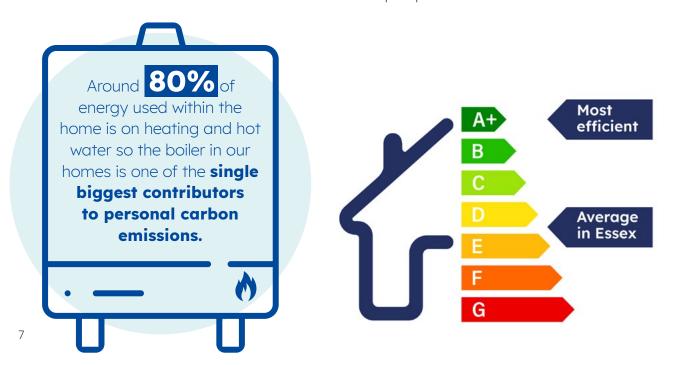
# 2. Energy and the Home

One of the best things about improving our home's energy efficiency is that it cuts our bills as well as carbon.



A well-insulated, ventilated and energy-efficient home can have much lower energy bills in comparison with the average home. Draughty, poorly insulated homes can also be very harmful to our health too. Upgrading our homes by **improving the insulation** can help keep us warm and comfortable, improve our health and save significant amounts of money.

Our <u>Energy Performance Certificates</u> (EPCs) show how energy efficient our home is, and if it's in need of improvements (below C). The most efficient home is A+ and is cheap to heat. The average in Essex, however, is D – and very expensive to heat. If you're buying or renting a new home, make sure you look into the **EPC**, and make sure you know the cost of any changes that will be needed in the future. For example, we will all have to change our heating over time to move to low carbon sources such as heat pumps.







# Financial help and incentives

**To save money and carbon, you can find heaps of advice online** – with almost all relevant Essex energy saving initiatives found <a href="here">here</a>.

- Essex County Council has partnered with Citizens Advice and <u>Warm Homes Essex</u>
  to help if you are struggling with your energy bills. Get in touch with them for
  independent advice on saving money and paying bills.
- The Green Homes Grant Local Authority Delivery Scheme offers lower income homeowners and those on certain benefits funding to cover the cost of some energy-saving home improvements. If your household income is below £30,000 or you receive certain benefits and your property's energy performance certificate is rated D or below, you may be eligible for this funding for energy efficiency improvements. This can be up to £10,000 worth of home improvements to upgrade your home and make it warmer, more comfortable and cheaper to heat, as well as cutting your carbon emissions. If you rent your home and qualify, your landlord may be able to benefit from up to £5,000 to upgrade your home and install energy efficiency improvements. So we'd encourage anyone renting to speak to their landlord and have them consider the grant.
- The Energy Saving Trust and the Simple Energy Advice websites have a wealth of information on what you can do to improve the energy efficiency of your home, including advice on insulation, heating and renewable energy. The Government has announced grants of up to £5,000 for homeowners to replace their boiler with heat pumps and more information will be available on these sites soon. We will update these links when that is available.

# Home energy saving tips

- Turning down the thermostat, even by just one degree, will save energy. Programme heating to make sure you only have it on when someone is home, for example.
- Run washing machines and dishwashers on lower temperature settings or eco-modes, so they can do the job without using too much energy. Similarly, products such as sustainable and re-fillable washing liquid and tablets can be an easy gain in your environmental footprint. If you are buying new fridges, TVs or washing machines, make sure they are as efficient as possible and buy an A rated product.
- On sunnier and warmer days, make the most of the weather by **drying clothes outside**, or an air dryer for the winter months. If you need to use the tumble dryer, make sure it is definitely full before starting.
- Simple things around the house also use energy such as boiling a kettle. So a good tip is to only fill your kettle with as much as you need.



















### **Reducing water usage**

It's easy to forget that our water use also has a big carbon footprint. We can take some simple steps to use water efficiently and cut our water bills. Everyone in Essex is eligible for a <a href="free water saving kit">free water saving kit</a> from <a href="Essex & Suffolk Water">Essex & Suffolk Water</a> and <a href="Anglian Water">Anglian Water</a>. Water scarcity is a big deal here in Essex – it might seem to rain a lot, but in fact East Anglia is one of the driest regions in the UK, with droughts and water scarcity projected to increase due to climate change. Try a shower instead of a bath and fit low flow taps to reduce the amount of water you use.

**Water Butts** are a brilliant way to take advantage of wet weather and reduce mains water consumption. It collects rainwater for use in the garden, conserving water whilst keeping your garden healthy.

As part of Essex Flood and Water

Management's Climate Action initiative, there is a 50% subsidy available on 100 and 200 litre water butt purchases for Essex residents. Visit the Get Composting website and enter your postcode to access the Essex County Council subsidies.





Renewable energy comes from non-polluting natural processes such as solar, wind or hydro power. Lots of energy suppliers provide renewable based supplies.



You can switch using the **Essex Energy Switch**.

Lots of advice is available on getting the best deal from your energy suppliers from advice sites like **Money Supermarket** or **Compare The Market**.

Or if it's possible, install renewable energy **in your own home** to not only save money in the long-term, but drastically reduce your carbon footprint – and dependency on the grid! Help to purchase solar panels and further information can be found from **Solar Together Essex**.



#### Remember

Saving energy and resources in the home will significantly reduce your annual bills as well as your overall carbon footprint.

Another fantastic way to support a low carbon energy transition is by participating in 'community energy' projects. These initiatives put people at the heart of the energy system. Examples of projects include groups working to install solar energy in a village hall or primary school, free energy saving advice to residents, or even electric car sharing clubs. These projects are either completely owned or controlled by communities or through partnership with partners. Essex County Council provides free support for groups to start and develop projects. More information on how you could get involved can be found through Community Energy South, Local Energy Communities or email lowcarbon@essex.gov.uk



# 3. Food

A climate friendly diet is healthier, has less waste, more seasonality and is sourced locally.



Reducing the amount of **food waste** at home is a good way to reduce our carbon footprint and save money. Currently, we are **wasting around 20% of all the food we buy**<sup>5</sup>, some £800 worth a year – and with some foods having a larger carbon footprint than others, throwing edible food away can have a big hidden cost.

Reducing food waste in our household can be simple:

- freeze or refrigerate anything that can't be eaten while it's fresh
- where possible, buy loose produce so you can select the exact amount that you need and avoid unnecessary packaging
- before discarding food, make sure it is **definitely out of date and inedible**.
- if we do need to throw away food, **composting** is a valuable solution see section 5.

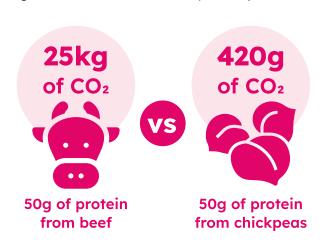
Find <u>tips from Love Essex</u> on how to cut down on food waste and make the most out of your leftovers, and check out the <u>'Love Food Hate Waste' campaign</u> to learn more about how to get **the most out of the food you buy** with recipes and other top tips.

There are also various resources and apps, such as <u>Giki</u>, <u>GreenRedeem</u> and <u>Capture</u> that provide **information about food products and beyond**. They can tell you anything from whether the packaging is recyclable to whether ingredients were sourced responsibly.



#### **Food choices**

When it comes to choosing protein, **50g of protein from beef takes 25kg of CO<sub>2</sub> to produce**, compared to just **420g** of CO<sub>2</sub> for the same amount of protein from **chickpeas or lentils**<sup>6</sup>. That's a big difference! Animal sources of protein tend to be higher-carbon, but **chicken emits less** than other meats.



Seafood, in general, is **lower carbon than meat**. However, fish stocks are being over-exploited and **some fish carry a high environmental footprint**. **Find out more** about the best seafood to choose when at the supermarket, grocers or fishmongers. Air-freighted fish from other continents, especially lobsters and king prawns, have the highest carbon footprint. Local shellfish such as mussels are always a good bet – they have a very low environmental footprint. Handline caught mackerel and hake can be good too. Buying locally caught fish is a good rule of thumb.

Eggs are also a lower-carbon source of animal protein, but why not go further and buy eggs from **local** suppliers – or, to reduce your footprint even further, introduce some chickens to lay your very own.

Choosing **local, smaller-scale producers** makes a big difference on how the land is treated and maintained. Their impact on the environment is far less than that of larger scale, international food supply chains. As well as supporting your health and your local economy, you might get to know local producers and get tips on how to prepare seasonal foods.

Veg box schemes can be a great way to support more sustainable farmers and local producers. They can also involve much less waste, as they often don't come with unnecessary packaging. They also put a focus on the seasonality of foods, giving you more vegetables and fruits that are in season in your box. Check out Odd Box, which delivers wonky fruits and veg that are delicious and fresh but would otherwise be wasted due to supermarket shape and size standards - fighting food waste and carbon emissions all at once. Find Local Produce is a great source of information about where to go and who to choose to support and incorporate local, small scale and more sustainable producers in your shop.







### **Making informed choices**

As you can see, it's not about restricting our diets but our choices can make a difference. We can learn more about the <u>seasonality of foods</u>, visit local farm shops, grocers and butchers. Local produce has a much lower impact than anything imported, so look out for UK, or even better, Essex producers!

Incorporating some **meat-free days** into your week can be a great starting point – with plant-based alternatives, choices and recipes becoming ever-more available. On the days that we eat meat, we can try to find **local options**. Buying meat locally not only **cuts our environmental footprint significantly**, but it also **boosts the local economy** by supporting local farmers.

When shopping in the supermarket, we can watch out for **food which has travelled by air** via this **food miles calculator**. It is better to buy things closer to home to keep the number of miles food has travelled to a minimum. Fruit and vegetables should have information regarding their origin – so if it's come from far beyond the continent of Europe for example, it will have a bigger carbon footprint. Eating foods which have travelled a long way can really increase our carbon footprint.

One of the most important things we can do to enrich our natural world is to learn more about and to support <u>sustainable farming</u>, with local farming even better.



Finding food that protects our planet can sometimes be hard but look out for **organic labels** such as **The Soil Association** and **the EU organic label**.

# 4. Waste

Buying things we genuinely need, buying things that are made to last and repairing and re-using things wherever we can.



If you don't need something anymore see if someone else can use it by reselling or giving away.

If each of us reduced our black bag waste by just 15%, Essex would save over **100 thousand tonnes of waste** going into landfill each year.

Every new product that we buy requires **resources and energy** to produce and transport – which almost always means significant carbon emissions. So, all of us can **really consider what we are buying before we make that purchase.** 



- ✓ Can it be recycled?
- ✓ Can it be repaired?
- ✓ Has it been made locally so it has not been transported far?
- ✓ Can we find it second hand or borrow it from Essex Library of Things?

There are a number of local schemes supported or provided by **Love Essex** to help you – such as:

- the Library of Things
- Freegle
- the Love Essex Fund
- clothes swap events
- the volunteer scheme **Love Essex Champions**.



They also provide tips and tricks on how to:

- · reduce your household waste
- improve your recycling
- and regular updates on waste services in Essex.



#### **Reducing single-use items**

When it comes to waste that's destined for the bin, think about ensuring you have a collection of **re-usable** bags, bottles, cups, cutlery instead of picking up single-use plastic. Having a reusable alternative can cut our environmental impact. **Discover more information** about the easy switches you can make - **one small change can make a big difference**.

Every 500ml plastic bottles uses almost <u>83g of CO<sub>2</sub> emissions</u> and 1 re-usable bag has the potential to **save nearly 800 plastic bags per year**<sup>8</sup>. Meanwhile, a reusable cup could save on over **1200** of their plastic equivalents. By going reusable, you not only cut carbon emissions, but **reduce litter and save money!** 

When things can't be re-used but can be recycled, items need to be clean and dry. Items which are not recyclable but placed in your recycling bin or sack can also cause issues during the recycling process. So you can check out **the tips from Love Essex** as it does make a difference. For further information on how to best get rid of your waste, use the search tool at the top of the **Love Essex website**.

# 5. Outdoors

Nature – we're part of it and it's part of us. Let's get closer to our precious environment.





#### Your green space

Got a garden? Why not grow your own fruit and vegetables or re-wild an area of land?

By letting wildflowers grow throughout a year, **biodiversity** can increase ten-fold – promoting natural processes of pollination and other key ecosystem services. This will help bees, insects, birds and other wildlife to maintain their habitat, to ensure the ecosystem is in balance.

<u>Growing your own fruit and veg</u>, even having chickens in your garden for eggs too, can also significantly cut your **dietary carbon footprint** as well as being host to a fun and engaging project to share with the family and friends.

**Composting** is a brilliant way to use your garden as a carbon sink. A carbon sink absorbs more carbon than it releases. It's a chance to turn your food waste into soil - a thriving ecosystem for insects and bugs, that itself sucks up carbon from the atmosphere. This will also reduce your carbon emissions, as there is no need to transport and process this waste, and instead will turn your waste into valuable soil improver that you can use across your garden. To help Essex residents get started with home composting, Love Essex offers tips and subsidised compost bins.





If you don't have a garden, perhaps consider an **allotment**, with more information available on your local council's webpage. This is a great chance to enjoy the outdoors and meet new people. If that's impractical, **window boxes** for fruit and vegetables work wonders, allowing you to grow your own without even needing a garden.

Tree-planting is another way to take action on climate change – a mature tree can suck up a lot of carbon from the atmosphere. Getting the family involved and learning about the importance of trees from an early age can be great fun with these downloadable Tree Art packs from arts partnership INSTAR. The Royal Horticultural Society (RHS) advise on best practice for tree planting in your garden – or get involved in local tree planting in your community, with more information found at the Essex Forest Initiative.



Paving your garden can dramatically increase your <u>risk of flooding</u> following **extreme** weather events, which are projected to only increase. By having a greener garden, you can increase the volume of water that can be **absorbed and drained**, to keep you and your property safe. If it's a must, you can use <u>permeable paving</u> to be on the safe side.



Paving your garden can increase your risk of flooding.



#### **Exploring the great outdoors**

Why not invest some time into exploring and connecting with the natural world out walking in Essex's beautiful countryside and <u>Essex Country Parks</u>! Download the <u>GoJauntly app</u> and visit the <u>Essex & South Suffolk Community Rail Partnership</u> for some brilliant walks (and how to get there) – a chance to discover the beauty across all corners of Essex.

Spending more time **outside**, especially in the countryside, is a fine way to get closer to the environment – but also to **boost your physical and mental health**. It can also be great fun, with a chance to share experiences with family and friends.



# 6. Useful Apps and Resources





#### **Useful apps**

Carbon Calculators are really handy when you want to know the impact anything has on your carbon footprint. But there are also plenty of apps that can help you make small changes to your lifestyle. These can include:

- · <u>Giki</u> · <u>Carbon Savvy</u> · <u>Klima</u> · <u>Olio</u>
- GreenRedeem
   Eevie
   Earth Hero
   Too Good To Go
- <u>Capture</u> <u>Carbon Donut</u> <u>Change It</u>



### **Community Resources**

Many local town and parish councils around Essex are going further and further in their efforts to be environmentally pro-active. To find out more and how to be involved, check out the **Essex Association of Local Councils website**.



### **Relevant Social Media Pages**





#### Facebook:

- Essex Climate Action Commission
- · Essex is Green
- Love Essex



- Essex Climate Action Commission
- · Essex is Green
- Love Essex

# Twitter:

- Essex Climate Action Commission
- · Essex is Green
- Love Essex



- Essex Climate Action Commission
- Love Essex

# Our choices can truly make a difference and will shape Essex today and in the future.

Climate change is real, it's now, we have to do something about it – and the good news is that we can. All of the actions outlined in this pack can help us to make a start in reducing our own impacts and carbon footprint. We can all act to **improve our lives and our planet.** 

# We CAN do this!



#### References

- 1 Mike Berners-Lee: How Bad are Bananas, 2020
- 2 2020 National Travel Survey, Gov.uk
- 3 Imperial College London, Science Daily, 2021
- 4 Mike Berners Lee: How Bad Are Bananas, 2020
- 5 Food Surplus and Waste in the UK: Key Facts, WRAP, 2021
- 6 Mike Berners Lee: How Bad Are Bananas, 2020
- 7 UK Statistics on Waste, DEFRA 2020
- 8 Mike Berners Lee: How Bad Are Bananas, 2020

