52 TIPS to combat climate change
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52 TIPS to combat climate change
Climate change is an undeniable reality and the main environmental challenge currently facing our planet.

There is consensus among the scientific community that the planet is warming faster than ever, due to the sheer amount of greenhouse gases being released to the atmosphere as the result of human activities. The fossil fuels that we are burning (coal, oil and gas), the cars that we drive and deforestation are just some examples. There have been other climate changes in the past, such as the Ice Age, but they were down to natural causes.

Human action is causing the global warming of the planet and its effects are expected to progressively increase in the future. The atmosphere and the ocean are warmed, the amounts of snow and ice have diminished and the sea level has risen. Current CO₂ are the highest in the last 800,000 years.

We are already seeing - and even suffering - some the effects of that climate change. Yet, it is not only about extreme weather phenomena, such as floods, droughts and hurricanes. The changes that are occurring in the climate could turn our lives upside down.
WHY IS IT IMPORTANT TO ACT TO TACKLE CLIMATE CHANGE?

The rise in the global average surface temperature is the best-known indicator of climate change. The average temperature of the earth’s surface has risen by 1 °C since the end of the 19th century and is expected to continue to rise throughout this century. The Paris Agreement, signed by 190 countries, has set the target of not exceeding 2 °C.

**Global warming must be limited to under 2 °C above pre-industrial levels to avoid the most serious effects of climate change and possible catastrophic changes in the global environment.**

Seventeen of the eighteen warmest years on record have all been during this century. We have caused this climate change that we are witnessing. We are releasing more and more gases that trap the heat of the sun in the atmosphere and that means the earth’s temperature is increasing at an extraordinary rate.

**The Basque Country has a climate change strategy - Klima 2050, which is our roadmap and sets the target of reducing our gas emissions by 80%. We therefore all need to play our part. There is no Plan B as there is no Planet B!**
The Basque Country’s contribution to climate change is small in quantitative terms (0.5% of the total emissions of the European Union). However, shared responsibility is the basic principle at the heart of international policies to reduce emissions. Therefore, Basque society cannot remain on the sidelines of fighting climate change and has assumed its share of responsibility with a stringent and far-reaching commitment.

However, 34% of Basque citizens do little to fight climate change, either because they do not know what they can do or they believe that they cannot do more. This publication seeks to help, with everyday and simple tips, that we can all carry out to play our part in slowing down climate change. The average CO₂ emission per person in the European Union is 3.5 tons a year and is 8.7 in the Basque Country.

It is now up to us to reduce this footprint.

**These 52 tips, organised in their level of difficulty when it comes to implementing them, aim to set out a series of practical actions meaning that everyone can help to slow down climate change and leave a habitable world for future generations. No action, however simple it may seem, is insignificant.**

**Let us not underestimate the importance of what each person can do to mitigate climate change. Every action counts!**
CLASSIFICATION OF THE 52 ACTIONS BY LEVEL OF EFFORT

**CLASSIFICATION** refers to the place where the action is taken: home, office/school, shopping, mobility and leisure.

**EFFORT**

The personal **EFFORT** needed to follow the thing you can do is scored on a scale of 1 to 5 according to its degree of difficulty:

1. **Very easy**
2. **Easy**
3. **Normal**
4. **Difficult**
5. **Very difficult**

**IMPACT**

The **IMPACT** of the tip on reducing greenhouse gases is scored on a scale of 1 to 5:

1. Very small impact.
2. Small impact.
3. Medium impact.
4. Large impact.
5. Great impact.
1. The energy label for household appliances, a way to help you save

**TIP** *Buy household appliances with a class A energy rating*

**Check if you really need them before buying new electronic and electrical equipment.** If the answer is you do, you should remember that the largest appliances are not the most suitable for all homes.

Household appliances account for over 45% of a household’s electricity consumption. Fridges, freezers, tumble dryers, washing machines and dish washers are subject to EU legislation which requires them to be labelled with their energy rating.

**You should choose Class A rated household appliances, as they use less energy to do the same job.** The even more efficient A+ and A+++ ratings have recently been added to the most efficient A rating. A fridge that is very energy efficient can mean savings of €60 a year compared to one that is 15 years’ old. An A+++ fridge consumes 60% less than an A rated one. Thus, an A+++ fridge costs €26 a year to run, while an A rated one is €69 a year.
Tins and cans are also put in the yellow container

The yellow urban recycling container is the one that receives the most incorrect waste (waste not deposited correctly). All the plastic containers, metal containers and cartons go into the yellow container. The incorrect waste that is most frequently found in yellow containers includes toys, ironing boards, VHS video tapes and CDs.

However, tins and cans, even if they are greasy, go into the yellow container. Tins and cans are usually used as a single-use container. Their manufacturing is one of the most energy-consuming industrial processes and with the greatest environmental impact. It is also expensive in terms of energy and raw materials. Even so, recycling is common practice in the manufacturing process. Recycling an aluminium tin can save 90% of the energy needed to produce a new one.

A television set can be running for two hours with the energy needed to manufacture an aluminium soft-drink can.
20 °C is high enough. Use heating responsibly

**TIP**

*Use climate control responsibly*

The comfort feeling is subjective, but a temperature between 19 °C and 21 °C is sufficient to obtain that feeling. Heating accounts for nearly half (45%) of households’ energy consumption.

Lowering the temperature of our homes by 1 °C can lead to savings of between 5 and 10% of the electricity bill and reduce the equivalent CO₂ emissions of a 1600-km journey by road.

**Programming the thermostat, setting a lower temperature at night and when you are not at home will lower your heating bill by 7-15%**.

Other useful tips include *not setting the boiler temperature at over 60 °C and leaving windows open for no more than 10 minutes*, which is sufficient time to freshen the air in the room without cooling the walls and floor.

Finally, *closing the shutters and curtains at night will stop important heat loses*. 
Never leave the mixer tap in the centre

**TIP**

*Only use hot water when necessary*

Using a mixer tap is very convenient, but its incorrect use can lead to wasting water and the unnecessary consumption of hot water. The mixer tap in the central position means lukewarm rather than cold water comes out.

Remember that domestic hot water is, after heating, the second energy consumer of our households. It causes 20% of the home’s CO₂ emissions. A temperature between 30-35 ºC is sufficient for personal hygiene.

The boiler starts up every time there is a demand for hot water. Those constant start-ups and shut-downs increase consumption damage the equipment.

Just one tip, **optimise hot water consumption and do not needlessly leave taps running when brushing your teeth or shaving.** Up to 75 litres of hot water can be used when shaving with the tap running.
Lamps are to provide you with light, not to light up empty rooms

**TIP**

*Turn off lights*

Just turning off the light when you do not need it helps to save energy and, consequently, to slow down climate change. **You should turn off the lights, even when you are only leaving the room for a few moments. You do not use up more energy when turning them on or off.** Lighting up an energy-efficient light bulb is equivalent to running it for 10 seconds.

If you turn off 5 lamps in the passageways and rooms of your home when you do not need them, you can save €60 on your annual bill and avoid a total of 400 g in CO₂ emissions.

Whenever possible, **use natural light** to study, cook or play. Light colours on the walls and ceilings lets you use the natural light better and reduce the artificial lighting needed.

**Presence detectors should be placed in hallways, garages and communal area** so the lights turn on and off automatically. Lighting accounts for 10% of the energy consumptions in our households.
6 Hot food should be left out

**TIP** Do not put recently cooked food in the fridge

If you are going to put cooked food in the fridge while it is still hot, wait till it cools down. This simple tip means the fridge does not have to run to return to its temperature before putting in the hot food.

Remember that the fridge is the one of the household appliances that uses most electricity in the home. 18% of the electricity consumed at home is used to cool and freeze food.

When putting in or taking out food, open the door as little as possible and close it quickly. This will prevent you from wasting energy needlessly.

When you remove food from the freezer to eat it next day, defrost it in the fridge compartment instead of leaving it out. This simple thing you can do will mean an extra source of cold free of charge and prevent possible health problems.
The optimum fridge temperature is 5 ºC in the middle area. A temperature of -18 ºC is recommended for the freezer. Lower temperatures increase energy consumption by around 5%.

For food safety reasons, the lower area for meat and fish should be kept at around 2-4 ºC.

With respect to spending on the bill, there is a difference of around €10 between keeping a fridge at the maximum or at the minimum.

Try to clean the dust on the back grille of the household appliance at least once a year, as the dirt can increase energy consumption by up to 30%.

Make sure that your freezer is always full. If you do not need to fill it with food, add plastic bottles filled with water. Less energy is required to cool a full freezer than an empty one.

Check that the door seals are not damaged and close correctly: you will avoid cold losses.
When you have finished using the oven, it remains at a very high temperature. That heat that it retains when turned off is heat that has been generated by consuming electricity and should not be wasted.

A tip for efficient consumption is to turn off the oven five minutes before the cooking time ends. The residual heat will be sufficient to finish the process.

There are other tips, such as not opening the oven door if not necessary. Use the oven’s light and do not open the door. Each time you open the oven door, you lose at least 20% of the energy accumulated inside.

You should maximise the capacity of the oven and cook the greatest number of items, if possible together. You do not usually need to pre-heat the oven for dishes to be cooked for over an hour.
The dishes are clean and are not too hot to handle

**TIP** *Use the dishwasher’s low-temperature programmes*

Most of the energy used by a dishwasher, approximately 90%, is to heat the washing water, while the remaining 10% drives the motor.

Using low-temperature programmes and time-saving programmes help to slow down climate change as they are more energy efficiency.

There is a very large difference in energy savings and consumption between an A+++ dishwasher and a C rated one. Thus, an efficient dishwasher consumes 0.75 kWh/cycle, which means 0.12 €/cycle, compared to 1.40 kWh/cycle and €0.23 consumption for a C rated dishwasher. In short, **appliances with a Class A energy label save energy and money.**

Try to use the dishwasher when it is completely full and keep an eye on the salt and rinse aid levels, as they reduce energy consumption in the wash and dry cycles, respectively.

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**CLASSIFICATION**

HOME

**EFFORT**

1 2 3 4 5

**IMPACT**

1 2 3 4 5
Washing machines use the same amount of energy me when full or empty

**TIP**
*Load the washing machine to the recommended maximum level and always wash in cold*

A half-loaded washing machine does not use half the energy. Therefore, **you should use this household appliance when you have a big enough load to fill**, but not overload it.

**Buying a washing machine with an A class energy label will let you save energy and money.** Specifically, a washing machine with an A+++ rating uses 140 kWh/year, which means electricity charges of 23 €/year, compared to 360 kWh/year and 60 €/year with a B class washing machine.

Using the cold cycle is another good tip that means you are doing your bit to combat climate change, as between 80% and 85% of the energy used by a washing machine is to heat the water. **It is therefore very important to use the low temperature programmes, except for very dirty clothes.**

A wash cycle at 90 °C uses nearly double the energy than at 60 °C and four times more than at 40 °C.
Discover the value of our earth!

TIP
Opt for local tourism and discover what your area has to offer

The sea, mountains and valleys are the main features of our landscape and have played a key role in our history. Visit San Juan de Gaztelugatxe, the Zumaia Geopark or the Gorbeia Natural Park. They are stunning spots where you can enjoy accessible experiences within easy reach. Visiting those natural areas raises awareness about looking after them.

The Natura 2000 Network of the Basque Country consists of 55 areas that are part of the European Natura 2000 Network with over 27,000 sites. They are home to the sea, forests, salt marshes, wetlands, hay meadows, upland grazing, heaths and other scrubland, rivers, peat bogs and cliffs.

The 55 areas in the Natura 2000 Network in the Basque Country cover a surface area of around 1,500 km², which accounts for 20.5% of the territory.

This European Natura 2000 Network is already an important driving force of many local economies, thanks to tourism.

And it is all right here, just a stone’s throw from your home.

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Using the door as a fan

TIP Cool down the car without switching on the air conditioning

Who hasn’t been forced to put the car’s air conditioning on full after spending a hot day at the beach?

Here is our alternative method to cool down your car in just one minute without needing to turn on the air conditioning. Close all the car doors except for the one for the front passenger seat. Then close and open the driver’s door five times as quickly as possible. This will quickly push the hot air from inside the vehicle. This is a useful way to reduce the temperature in the car by 10 degrees in just a few seconds.

Remember that having the air conditioning always on may increase fuel consumption and emissions between 5% and 20%.
Better to pay your bills online

Pay your bills online

Paying bills online helps to save paper and avoids the energy consumption that is required to send them by post. Saving paper means fewer trees have to be felled.

Remember that a medium-sized tree absorbs 6 kg of CO₂ a year, which adds up to 250 kg over 40 years.

Sharing photos on social media instead of printing them and deleting your name from mailing lists are other contributions to use less paper and stop forests from disappearing.

Another way to use less paper is to convince your neighbours to limit the distribution of flyers in the mail boxes of your neighbourhood association.
**14 Turn off the television, it is still on when on stand-by**

**TIP Turn off the television when you are not watching it**

Just turning off the television using the remote control is not enough. You should turn it off and unplug the television when you are not watching it. **Energy consumption on stand-by accounts for 11% of a household’s total.** Lowering the brightness setting, switch on the environmental light sensor or choosing the right screen size for your needs also helps to cut energy consumption.

**The use of a power strip to turn off electronic devices saves 10% of energy.** Unplugging the mobile charger when you are not using it also helps to save energy. You can save over €40 a year if you switch off the power strip.

It is important to take into account that a television set that is on for 3 hours and is on stand-by for the remaining 21 hours, uses around 40% of its total energy while on stand-by.
If you cannot get there by bike or on foot, you should use public transport, the most efficient option against CO₂ emission, as a large group of users travelling together reduces the use of other more individual transport methods. If you need to travel by taxi, the option of an electric model is the most sustainable.

Public transport is fundamental in the city: it pollutes less, is a money-saver for the people using it, reduces the number of vehicles on the road, lowers the risk of in intinere accidents, is affordable for the great majority of the population and takes up less public space.

Emissions per person in a private vehicle are 208 g CO₂e/km; 135 g CO₂e/km in urban buses and 25 g CO₂e/km in Metro Bilbao.

Tools such as www.moveuskadi.com help you to plan travelling by public transport between different points of the Basque Country.
Eat a balanced amount of meat for the good of your health and environment

When you eat meat, make sure it is produced in the Basque Country

Livestock production generates nearly 15% of global greenhouse gas emissions. A change in lifestyle that helps to slow down climate change involves eating more fruit, vegetables and moderating your meat consumption.

The 20 main meat and dairy companies emitted more greenhouse gases in 2016 than the whole of Germany. If those companies were a country, it would be the seventh largest greenhouse gas emitter of the world.

Meat production generates large amounts of CO₂ and methane, and needs intensive use of water. Obtaining a kilo of beef releases three times more greenhouse gas emission than for a kilo of pork or poultry and generates more CO₂ than a car circulating for three hours.

However, moderate meat consumption is part of a balanced diet. By eating meat produced in the Basque Country, you will help to develop the local livestock sector and support the rural environment.
Use reusable instead of disposable tableware

TIP
Remove disposable tableware from your life

Dishing up is the last step before eating food and it is something that we do at least three times a day. Plates and glasses can be reusable, like the ones made of porcelain, glass or crockery, but there are also single-use plastic ones.

Six per cent of the oil used worldwide is to manufacture plastics and that percentage will have increased to 20% by 2050. It is, therefore, an additional source of pollution affecting climate change.

Using reusable tableware helps to cut oil consumption.

Every year, Europeans generate 25 million tons of plastic waste, but barely 30% is recycled. It is hard to give up the convenience offered by disposable plastic containers, but the sooner we do so, the better.
Used clothing can be reused

**TIP**
Donate the clothes you no longer use and your old glasses

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The circular economy, a low-carbon and resource-efficient economy, is the basis of this tip.

**Reusing the clothing that we no longer use reduces the use of resources such as cotton or oil** which are the basis for garment production.

Reusing means that the value of the products, materials and resources will last as long as possible. Every year, the Basque Country generates 32,000 tons of post-consumer waste, 44% of which is reused or recycled, with two thirds of what is recovered sent for international or local reuse and a third to produce new secondary materials.

**Donate what you do not use.** In Europe and the USA, 10 million pairs of glasses are thrown away each year and which could be used by other people who need them. Local charities will find a new use for glasses, clothes, books and furniture that are in good condition.
Clothes dry better outdoors

Whenever possible, hang the clothes to dry outdoors as it is most sustainable and ecological option. If time is pressing or you do not have a clotheshorse, spin the clothes in the washing machine before putting it in the dryer and separate the clothes so you can adjust the programme and the drying times.

Each use of the dryer means 3 kg of CO₂ are emitted to the atmosphere.

Drying the clothes on a clotheshorse not only protects the environment and mitigates climate change, but also means the garments last longer.

In case of bad weather or you cannot dry outdoors, make sure you maximise your dryer’s capacity and make sure it is always fully loaded.
The back of the paper can also be used

**TIP** *Photocopy, print and write on both sides*

Paper consumption per person stands at around 20 kg/month. Can you imagine using only half that amount of paper? **Photocopying and printing on both sides cuts the use of paper by 50%**. Another action that achieves that same result is to print using the “2 pages per page” option.

This simple action helps to foster carbon sinks, as trees and forests, which supply the raw material made to use paper, are the main “devourers” of CO$_2$ . Specifically, a tree of the usual species to be found in our territory “devours” around 6 CO$_2$ a year.

**Encourage people not to use paper by adding a note to your electronic signature asking your contacts to think before printing emails.**
Say no to single-use plastic bags

TIP

Take your reusable bag with you when you shop

The Member States of the European Union must reduce bag consumption to 40 units per person a year before the end of 2025. Spain has taken proactive measures in this regard: to ban plastic bags in 2020 and their free distribution from 2018.

The average use of plastic bags is around 12 minutes and they take 15 to 1000 years to decompose. Many of them end up in the oceans and harm marine fauna and flora. Between 10 and 15% of seabirds in the Bay of Biscay have plastic in their stomachs. Those impacts can be avoided using reusable bags or the traditional shopping trolley bag.

Furthermore, just 35% of them are deposited in the yellow containers to be recycled. The climate cost of this product is very high as it is an oil derivative.
Home energy certification provides information on CO₂ emissions

**TIP**

*Take the energy certificate into account when buying a house*

The energy certificate is an essential document when selling or renting a property. It provides information on the CO₂ emissions of a property that is for sale or to be rented. The content of the energy certificate is summarised on the energy label.

This label, which is similar in appearance to the energy label on household appliances, indicates the emissions and consumption ratings that the property obtained in its energy certification, on a colour scale that ranges from A (most efficient) to G (least efficient).

Specifically, an A-rated house, i.e. with maximum efficiency, can consume up to 86% less energy than a G-rated one.
Better air quality and protecting the atmosphere with zero-emissions vehicles

TIP Analyse the emissions certificate when buying a vehicle

Since 2015, average CO₂ emissions for new cars cannot exceed 130 grams per kilometre. The rating of the cars on the road is aimed at positively discriminating in favour of the most environmentally friendly vehicles and being an efficient instrument in municipal policies, both to restrict traffic in high pollution events and to introduce incentives in terms of tax benefits.

The rating is divided into the following categories: Zero emissions (for battery electric vehicles, plug-in hybrid electric vehicles with a range of over 40 kilometres or fuel-cell vehicles); ECO (for plug-in hybrid vehicles with a range of under 40 kilometres, fuelled by natural gas or liquid petroleum gas (LPG); C (petrol vehicles registered after January 2006 and diesel after 2014); and B (petrol vehicles registered after January 2000 and diesel after January 2006).

**Basing your buying decision on sustainability criteria helps to slow down climate change.**
Remember that some local councils already offer benefits (special lanes, free parking...) for “zero emissions” vehicles.
At work, school or ikastolas, there are many electronic and electric devices that continue to consume small amounts of electricity when they are turned off or on stand-by.  

**Use power-strips with a switch to stop devices continuing to consume power when they are on stand-by. When you disconnect the power-strip, all the devices connected to it are switched off, with the ensuing energy savings.**

Energy consumption per work station in an office is around 8,000 kWh/year. This energy consumption is double what each person consumes at home and causes the emission of around 4 tons of CO₂/year.

Three hectares of forest are needed to eliminate the CO₂ that is produced at each work station from energy consumption.
The more trees there are, the greater the absorption of CO$_2$

**TIP**  *Use less paper and cardboard*

Paper use can be reduced by working digitally and fostering the use of email for external and internal communications.

Checking texts on the computer using preview, before printing them also helps to save paper.

The blank sides of sheets of paper already printed on the other side can be used to print drafts.

These and similar measures help to maintain the forest cover, the main source of CO$_2$ absorption.

Each ton of recycled paper saves 17 trees from being felled and each of those trees absorbs 6 kg of CO$_2$ a year.

A simple multiplication shows us that saving a ton of paper helps to absorb 102 kg of CO$_2$ a year.
Your opinion is important, make yourself heard

**TIP**

*Use sound arguments to defend climate change theses*

**Set out your arguments in a calm, but convinced and clear-cut way.** Future generations will thank you for your work to take apart the arguments of climate change denials. The reality is that global warming is real and its consequences very serious, as the international scientific community contends.

**Help to disseminate best practices. Share on social media any publication or idea that helps to combat climate change.** The multiplier effect of social media is useful in order to raise awareness about the benefits for future generations of the steps that we take today to slow down climate change.

The reality is that in the 21st century alone, the Basque Country has experienced the hottest summers in the last 100 years. The extreme events (floods, hurricane-force winds,...) are also concentrated in recent decades. According to scientists, the last 30 years show a period of unprecedented warming during the last two millennia.
Compost, microorganisms helping us

**TIP**
*Provide an organic waste container for composting*

The arrival of the brown containers to our towns and cities has made it easier for everyone to contribute to the making of compost. Remember that organic matter accounts for 40% of the volume and weight of the waste that ends up in landfill and incinerators.

Separate plant and animal organic waste and deposit it in the brown container in the street. That waste is transported to the composting plant where it is processed to turn it into compost, a natural substrate that is used in gardening and marketing gardening.

It is better to use the organic waste (fruit, vegetable, egg shells or coffee) to make compost than it ending up in landfill. When the waste is put in a compost pile and is exposed to the air, it decomposes and becomes a natural fertiliser. In landfill, without air, it ferments and gives off methane, a greenhouse gas.
Not all computers are energy-saving

**TIP** *Buy computers with the “Energy Star” logo*

Buy computers or monitors with the ‘Energy Star’ logo, which means that the computer, when configured correctly, saves energy when not being used.

Office equipment with an “Energy Star” label is able to revert to idle mode after a certain time of the machine not being used. In that mode (low energy), the energy consumption is no more than 15% of normal consumption.

The requirements of the programme for “Energy Star” image equipment foster energy saving as they promote energy-efficient computer equipment and other office equipment. As well as on computer equipment, the programme logo appears on monitors, printers, fax machines, photocopiers and scanners.
Repair rather than throw

Be a responsible consumer

Planned obsolescence is the technology expiry date that some companies programme into their products in order to make consumers buy another one to replace it.

Perceived obsolescence is when a product is created with a certain appearance and the same product is later launched with just the design being changed.

**When you have to buy a product, check out its durability and take that variable into account when making the purchase.**

Being a responsible consumer means giving a second opportunity to household appliances and electronic devices that break down. Repairs are the way to get over planned obsolescence. The key is to extend the life of the devices.

Find out about reliable models and brands and about second-hand products. New things do not necessarily mean they are better.
Awnings and fans, alternatives to air conditioning

**TIP**
*Use climate control responsibly*

Air conditioning can account for up to 10% of the total energy consumption at home or in the office. The use of these appliances is increasing at one of the fastest rates, even though sustainable criteria are not always followed.

**It is feasible to cut energy consumption by over 30% by installing window awnings. Airing your home when the outside air is cooler and using a fan also helps to slow down climate change.**

A simple fan may often be enough to ensure an acceptable level of comfort: the movement of air cools the temperature by between 3 and 5 ºC, and its electricity consumption is very low.

If you have to switch on the air conditioning, set the cooling temperature at 25 ºC. For every degree more that you lower the temperature, 8% more energy will be consumed.
Buying seasonal and local products avoids the polluting gases caused by transport

**TIP** *Buy local produce*

Buying from local farmers means the produce will not have travelled far and avoids unnecessary packaging.

**Transport is a main cause of greenhouse gas emissions. The nearer the food is produced to the place of residence, the smaller the contribution to climate change.**

Eating seasonal fruit and vegetables, rather than international imports, also limits CO₂ emissions into the atmosphere.

Growing crops outside their natural environment or out of season requires large amounts of water, energy and other resources.

Transporting food by plane from one part of the planet to another generates 1,700 times more CO₂ emissions than when transporting them 50 kilometres by lorry. In strict terms, transport can account for up to 80% of the carbon footprint of food. Incidentally, local produce is tastier as it ripens in the field and not in cold stores.
Buy certified timber

**TIP** Check the origin of the wood

Forests provide important environmental services: timber, paper, medicinal plants or fruit, and they are important for leisure and stimulate our wellbeing.

Furthermore, they ensure water quality and store carbon and thus effectively combat climate change as they fix CO₂. Forest floors store 3 times more carbon than the tree biomass.

Forests need to be managed sustainably in order for forests to be able to continue to provide all those services. **It is therefore important to use timber and forest products certified by independent seals of approval in sustainable forestry management (such as PEFC or FSC).** This consumption has to preferably be local to avoid the emissions caused by transporting it. Its accreditation is a guarantee that the timber complies with sustainability standards in the supply of forest products.
Tourism is an activity that provides us with days of enjoyment and helps to generate wealth at the destinations, but it can also have significant impacts if not based on sustainable criteria.

Therefore, if you consume natural products from the area where you go on holiday, buy local crafts or enjoy the regional cuisine, you are contributing to the prosperity of the local economies.

Visit and look after protected natural areas, created to preserve places and species of great ecological value. The Basque Ekoetxeak network (Ekoetxea Txingudi, Ekoetxea Azpeitia, Ekoetxea Urdaiabi and Ekoetxea Peñas Negras) provides you with all you need to know to discover the local biodiversity and cultural heritage and to be a responsible tourist.

And one last tip, do not buy souvenirs from wildlife included in the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Leave it as you find it.
Shopping locally avoids car trips

TIP

Shop at local stores

Shopping locally helps to reduce environmental pollution, as it avoids a trip by car, saves on fuel and reduces air pollution.

For each litre of fuel burnt by a car engine, over 2 kg of CO₂ are released into the air.

You are helping to make the city work by shopping locally. You should also check that the product is local, by looking for the seals of guarantee or of origin, such as Eusko Label, Euskal Baserri or the designations of origin and protected geographical indications, Basque organic products, etc. that helps you to find locally-produced items.

Supporting local traders helps save money, is good for your health and the economic developing of our towns and cities.
If you have to use your car, make sure you drive efficiently

TIP  Drive efficiently

Don’t use your car whenever possible, but if you have to, make sure you drive efficiently. The most efficient way of driving is to use high gears and low revs.

Moderate speed, apart from being fundamental to improving safety, reduces fuel consumption, one of the main causes of CO₂ being released into the atmosphere.

Only use first gear to start the car and change quickly into second gear. Drive in the highest gear possible and at low revs. Keep within the speed limit on motorways. Make sure your tyres are at the right pressure, as just being 0.3 bars under increases fuel consumption by 3%. Turn off the engine when stopping for long periods.

Efficient driving does not just save on fuel, but also increases road safety.
Pedalling is good for your health and cuts greenhouse gases

**TIP**  
*Travel by bike*

Using a bike to get around can help to cut greenhouse gas concentrations. **Cycling is by far the most efficient and cheapest means of transport in a city. It is a quicker way to get around than by car and does not use fuel.**

Cyclists are also, in general, healthier. **Pedalling improves the immune system, prevents back-pain, protects joints and halves the risk of suffering a heart attack.**

The greenhouse gas emissions for each kilometre travelled are 0 grams of CO₂ equivalent by bike or on foot; 50 by bus, train, tramway or underground; and 200 by car with a single occupant.

Bicycles do not consume energy, are cheap to buy and cycling is very healthy.
Tap water is very healthy

**TIP** *Drink bottled water in moderation*

Production, filling, labelling, transporting, storage and recycling are the different stages involved in the life of a plastic bottle of mineral water. Its use has an environmental impact and consumes resources. A plastic bottle can take up to 500 years to decompose.

The good quality of our tap water makes it much easier to make the decision to consume bottled water in moderation. Most of the water collected in the Basque Country comes from Natura 2000 Network natural areas. They provide top quality water.

One million plastic bottles are bought every minute worldwide. **Everybody who stops drinking bottled and starts using tap water prevents the annual emission of 36 kg of CO₂ a year. Use your own water holder and ask for tap water at hospitality establishments.**
Brands that are concerned about the future

TIP

*Buy products from companies that support the change towards a low-emissions future*

A growing number of companies are taking the plunge to a future with low carbon emissions. There are increasingly more companies that are committed to climate change.

As consumers we can back those brands that are clearly committed to reducing their climate impact. **Do some research online and just buy from companies that you know apply sustainable practices.**

The European Union’s ecol-label identifies the products and services that are environmentally friendly and are not toxic. Look for it when you buying light bulbs, detergents, household appliances and even when booking a hotel room.

If you are also in a position to invest, focus on companies that are committed to sustainability.

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Buy loose rather than packaged items

- **TIP**
  - *Buy loose fruit, vegetables, pickles, dried fruit and nuts, etc.*

Whenever possible, you should buy loose products such as fruit, vegetables, pickles, pulses and beans, dried fruits and nuts, biscuits, etc. This will help reduce the amount of packaging ending up in household waste.

Food packaging, for example, accounts for 1.2% of greenhouse gas emissions in the United Kingdom.

Numerous stores - greengrocer’s, bakers, sweetshops, organic food stores, supermarkets, etc.- offer the possibility of buying unpackaged food. Buying loose items is efficient in terms of reducing plastic and packaging in general.
Your mobile phone is obsolete as soon as you leave the store

TIP Keep your mobile as long as possible

A large variety of materials is used to manufacture a mobile telephone, including lithium and cobalt in the battery, copper in the cables and on the print circuit boards, tin in the welding, plastic in the case and even gold and silver in the chip contacts.

Deforestation, armed conflicts, water and soil pollution practices are behind the obtaining of these raw materials…

**Recycling old mobiles and no impulse buying are two good TIPS to combat climate change.**

It is also important to use your mobile correctly and particularly when recharging. **If just 10% of mobile phone users around the world unplugged their chargers as soon as they had recharged their phones, the equivalent energy to supply 60,000 homes for a year would be saved.**
Greater comfort and energy savings thanks to correct insulation

TIP

Adequately insulate your home

Lack of insulation causes the outdoor and indoor temperatures to tend to equalise. The better insulated the walls and windows of the home are, the smaller the energy losses will be. Heat losses through walls, roof and the floor usually account for over 50% of the total losses.

The thermal insulation of a window depends on the quality of the glass, the type of carpentry of the framework and the shutter installation. Improvement to a home’s insulation can lead to energy and economic savings of over 30%.

It is of interest to insulate our home, including the hot water tanks, the central heating pipes and cavity walls. Putting a piece of aluminium foil behind the radiators is also a good tip.

The Basque Government has a series of grants for work on resident associations’ façades aimed at cutting the energy consumption of the buildings.
LED light bulbs allow electricity consumption to be reduced by up to 80-90%

**TIP** *Replace traditional incandescent light bulbs by LED lighting*

On average, lighting accounts for 80% of the electricity consumption of the household. **It is therefore important to opt for LED light bulbs, which offer high energy efficiency.**

The annual cost of leaving an incandescent being on for 4 hours every day comes to €15.15, including the price of purchasing the bulb. It is €6.37 in the case of a compact fluorescent bulb (energy efficient), while it is €8.17 for a LED bulb. With respect to the lifespan, the length is 1000 hours for incandescent bulbs, 10,000 hours for compact fluorescent bulbs (energy efficient), while it is 25,000 hours for LED bulbs.

They offer the maximum light intensity instantly, they offer good fire resistance and provide a high colour rendering index. **LED light bulbs allow electricity consumption to be reduced by up to 80-90% compared to traditional bulbs.**
Accommodation with a European Ecolabel is a sustainable alternative for your holidays

TIP
Choose tourist accommodation with an ecolabel for your holidays

Energy and water savings, the use of renewable energies, bioclimatic architecture, reducing waste and its correction management are some of the features that make accommodation with the European Ecolabel stand out from the traditional tourist sector.

Using that accommodation, including camping sites, rather than staying at traditional accommodation is a way to help combat climate change even when you are on holiday.

Such accommodation uses low carbon technologies, thermal and acoustic insulation, and features locally-sourced and seasonal food. Those measures allow the carbon footprint to be cut by 90%, compared to traditional accommodation.

There are over environmentally-certified 25 tourist accommodation establishments in the Basque Country.
Do not emit CO$_2$ at Christmas

**TIP**

Give sustainable products

Christmas has become one of the consumer high points of today’s society. Considering sustainability when shopping at that time of year is a simple thing you can do to limit CO$_2$ emissions.

**Give sustainable or recycled products or which generate little waste.** Avoid paper Christmas cards and replace that tradition by sending digital seasonal greetings through email.

**Do not use disposable materials at meals and family get-togethers:** avoid using plastic plates and glasses or paper serviettes.

**Make your Christmas decorations using recycled or upcycled materials.**

**If you buy a real Christmas tree, replant it at the end of the festive season.** Remember that species such as holly are protected and must not be removed, not even the branches, from their natural habitat.
Don’t give into temptation

Be a responsible shopper

We live in a consumer society. Throughout the day, we are bombarded with incentives to buy and use goods, even if we do not need them. Mass consumption has led to consumerism, which is the exaggerated and compulsive demand for goods and services.

**Shop sensibly:** plan your meals, make shopping lists and avoid impulse buying and don’t let yourself be seduced by advertising. **Opt for fair trade, ethical and organic products and services, along with ones that are very energy efficient.**

**Reject disposable products and don’t buy goods with unnecessary packaging.**

**Preferably buy drinks in reusable** rather than recyclable containers (metal, plastic cartons...). Choose drinks, juices, yoghurt, milk, soft drinks, preserved foods, etc. in returnable glass bottles or jars.

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- TIPS -
EFFORT LEVEL

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Very difficult
TIP
Plan and offset your trip

Before travelling, check out the different alternatives. If you have to travel a medium distance, the train can be an environmentally more sustainable alternative.

Flying is the source of CO₂ emissions where there is the greatest increase in the transport sector. A flight between Bilbao and Madrid (369 kilometres) generates 59 kg of CO₂ emissions per passenger. Flying from Bilbao to London-Heathrow (940 kilometres) generates 150 kg of CO₂ emissions per passenger.

The pollution generated may be offset by promoting activities to absorb CO₂ that airlines offer when you buy your ticket. For examples, the emissions produced in a return journey of Bilbao to London may be offset by donating €11 to a climate-action project.
Electric mobility is growing fast. The number of hybrid and electric vehicles registered worldwide already stands at two million, double the number for the previous year.

Those “green vehicles” reduce greenhouse gas emissions. Electric cars do not produce CO₂ emissions, as they are powered by batteries previously charged from the mains grid. Travelling one kilometre in a petrol-fuelled car costs €0.10 and is nearly ten times cheaper in an electric one: €0.013.

If you decide to buy a new car, try to choose a fuel-efficient one. Vehicle manufacturers are required to show the CO₂ emission level and fuel consumption of their products in the showroom and in advertising.

Did you know that there are municipalities in the Basque Country that charge lower road taxes for vehicles that pollute less?
Get an allotment and fill your pantry

**TIP**  
Grow your own and organic food

Organic food is healthy, nutritious, fosters biodiversity and mitigates climate change. Organic farming is protected by European legislation and its production and quality is controlled.

Local councils have recently introduced allotment schemes to encourage healthy lifestyles by working the gardens and locally-produced food without any additives.

In line with this trend, you can also opt for organic farming that grows local varieties and the use of non-chemical fertilizers and pesticides. Those practices help to prevent soil exhaustion and reduce the pollution of water tables.

**Before filling your fridge, look at what you are eating and at the consequences for climate change when you go shopping,** as the production of a kilo of lamb involves one hundred times more CO₂ than a kilo of oranges.
A natural way of beating heat

**TIP**  
*Install a green roof at home*

A green roof or a rooftop garden provides shade and eliminates heat from the air, lowering the temperatures on the roof surface and from the surrounding air. On hot summer days, the surface temperature of a green roof can be cooler than the air temperature, while the surface of a conventional roof may be up to 30 °C warmer.

Green roofs can be set up on a wide range of buildings, from industrial facilities to private residences. They can be as simple as 5 centimetres of resistant plant cover or as complex as a fully accessible park with trees.

Green roofs generate savings of at least 10% in the energy demand of the buildings.

Not everyone can have the option of setting up a green roof on their building, but **simple steps, such as planting tall plants on terraces and balconies, can achieve the same objective on a small scale.**
Woodland acts as sinks through photosynthesis, by capturing CO₂ from the air or dissolved in water, and with the help of sunlight to produce simple sugar molecules. Its importance is fundamental in combating climate change. You can help with the upkeep of the forest by backing reforestation projects run by NGOs or supporting local initiatives.

It is estimated that a square kilometre of forest generates a thousand tons of oxygen a year or that a 20-year old tree absorbs in one year the CO₂ emitted by a vehicle that travels 10,000 to 20,000 km.

Our CO₂ emissions can be offset by planting trees. Offsetting CO₂ emissions is based on the voluntary contribution of an amount of money, proportional to the tons of CO₂ equivalent emitted. This contribution is used for projects that reduce or absorb CO₂ equivalent emissions.
Erronka Garbia is the seal you need

**TIP** Organise sustainable festivities and events

A sustainable event is one that has been designed, organised and implemented in such a way that it minimises the potential negative impact on the environment. In the Basque Country, there is an environmental sustainability certificate for events called Erronka Garbia.

This certificate may be applied to a very extensive range of events, held indoors and outdoors, such as congresses, conferences, recreational events, sports events, musical festival, patron saint festivities...

Thanks to the Erronka Garbia certificate, there are already events that have cut their CO₂ emissions by at least 40%, and have even managed to be carbon neutral by means of offsetting those emissions that could not be reduced using the implemented measures.

**CLASSIFICATION**

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Using electricity from a 100% renewable source is possible

Contract electricity from renewable sources

Directly generating energy or contracting energy from 100% renewable sources are two options to use renewable electricity. The main systems to produce renewable electricity at home are to install photovoltaic solar panels or to install wind mini-generators. Those solutions are now always simple, but it is easy to contract electricity from a 100% renewable source.

There are different companies and cooperatives that only supply electricity from renewable sources. Renewable power can also be used for heating. The energy for heating and domestic hot water can be obtained for renewable energy sources, such as biomass boilers, thermal solar panels or geothermal facilities. 
• EU Climate Action European Commission.
• Our planet, our future. Fighting climate change together. European Commission.
• Climate change. What is it all about? An introduction for young people. European Commission.
• 52 Tips for Biodiversity European Commission.
• Tips to cut your greenhouse gas emissions Ministry of the Environment, Territorial Planning and Housing. Basque Government.
• Electricidad procedente de fuentes renovables en tu hogar. Comunidad #Por el Clima.
• Guía para disminuir la factura eléctrica y ahorrar en el hogar. Ecodes.
• www.ingurumena.eus
• www.ihobe.eus
52 TIPS to combat climate change

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