

An introduction to climate literacy for all.



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Adult
Literacy
for Life



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An introduction to Climate Literacy for All

**To provide concise, simple
information on climate
change, sustainability and
climate justice combined
with practical actions that
individuals can take.**

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Climate Change

Planet Earth has seen many changes in the 4.54 billion years of its existence.

For example:

- 320 million years ago, Ireland sat at the equator.
- Evolution/Extinctions – Human Evolution/Dinosaur Extinctions
- Changes in Temperature – The Great Ice Age



Scientists agree that Earth is now undergoing climate change and global warming. Change always has a cause. Climate change is due to human activity and the burning of fossil fuels.



Fossil fuels come from the fossils of tiny plants and animals that lived hundreds of millions of years ago.

Since then, the Earth's movement compressed them into oil, coal, and gas. They took a long time to form. We call them non-renewable fuels. When burned for energy, they release greenhouse gases.



Greenhouse gases are gases like carbon dioxide, methane, and nitrous oxide. When they are present in the Earth's atmosphere they trap heat.

This heat cannot escape away from Earth into space. This creates the Greenhouse Effect that causes global warming.



Global Warming is the rise in the Earth's average surface temperature since pre-industrial times (before the 1900s).

The Earth's average surface temperature is 15 degrees Celsius. It is rising due to greenhouse gases from fossil fuels.

Some Effects of Climate Change:

- Rising Temperatures
- Melting Polar Ice Caps and Glaciers
- Sea Level Rise
- Extreme weather like storms, floods, and droughts
- Wild fires




Change can be difficult.

Our lives revolve around the weather because we depend on it.

- Weather changes make food production challenging.
- Weather extremes threaten human life. Some places may become uninhabitable.

Climate change's worst effects can be avoided. We can look for solutions. 5

The solution involves sustainability.

An orange circular graphic with a watercolor-like texture, containing the text 'What does living sustainably mean?'.

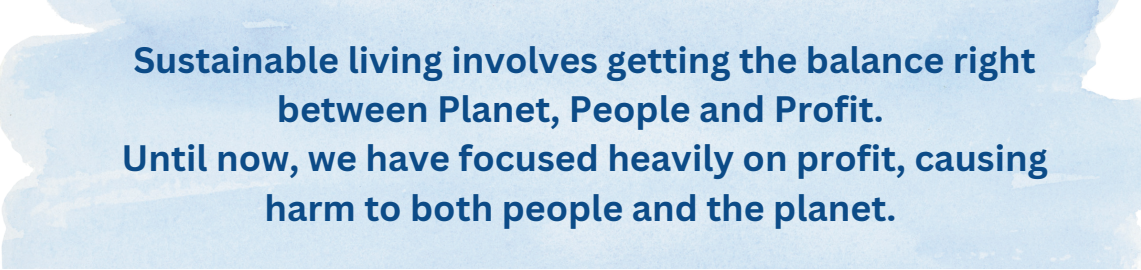
**What
does
living
sustainably
mean?**

Living sustainably means adopting habits that preserve the planet's natural resources.

Living sustainably means considering, not just the economic value of things, but also their human and environmental costs.

This ensures we can meet our needs. It won't harm future generations' ability to meet theirs.

This is called climate justice.

A light blue background with a white brushstroke-like texture, containing the text 'Sustainable living involves getting the balance right between Planet, People and Profit. Until now, we have focused heavily on profit, causing harm to both people and the planet.'.

**Sustainable living involves getting the balance right
between Planet, People and Profit.**

**Until now, we have focused heavily on profit, causing
harm to both people and the planet.**

Climate Justice

Climate Change is not just an issue about the environment, it is also an issue about justice. Countries are not all equally responsible for causing climate change and countries of the global south are often bearing the brunt of the impact.

Climate Change shows us how important it is to care for others. Everyone deserves to be treated fairly yet we live in an unequal world



Climate Justice aims to make sure that people who are vulnerable are given what they need to thrive as the effects of climate change take hold. Living sustainably and buying fair trade help make this a reality.



Climate Justice recognises that those who are least responsible for climate change suffer the most.

How can we live sustainably?



To help us to live sustainably, the UN made 17 Sustainable Development Goals. Governments worldwide are using these goals to ensure that new policies meet their aims.



This booklet looks at four topics: Food, Fast Fashion, Biodiversity and Waste.

It looks at how our unsustainable way of living harms people and the planet. It provides steps to adopt sustainable living. It also shows how climate justice can be achieved.

Food and People



We need to eat a balanced diet that includes lots of fruits and vegetables to stay healthy and happy.

Global food inequalities mean that worldwide 735 million are poorly nourished.

Poor diet is the leading cause in 20% of deaths worldwide.

This tells us that our relationship with food needs to improve.

Food and the Planet



How we farm and eat are damaging the planet. Food production is linked to producing 33% of all greenhouse gases.

Some intensive farming methods that use a lot of fertiliser and pesticides can pollute water and soil.

Clearing land for farming impacts on animals and their habitats.

What You Can Do to Make Food Sustainable?

Improve your diet –
reduce the amount of sugar,
carbohydrates and fats and
eat more plant food.

Reduce food waste.
In Ireland, 146 kg of food
per person is wasted
each year.
It costs the average
household
€60 a month.

Grow your own food
and/or buy fruit and
vegetables that are in
season and grown locally.

Be aware of campaigns to
support small farmers in the
Global South.



Fast fashion and people

Fast fashion is cheap, trendy clothes produced in large numbers. The clothes are not made to last and often end up looking faded or out of shape after just a few washes.

Fast fashion comes at a cost for workers in some countries particularly in Asia. They work long hours, in poor conditions, for little pay to make our clothes.

Fast fashion and the planet

Experts say that fast fashion is killing the planet.

How? Excessive water usage. It takes 2,700 litres of water to make a cotton t-shirt. At the same time, dyeing clothes creates large amounts of water pollution.



Oil usage: We need 342 million barrels of oil each year to make synthetic materials for our clothes.



Greenhouse Gases: Fast fashion creates more greenhouse gases than all the world's planes and ships combined.

What can you do to make fashion sustainable



Use charity or second hand shops



Up cycle and repair clothes



Wear what you have and learn to style it



Buy they best quality clothes you can afford



Biodiversity

Biodiversity and People

Biodiversity is the rich variety of life on Earth. Everything is interconnected, or dependent on everything else! Communities of plant, animal and microbial interconnections are called ecosystems.

We need nature, we love nature and we learn from nature. Much of what we use in our everyday lives comes from nature, e.g., our food, shelter, and medicine. Nature is vital for our mental health and well-being.

The planet's animals and plants have greatly declined in number and variety.

This is called Biodiversity Loss.



Biodiversity loss threatens our healthy existence.

Biodiversity and the planet

It can be natural for creatures, plants to come and go on Earth.

When a creature becomes extinct it creates a space for something new to take its place.

Mass extinctions sometimes occur when many plants and animals die out in a short period of time.

A mass extinction event is when species vanish much faster than they are replaced.

Scientists believe that the Earth is experiencing its sixth mass extinction event.

Our activities cause biodiversity loss, so, we can do something about it.



What you can do to sustain biodiversity



Leave space for nature and consider it in the decisions you make.



Join a group like the Tidy Towns, participate in surveys, volunteer for citizen science projects.



Spend time enjoying the beauty of nature. Smell the flowers, walk in the woods and observe the changing seasons.



For positive well-being and to interact with nature, everyone should live within 300 metres of a green space.

Liaise with community leaders if you there are no green spaces near where you live.

Waste



Our daily needs such as food, shelter, and clothing and activities such as transport and manufacturing create waste. This can cause pollution.



For example:-

We extract oil from the planet to make plastic and plastic is polluting our ocean and damaging marine life and our own health

Waste and the planet



The resources on Planet Earth are finite —they are limited, they won't last forever.

We can't expect to keep taking without giving back.

We must look for better ways to manage our waste because much of our waste is polluting and damaging the planet.

Waste

Value and care for what food, clothes, shelter etc., you have.



When an item comes to the end of its life recycle it or reuse it in a different way.

Compost food waste.

Use reusable shopping bags and avoid packaging.



Donate things you don't use to charity shops and buy second hand.

All these actions will help support the Circular Economy

The Circular Economy

Our waste can be better managed, through the Circular Economy system. This is a system of reusing or repairing things before we recycle them or throw them away.

This will result in us using up less of the planet's natural resources.. The Circular Economy is benefited by products that are designed to last and when items are shared.

International Agreements

What the world can
do to support
a sustainable future

In 2016 the countries
of the world came
together to take
action to try to limit
climate change.

**196 countries signed
the Paris Agreement**

Paris Agreement

The Paris Agreement is a legally binding treaty. It aims to limit global warming. It means that Earth's average surface temperature must not rise by more than 2 degrees Celsius.

It aims to limit the global warming to 1.5 degrees Celsius.

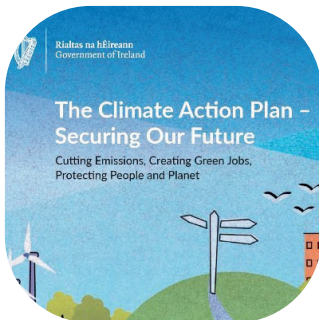
To achieve this, every country must reach net zero carbon emissions by 2050.



Net Zero

This means that the amount of carbon dioxide entering the atmosphere is equal to or less than the amount which is removed.

Carbon dioxide is removed from the atmosphere by trees, plants and the ocean. A carbon budget helps countries achieve net zero.

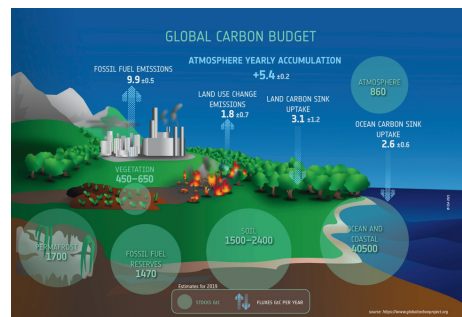


Ireland's Climate Action Plan.

Each year, Ireland's Climate Action Plan outlines the actions and measures that it will take so that Ireland stays within its carbon budget.

Carbon budgets set out how much carbon a country can emit in an agreed five-year period.

This budget is shared among across five sectors in Ireland. They are Energy, Industry, Agriculture, Land Use – Land Use Change and Forestry, and Waste.



Climate Change and Sustainable Development Resources

Climate Change in Ireland <https://www.epa.ie/our-services/monitoring--assessment/climate-change/>

Met Eireann on Climate Change
<https://www.met.ie/climate/climate-change>

Climate Change Advisory Council
<https://www.climatecouncil.ie/>

Climate Change/Climate Justice/ Sustainable Development
<https://sdgs.un.org/goals>
<https://irelandsdg.geohive.ie/>

Food References and Additional Information

Concern Worldwide (2023) World hunger facts: What you need to know in 2023, <https://concernusa.org/>. Available at: <https://concernusa.org/news/world-hunger-facts/>

Environmental Protection Agency (2024) Food Waste Statistics, <https://www.epa.ie/>. Available at: <https://www.epa.ie/our-services/monitoring--assessment/waste/national-waste-statistics/food/>.

World Economic Forum (2019) One in five deaths worldwide link to unhealthy diet | World Economic Forum, www.weforum.org. Available at: <https://www.weforum.org/agenda/2019/04/one-in-five-deaths-worldwide-linked-to-unhealthy-diet/>.

World Health Organization (2024) Obesity and overweight, www.who.int. Available at: <https://www.who.int/news-room/fact-sheets/detail/obesity-and-overweight>

Check Out

Safe Food <https://www.safefood.net/>
Grow It Yourself <https://giy.ie>
StopFoodWaste.ie

Fashion References and Additional Information

Ellen MacArthur Foundation (2017) 'A new textiles economy: Redesigning fashion's future,'. Ellen MacArthur Foundation. Available at: <http://www.ellenmacarthurfoundation.org/publications>).

World Wildlife Fund (2014) Handle with Care | Magazine Articles | WWF, <https://www.worldwildlife.org/>. Available at: <https://www.worldwildlife.org/magazine/issues/spring-2014/articles/handle-with-care>.

Oxfam UK (2019) New Shocking Facts about Fast Fashion, <https://www.oxfam.org.uk/>. Available at: <https://www.oxfam.org.uk/oxfam-in-action/oxfam-blog/new-shocking-facts-about-the-impact-of-fast-fashion-on-our-climate/>

Check Out
Fashion Transparency Index
<https://www.fashionrevolution.org/>

Biodiversity References and Additional Information

World Wildlife Fund (2024) What is the sixth mass extinction and what can we do about it? | Stories | WWF,
<https://www.worldwildlife.org/>.

Available at: <https://www.worldwildlife.org/stories/what-is-the-sixth-mass-extinction-and-what-can-we-do-about-it>

World Health Organization Regional Office for Europe (2017) 'Urban Green Spaces: A Brief for Action'. World Health Organisation.

Available at: <chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://iris.who.int/bitstream/handle/10665/344116/9789289052498-eng.pdf>.

Check Out

Local Kilkenny Tidy Towns Groups

National Biodiversity Data Centre - <https://biodiversityireland.ie/>

Nore Vision - <https://norevision.ie/>

Waste References and Additional Information

UN Environment Programme (2024) Eight ways to overcome the waste pollution crisis | UNEP, <https://www.unep.org/>.

Available at:

<https://www.unep.org/news-and-stories/story/eight-ways-overcome-waste-pollution-crisis>

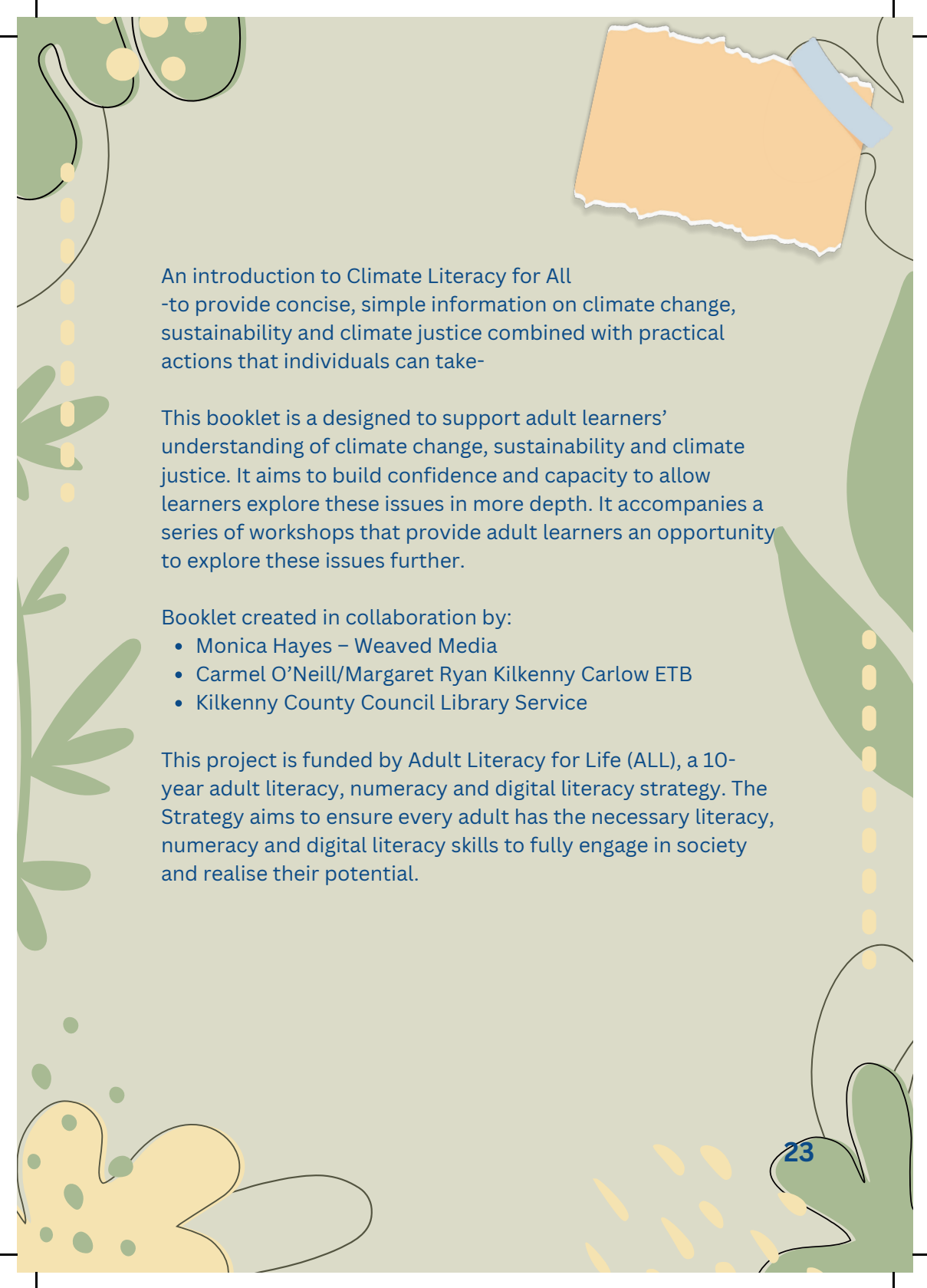
Check Out

Dunmore Recycling and Waste Disposal Centre, Kilkenny

MyWaste.ie

Fossil Fuels [Geological Survey Ireland](https://www.gsi.ie)

<https://www.gsi.ie>



An introduction to Climate Literacy for All
-to provide concise, simple information on climate change, sustainability and climate justice combined with practical actions that individuals can take-

This booklet is designed to support adult learners' understanding of climate change, sustainability and climate justice. It aims to build confidence and capacity to allow learners explore these issues in more depth. It accompanies a series of workshops that provide adult learners an opportunity to explore these issues further.

Booklet created in collaboration by:

- Monica Hayes – Weaved Media
- Carmel O'Neill/Margaret Ryan Kilkenny Carlow ETB
- Kilkenny County Council Library Service

This project is funded by Adult Literacy for Life (ALL), a 10-year adult literacy, numeracy and digital literacy strategy. The Strategy aims to ensure every adult has the necessary literacy, numeracy and digital literacy skills to fully engage in society and realise their potential.

