





Young people taking action for the environment and sustainability

Further topic information and project ideas for youth workers





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Biodiversity is a measure of the variety of living things in an ecosystem. Simply put a healthy biodiverse ecosystem is essential for life on earth creating functioning ecosystems that provide oxygen, food, manage waste etc.

- 1 in 10 species are at risk of going extinct in Northern Ireland
- Northern Ireland is 12th worst in the world for biodiversity loss out of 240 countries surveyed

The UK is in the lowest 10% of countries worldwide for biodiversity loss. It has around half its biodiversity left, well below the global average of 75%. (90% is the goal to ensure a healthy planet)

Causes of biodiversity loss

- Land use change
- Direct exploitation of organisms e.g. overfishing
- Climate change
- Pollution
- Invasive alien species

It is now widely accepted that we need urgent and transformational change in our economy and society if we are to avoid future catastrophe. We will all have to make changes. Without this, we are facing a very uncertain future and leaving a toxic legacy for our children.

Locally, we continue to lose our most precious remnants of wild natural space - ambitious restoration of nature not only improves biodiversity but creates systems that capture carbon in our peatlands, meadows, woodlands and marine ecosystems e.g. oyster beds, sea grass, kelp forests.

We need every single space reimagined to help wildlife, walls, fences, youth club grounds, they can all become part of a huge jigsaw of nature recovery networks. No space is too small, together the small spaces can create green corridors and stepping stones to connect larger wild spaces.

Given the chance nature is capable of extraordinary recovery.



| Action | Resource |
|---|---|
| Wildlife ID recording for Citizen Science Projects | There are a lot of opportunities for citizen science, it's very rewarding and valuable for scientific research, projects are usually seasonal http://www2.habitas.org.uk/records/home https://www.biodiversityireland.ie https://www.ulsterwildlife.org/hedgehogs https://www.seadeepni.org/eggcase https://www.rspb.org.uk/get-involved/activities/birdwatch https://bigbutterflycount.butterfly-conservation.org |
| Creating space for nature around Youth Club grounds | Wildlife trusts series of gardening guides https://www.wildlifetrusts.org/gardening |
| Take action for nature in your own home | A comprehensive list of attainable actions. E.g. how to create a mini pond etc. https://www.ulsterwildlife.org/let-nature-in |
| Building habitat boxes | https://www.ulsterwildlife.org/actions E.g. Bird boxes, swift boxes, bat boxes, insect hotels, https://www.bto.org/sites/default/files/bto-nest-boxes-essential-guide.pdf |

- What is biodiversity? | David Attenborough: A Life On Our Planet YouTube
 https://www.youtube.com/watch?v=a8hhAfSPBq8 Film Trailer for a Life on our Planet
- https://www.rspb.org.uk/our-work/state-of-nature-report/
- Biodiversity: Why the nature crisis matters, in five graphics BBC News
- UN Report: Nature's Dangerous Decline 'Unprecedented'; Species Extinction Rates 'Accelerating' –
 United Nations Sustainable Development
- Global environmental issues Land https://sdgs.un.org/goals/goal15
- Marine https://sdgs.un.org/goals/goal14

It's been said Energy is the foundation of civilization.

Think about your daily activities and the energy that has gone into making them happen. Everything from food, hygiene, transport, heating, recreation etc. requires energy and currently much of that is in the form of fossil fuels.

- Fossil fuel burning has resulted in a huge and unsustainable CO2 increase which
 is now directly impacting the climate on the planet. Worldwide 1/3 of the world's
 population use dangerous and inefficient cooking systems and 759 million
 people lack access to electricity.
- Northern Ireland has a high level of fuel poverty 22% and a high level of dependency on fossil fuels. A household is said to be in fuel poverty if it needs to spend more than 10 per cent of its income on energy costs.
- Northern Ireland has the highest dependency on oil for home heating (68%) in the UK rising to 82% in rural areas. A transition away from fossil fuels to renewable energy will benefit people in many ways.
- Energy is considered sustainable if it can meet the needs of the present without compromising future generations. There are numerous positive stories of how this transition is underway.
- From July 2020 to June 2021, 45.4% of total electricity consumption in Northern Ireland was generated from renewable sources located in Northern Ireland
- Ensuring access to affordable, reliable, sustainable and modern energy for all will open a new world of opportunities for billions of people through new economic opportunities and jobs, empowered women, children and youth, better education and health, more sustainable, equitable and inclusive communities, and greater protections from, and resilience to, climate change.



youth-club-audit-activityage-10plus.pdf Conduct an energy audit (keepscotlandbeautiful.org) Measure your Carbon **WWF Footprint Calculator Footprint** Research Renewable https://powerni.co.uk/help/e energy options within the nergy-guides/greenlocal area energy-northern-ireland Hold a club info night on energy-source-game.pdf (keepscotlandbeautiful.org) energy Fundraise to purchase solar E.g. solar phone chargers power

Useful Links

- https://www.carbonbrief.org/met-office-atmospheric-co2-now-hitting-50-higherthan-pre-industrial-levels
- https://sdgs.un.org/goals/goal7
- https://www.communities-ni.gov.uk/topics/housing/fuel-poverty
- https://www.economy-ni.gov.uk/articles/electricity-consumption-and-renewable-generation-statistics
- https://sdgs.un.org/topics/energy
- BBC Bitesize Renewable Energy Chart https://www.bbc.co.uk/bitesize/guides/z3tjcwx/revision/2
- https://www.irena.org/newsroom/articles/2022/Apr/In-an-Indonesian-Village-Solar-Light-Drives-Gender-Equitable-Economy-and-Improves-Welfare



Climate Change

"The world's five warmest years have all occurred since 2015 with nine of the 10 warmest years occurring since 2005" NOAA

CO2 produced by human activities is the largest contributor to climate change. It is now widely accepted that this is causing man made Climate change. Climate change is now affecting everyone, already we are seeing changing weather patterns, rising sea levels and extreme weather events becoming more common.

The urgent and transformational action need to avoid catastrophe is currently not happening at a fast enough rate to mitigate the impacts we are facing.

The Paris Agreement (2015), is a legally binding international treaty on Climate Change which aims to keep global temperature rise to well below 2C. COP26 in Nov 2021 was a crucial decision point when world leaders came together to commit to take action forging the Glasgow Climate Pact. Locally the Northern Ireland Assembly recently passed the Climate Change Bill giving a framework to tackle the issue here.

Anxiety about the future in terms of climate change is adding to the mental burden carried by many children and young people. Supporting young people to take action can help reduce this anxiety and promote feelings of being able to make a difference in the world.

Some of the messaging around climate change is very negative, there are however numerous positive stories worth sharing e.g. Earthshot prize winners.



| Action | Resource | |
|--|---|--|
| Site visit to see local nature based climate solutions | https://www.ulsterwildlife.org/blue-carbon https://www.ulsterwildlife.org/saving-our- peatlands | |
| Get involved in some tree planting | https://www.woodlandtrust.org.uk/about- us/where-we-work/northern-ireland/ | |
| Visualise a positive climate future | visualising-climate-futures-activity.pdf (keepscotlandbeautiful.org) | |
| Measure your Carbon Footprint | https://footprint.wwf.org.uk/#/ | |
| Host a mini COP | how-to-host-mini-cop-activity.pdf (keepscotlandbeautiful.org) | |
| Host your own climate negotiation | climate-negotiations-age-12plus.pdf (keepscotlandbeautiful.org) | |

- https://www.bbc.co.uk/iplayer/episodes/m0011h0j/life-at-50c
- https://www.noaa.gov/news/2019-was-2nd-hottest-year-on-record-for-earth-say-noaa-nasa
- https://ec.europa.eu/clima/climate-change/causes-climate-change_en
- https://www.un.org/sustainabledevelopment/climate-change/
- https://www.ipcc.ch/report/ar6/wg1/downloads/outreach/IPCC_AR6_WGI_SPM_Basic_ Slide_Deck_Figures.pdf
- https://fridaysforfuture.org/
- https://footprint.wwf.org.uk/#/
- https://ukcop26.org/the-glasgow-climate-pact/
- I am Greta Film Trailer https://www.youtube.com/watch?v=Mwk10YGPFiM
- https://www.bbc.co.uk/iplayer/episodes/p09w80wb/the-earthshot-prize-repairing-our-planet



Health and Wellbeing

You have probably heard the saying "Your health is your wealth"

The Covid pandemic has brought home how important health and well-being is. Our environmental surroundings have an impact on us, this can be positive or negative. This can be due to poor air quality, lack of greenspace, hygiene etc. Spending time in green space or bringing nature into your everyday life can benefit both your mental and physical wellbeing.

12.6% of children and young people in Northern Ireland suffer "common mood disorders"

The additional burden of the climate and biodiversity crisis on mental health cannot be ignored.

"Young people today have not created this reality; we've inherited it. And we're told we are the last generation with a chance to save the fate of our planet. It should come as no surprise, then, that there is an epidemic of mental health problems."

Emerging research suggests that social action projects help confer resilience and have a positive impact on the mental well-being, of young people, suffering from eco-anxiety.

"Those who contemplate the beauty of the earth find reserves of strength that will endure as long as life lasts."— Rachel Carson, The Sense of Wonder



| Action | Resource |
|--|---|
| Create a sensory space in the youth club garden | https://www.handmadeplaces.co.uk/blog/artic les/school-sensory-garden-design- children.html |
| Take part in well being activities in nature | https://www.mind.org.uk/information- support/tips-for-everyday-living/nature-and- mental-health/ideas-to-try-in-nature/ |
| Fundraise and help other young people access wellbeing opportunities | https://www.waveproject.co.uk/ |
| Try some nature art | https://www.youtube.com/watch? v=XFxwoqYJC3k |

- https://www.mind.org.uk/information-support/tips-for-everyday-living/nature-and-mental-health/how-nature-benefits-mental-health/
- http://www.hscboard.hscni.net/our-work/social-care-andchildren/youth-wellbeing-prevalence-survey-2020/
- Force+of+Nature+(THE+RISE+OF+ECO-ANXIETY).pdf



Water is possibly the most important substance on the planet. Water is vital to everything that is alive.

Here in Northern Ireland we sometimes take it for granted because we have an abundance of water.

Many countries around the world are facing increasing problems accessing adequate quantities of clean water. This is leading to a water crisis.

Without water food supplies become scarce, disease spreads due to sanitation issues, people need to migrate and conflicts can become more likely.

Recently due to climate change water patterns on the earth have been changing. Some areas are getting wetter and others drier. Too much water can be as big a problem as too little. Both droughts and floods cause huge disruption to agriculture, people and the environment.

Water pollution harms human health and the natural environment.

Here in Northern Ireland many of our rivers are under pressure from pollution caused by agriculture, water treatment and occasional spill incidents. In 2021 no rivers in Northern Ireland achieved a good environmental status.

Most of the water on the planet is in the form of sea water with many reports indicating sea level rise and marine pollution being issues needing addressed worldwide.



Here in Northern Ireland we are failing to meet 11 of 15 indicators for Good Environmental Status and 95% of our inshore Marine Protected Areas (MPAs) are not favourably managed.

There are positive and exciting blue carbon opportunities on the horizon e.g. native oyster restoration projects, sea grass meadow restoration etc.

- https://www.daera-ni.gov.uk/news/northern-ireland-water-frameworkdirective-statistics-report-2021-released
- https://www.ulsterwildlife.org/news/northern-irelands-marine-habitatscould-help-transform-climate-crisis-says-new-report
- https://www.wildlifetrusts.org/water
- https://www.wildlifetrusts.org/news/new-report-reveals-pollution-biggest-threat-wildlife-our-waterways
- https://www.un.org/sustainabledevelopment/water-and-sanitation/
- https://www.theguardian.com/environment/2021/dec/15/7m-tonnes-of-raw-sewage-a-year-discharged-into-northern-irish-rivers



| Action | Resource |
|--|---|
| Educational visit | https://www.niwater.com/water-treatment-plant- visits/ |
| Water pollution study Water pollution monitoring | Air and water quality nidirect |
| Create a pond or water feature | https://www.ulsterwildlife.org/help-wildlifehelp- wildlife-homehelp-frogs/how-build-pond |
| Water use survey/ education | https://www.watercalculator.org/wfc2 / https://www.activesustainability.com/sustainable- life/calculate-water-footprint/ https://friendsoftheearth.uk/sustainable-living/13- best-ways-save-water |
| Wildlife survey Look at water quality indicator species in a river | https://practicalbiology.org/environment/environmental-indicators/monitoring-water-pollution-with-invertebrate-indicator-species? highlight=WyJpbnZlcnRIYnJhdGUiXQ== |
| Create a marine activity day/ beach litter collection | https://www.ulsterwildlife.org/help-wildlife/learning- resources |
| Citizen science- become a marine recorder- | https://www.ulsterwildlife.org/ShoreNI https://www.seadeepni.org/eggcase |
| Create a marine education day | https://www.ulsterwildlife.org/help-wildlife/learning- resources |
| Attend a marine event | https://www.ulsterwildlife.org/events |

https://www.sas.org.uk/ Surfers against sewage

Marine campaign



The air we breathe is of vital importance, both locally and around the world clean, safe air is becoming an issue for many people.

Air pollution is also a threat to the climate, contributing to climate change by releasing methane a potent Greenhouse gas, and to humans killing over 7 million people worldwide per year.

Across the UK Air Pollution is the biggest environmental threat to health. The tragic story of Ella Adoo-Kissi-Debrah brings home the human impact of those statistics. Ella was a nine-year-old girl who died following an asthma attack. She become the first person in the UK to have air pollution listed as a cause of death.

Here in Northern Ireland air pollution is thought to contribute towards 553 premature deaths annually and is mainly caused by burning solid fuels, road transport and agriculture.

Increased use of public transport, urban greening and increased cycling can all significantly improve both air quality and public health and wellbeing.

- https://breathelife2030.org/the-issue/health-and-climate-impacts/
- https://www.who.int/health-topics/air-pollution#tab=tab_1
- https://www.iqair.com/uk/northern-ireland
- http://ellaroberta.org/about-ella/
- https://isglobalranking.org/



Action

Resource

Investigate the air pollution where you live

https://adr2020.shinyapps.io/Air_Pollution_ Dashboard_for_Northern_Ireland/ https://breathelife2030.org/

Take part in or create your own active travel program

https://www.sustrans.org.uk/our-blog/projects/2019/northern-ireland/community-active-travel-programme-in-northern-ireland/

Take part in some tree planting

https://www.woodlandtrust.org.uk/treeswoods-and-wildlife/british-trees/tacklingair-pollution-with-trees/

Take part in a travel challenge

https://www.translink.co.uk/ecoschools#res ources https://www.translink.co.uk/youthforum



"The most environmentally friendly product is the one you didn't buy." – Joshua Becker, founder of Becoming Minimalist.

Economic growth has often been accompanied by environmental degradation. Everyone has seen images of mountains of waste or the now famous Great Pacific Garbage Patch. The world is drowning in waste at the current rate of population growth by 2050, the equivalent of almost three planets could be required to provide the natural resources needed to sustain current lifestyles. This is simply unsustainable.

Northern Ireland has a big waste problem, 700,000 tonnes of waste were exported in 2020, and in excess of three million tonnes since 2016. Some shipped to other countries to landfills or for incineration.

You may have seen the Reduce, Reuse, Recycle logo. Reduce is the first and most important point, followed by reuse and lastly if not possible recycling should be the last option.

Sustainable consumption and production is about improving efficiency so that less resources are needed and those that are used are reused or recycled. This can have a positive impact on poverty and help in the move towards a low carbon economy.

- https://sdgs.un.org/goals/goal12
- https://www.thredup.com/fashionfootprint/
- https://www.bbc.co.uk/bitesize/topics/zshp34j/articles/z6m7vk7
- https://keepnorthernirelandbeautiful.etinu.net/cgi-bin/generic?instanceID=67
- https://keepnorthernirelandbeautiful.etinu.net/cgi-bin/generic?instanceID=60
- https://www.un.org/sustainabledevelopment/sustainable-consumptionproduction/

Waste

| Action | Resource |
|--|---|
| Litter pick- Adopt a spot | https://www.keepnorthernirelandbeautiful.org/cgi- bin/generic?instanceID=20 |
| Create a community event to reduce waste e.g. Formal wear/ school uniform swop | https://www.ecocollective.com/blogs/blog/how-to-host-your- own-clothing-swap |
| Set up a repair cafe | https://repaircafebelfast.wordpress.com/ |
| Targeted litter collections e.g. Makeup packaging/ crisp packets | https://www.terracycle.com/en-GB/ This is a social enterprise working to eliminate waste https://www.brysonrecycling.org/northern-ireland/cash-for-cans/ |
| Take part in a Plastic free challenge | https://www.keepnorthernirelandbeautiful.org/cgi- bin/generic?instanceID=60 |
| Create a fast fashion project | https://www.keepscotlandbeautiful.org/media/1566447/fast- fashion-activity-age-10plus.pdf |
| Improve waste disposal in the club/ community | Take an audit of youth club waste or advocate for recyclable/ compostable packaging. https://greenschoolsireland.org/resources/ https://www.eco-schoolsni.org/eco- schoolsni/documents/006534.pdf |
| Plastic Waste | https://www.sas.org.uk/ Surfers against sewage |
| Educational visit | https://riverridge.co.uk/ |
| Research | https://www.recyclenow.com/ni |

Set up a compost heap

https://schoolgardening.rhs.org.uk/Resources/Info-Sheet/Toptips-for-making-compost



Food is vital to our survival. It does more than just keep us alive.

Food is integral to our cultures, economies and our relationship with nature. Tragically over two billion people in the world still do not have regular access to safe, nutritious and sufficient food.

Current estimates are that nearly 690 million people are hungry, or 8.9 percent of the world population – up by 10 million people in one year and by nearly 60 million in five years.

"food systems are contributing up to one-third of greenhouse gas emissions, up to 80 per cent of biodiversity loss and use up to 70 per cent of freshwater. However, sustainable food production systems should be recognized as an essential solution to these existing challenges. It is possible to feed a growing global population while protecting our planet." https://www.un.org/en/food-systems-summit/news/making-food-systems-work-people-planet-and-prosperity

Many of the solutions to climate change also lie in the way we produce food and what we eat.

There are three important changes that could have an enormous impact these are more sustainable diets, reducing food waste and shortening supply chains so we can all buy more locally grown food.

- Sustainable diets https://sdgs.un.org/topics/food-security-and-nutrition-and-sustainable-agriculture
- Food waste https://friendsoftheearth.uk/food-waste
- https://feedbackglobal.org/knowledge-hub/food-waste-scandal/
- https://www.un.org/sustainabledevelopment/actnow-food-challenge/



| Activity | Resource |
|--|--|
| Collect food for a food bank | https://www.trusselltrust.org/wp- content/uploads/sites/2/2019/12/Food-collection-guide.pdf |
| Create cheap/ nutritious meals | https://cookingonabootstrap.com/tag/a-girl-called-jack/ |
| Grow your own | Create a community orchard/ berry patch Herb Garden or vegetables https://schoolgardening.rhs.org.uk/Resources/Info- Sheet/Growing-Vegetables-in-Schools https://www.quickcrop.co.uk/blog/grow-school-vegetable- garden/ |
| Advocacy Campaigning | Sustainable Fish Cities https://www.ulsterwildlife.org/sustainable-fish-cities-ni |
| Mushroom growing | https://www.growwilduk.com/using-my-fungus-lab |
| Raising awareness Food miles calculator | https://www.bbc.co.uk/news/science-environment-46459714 |
| Host a community meal | Source local or leftover produce |



Our world has become much smaller as improvements in transport have made journey times less, at both local and global levels.

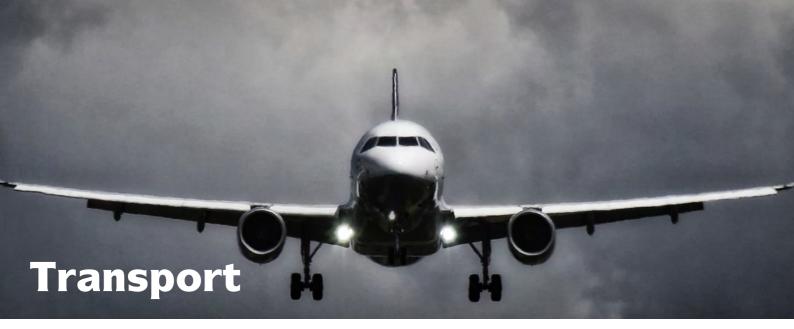
100 years ago a European City Break or fruit flown around the world would have been unthinkable.

All this movement around the earth of both people and goods has a huge impact on the climate and environment. Much of our culture, society and economy is based on transport. This unsustainable situation has led to transport being responsible for approximately ¼ of global CO2 emissions.

The story of cycling in the Netherlands is very inspiring, after a year of child fatalities due to increased road traffic in the early 1970's there was a campaign to put the cyclist, pedestrian and public transport back at the centre of city planning. Today there are as more bicycle's than people in the Netherlands and cycling and public transport remain the preferred way to travel.

There are lots of positive stories like this in action around the world with the benefits to people and the environment it brings.

- https://sustainabledevelopment.un.org/topics/sustainabletransport
- https://www.sustrans.org.uk/about-us/our-work-in-northern-ireland
- https://www.translink.co.uk/getonboard/youthforum See Translink Changemakers guide to climate action.
- https://www.vox.com/science-and-health/2018/8/28/17789510/bike-cycling-netherlands-dutch-infrastructure
- https://wwf.panda.org/projects/one_planet_cities/sustainable_mobility/



| Action | Resource |
|--|---|
| Research and share sustainable transport solutions | https://www.15minutecity.com/ https://www.wearepossible.org/carfreecities |
| Cycle to school/ club challenge | https://www.sustrans.org.uk/about-us/our-work-in-northern- ireland |
| Car share/ transport planning | http://journeyplanner.translink.co.uk/mobile/XSLT_TRIP_REQ UEST2?language=en |
| Take a cycle safety/ maintenance course | https://www.sustrans.org.uk/our-blog/projects/2019/northern-ireland/active-travel-hubs |
| Organise a bicycle awareness event | https://www.cyclinguk.org/Support%20for%20cycling%20groups%20and%20clubs/event-organisers-toolkit |





Cross Cutting Themes

Here are some cross cutting themes which are also really important to achieving sustainable development and that could be the focus of your social action project.

| Theme | Resource |
|--------------------------------|--|
| Poverty | https://www.un.org/sustainabledevelopment/poverty |
| Peace | https://www.un.org/sustainabledevelopment/peace-justice |
| Inequality and Education | https://www.un.org/sustainabledevelopment/gender- equality https://www.un.org/sustainabledevelopment/education |
| General | https://www.transform-our-world.org/top-resources |