Community Climate Action Programme

The Community Climate Action Programme aims to support Monaghan community groups, large and small, rural, and urban, to build low carbon communities.

Themes

There are five programme themes under the Community Climate Action Programme which projects should be based on.

The themes are:

- Theme 1: Energy
- Theme 2: Travel
- Theme 3: Food & waste
- Theme 4: Shopping & recycling
- Theme 5: Local climate and environmental action

There are many opportunities to create projects which include multiple themes and communities should try to incorporate as many themes as possible.

This document contains a selection of case studies for each theme. These are only examples, and communities are encouraged to be as innovative as possible with their projects, harnessing their local interests and assets.

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Rialtas na hÉireann Government of Ireland
Tionscadal Éireann Project Ireland 2040

Theme 1: Energy

Projects of interest under this theme would reduce the climate impact of buildings in communities by using less energy, utilising renewable energy and avoiding heat loss.

SOS Kilkenny – Building and lighting upgrades.

Background: SOS Kilkenny, a not-for-profit organisation who provide services to adults with intellectual disabilities made energy upgrades to their six-building complex in Kilkenny.

Project: In 2016, the organisation replaced their old storage heating system in four of their buildings with a district heating system. In 2018, the internal and external lighting was replaced with LED lighting and the remaining two care buildings were switched from oil heating to gas heating. Roof and wall insulation works carried out also.

Impact: The upgrades reduced heating and lighting costs by an average of €9,000 per year. Besides the reduction in energy use and costs, the upgrades improved working and living conditions for all.

Learn more:

https://southeastenergy.ie/sectors/community-groups/sos-kilkenny-heating-and-lighting-upgrade-sos-kilkenny/

Cappoquin Community Centre – Building upgrades.

Background: Cappoquin Community Centre is a multi-purpose community centre located in Waterford managed and operated by Cappoquin Community Development.

Project: Wanting to reduce their carbon footprint and energy costs they carried out an energy audit of the building and applied for a grant for works to upgrade lighting, wall and floor cavity insulation and install solar PV panels.

Impact: Annual savings of 32,782kWh and €4,821. The Community were happy that they were able to manage rising energy costs while also making improvements to the environment of their community building, making it a heathier and more pleasant place to be.

Learn more:
https://southeastenergy.ie/sectors/community-groups/cappoquin-community-centre/

Fair Play Café – LED lighting and Solar PV

Background: The Fair Play Café is a community centre in Ringsend, Dublin. After completing an Energy Master Plan through SEAI's Sustainable Energy Communities scheme, they decided on a roadmap for their energy efficiency projects.

Project: A range of projects were carried out to improve the energy efficiency of the café and to show to their wider community how energy projects could be successfully implemented. Lighting was replaced with energy efficient LEDs; a 3 kW Solar PV was installed; and advanced heating controls and a new insulated door were installed.

Impact: The LED lighting saved 21% of total electricity consumption in the café. The solar panels contribute to 16% of their total energy consumption. The controls and door significantly contributed to the reduction of heat loss and created a more comfortable space. The café saved €1,300 per year on energy costs.

Learn more: https://www.seai.ie/case-studies/the-fair-play-cafe/

Things to consider for energy project:

Always look first at your building fabric

• When looking at energy, it is recommended to always first check the fabric of your building – your walls, floor, roof, doors and windows.

• By reducing the amount of heat (energy) escaping, you will reduce the amount of energy your building uses.

• A well-insulated building will have lower running costs and have better heating efficiency.

• Building upgrades could include changing old windows to double or triple glazed; sealing draughts around doors and windows; and insulating your attic, floors, walls, water tanks and water pipes.

LED Bulbs and light controls

• Lighting can be a big energy user for many organisations.

• LED bulbs and light controls (e.g. daylight and occupancy sensors) are great ways to lower energy usage and emissions.

• There are different types of LEDs available so chose what is right for your location and needs. For any outdoor lighting consider the impact to local wildlife and reduce unnecessary light pollution where possible.

The energy efficiency of your devices

• It can be useful to know how much energy your appliances are using, and which are the biggest energy users.

• Some appliances when left plugged in or switched on, use huge amounts of energy.

• Fast savings could be made by looking at usage and behaviour. For example, spot checks to see what is being left on unnecessarily, installing shower timers and reducing the temperature by 1^{o}C etc.

• Typically, appliances which are used for heating (e.g. electrical showers) are big energy users. A good mantra to remember is “If it makes things hot, it costs a lot”.

Understand your energy with an Energy Audit

• A good way to assess your energy use is to carry out an energy audit. An audit will look at the fabric of the building, how much energy is used in the building, the equipment and processes that use the most energy and ultimately what actions you should take to save energy, including cost and impact.

• An audit typically cost between €1,500-2,000. If your community building has an energy spend of at least €10,000 per year, you may be eligible for SEAI’s €2,000 voucher towards the cost of a professional energy audit. Alternatively, you may have the internal expertise within your community to carry out an energy self-assessment.

Solar PV

• Solar PV is when light from the sun is converted to electricity.

• This is good option for a building when:

o there is a steady daytime electricity demand

o a suitable roof top, i.e. south-facing, in good condition and with minimal shading

• Solar PV suits buildings that are busy during the day. It is more energy efficient to use the electricity as its being made when the sun is shining.

• If your building does not have a lot of daytime activity and you are still interested in Solar PV, then you could consider getting battery storage. This means that the electricity made during the day can be stored and used in the evenings or during cloudy times. However, batteries are costly.
• Another option is a hot water immersion diverter. This means the electricity generated is diverted to an electric immersion in your water tank to heat hot water. This is a good option in a building where hot water (e.g. showers) is often used in the evenings.

• You can also export and sell your excess electricity back to the grid but there is a cap on the amount.

Heat Pumps

• Heat pumps work by capturing the heat outside and moving it into the building – even when the weather is cold.

• They can heat both the air and water.

• Heat Pumps are a good option for:

o new builds or buildings that have excellent insulation and airtightness

o buildings frequently in use – they are less efficient if only needed for short periods of time.

• Heat pumps are more efficient than most existing systems like gas, oil, solid fuel and direct electrical heating systems.

• There are three types of heat pumps available 1. Air source heat pumps take heat from external air. They are typically the cheapest and easiest to install but are less efficient than other heat pumps in colder weather. 2. Ground source heat pumps takes heat from ground through pipework. They are highly efficient all year round but are more suitable for new builds or buildings with sufficient space around a building. 3. Water source heat pumps take heat from surrounding water (e.g. rivers, streams, lakes). They are highly efficient all year round but would require a water body close by.

Theme 2: Travel

Projects of interest under this theme would contribute to a reduction in travel related emissions.

Collinstown – Bike Hub

Background: South Dublin County Sports Partnership (SDCSP) with support from other groups established the Bike Hub on the grounds of Collinstown Park Community College, Clondalkin.

Project: The Bike Hub is a co-shared amenity with bikes, other equipment, and repair facilities. Other initiatives include Learn to Cycle programmes for young people 5-13 years of age, teenager BMX/Trail programmes, primary school cycle safety training, adults' community bike rides and more.

Impact: This initiative supports active travel, the circular economy and social inclusion.

Learn more:

https://www.cyclingireland.ie/clubs/cycling-hubs/

Fingal- Shared e Cargo bike initiative

Background: This active travel and low carbon mode of transport was operated by bleeper and Fingal County Council. The e cargo bike is located on Mountview Community Centre and is used through an app.

Project: The bike is a battery-assisted pedal bike with a large, lidded box. The box is suitable for moving items such as sports training gear, small items of furniture and grocery shopping. The bike is stored in a bike bunker and can be unlocked for a €3 fee, which covers 120 minutes of use. Any additional time is charged at a fee of €0.05 per minute.

Impact: Through use of this e cargo bike users increase their activity while reducing their emissions.

Learn more: https://council.ie/mountview-gets-moving-with-ecargo-rental-from-fingal-county-council-and-bleeper/

UCD Campus – Cycling parking and bike repair stands

Background: UCD is a third level institutions with over 30,000 students at their Dublin campuses which actively promotes cycling.

Project: To promote people getting to UCD via bicycle they have provided over 4,000 bicycle parking spots, security, lockers and shower facilities. They have also installed 6 self-fix bicycle repair stations which include air pumps to reflate flat types and are equipped with a range of tools for the upkeep of bikes.

Impact: It is estimated that UCD have 7,000 cycle journeys to the campus on an average term day. Their cycle facilities encourage and support cycling. Contributes to lower emissions and better air quality.

Learn more:
https://ucdestates.ie/commuting/getting-here/cycling/

Things to consider: **Theme 3: Food & Waste**

Projects of interest under this theme would reduce food waste.

Cork Urban Soil Project – Community Composting

Background: Cork Urban Soil Project (CUSP) is about community-scale composting. They compost food waste and use the compost right in the middle of the city.

Project: CUSP use a small composting machine (a Joraform aerobic biodigester) and team with MyGoodness, a community food company who produce large amounts of food scraps and compostable packaging. At the end of every week, CUSP brings all MyGoodness's food waste and packaging to the biodigester where it is shredded and broken-down producing compost in four weeks. After an additional "curing" period the compost is used in the CUSP microfarm.

Impact: CUSP have diverted 10,200kg of food waste and 8,000kg of cardboard and produced 6,000 litres of compost while changing the way society views waste.

Learn more:
https://www.urbansoilproject.com/impact

Top of the City – Community Garden

Background: Transformation of derelict space at St Carthage's Avenue, Waterford City into a community allotment and garden.

Project: In 2020 the community garden was developed in collaborative effort of volunteers, Waterford City and County Council and local businesses. Works included, establishing raised beds for growing vegetables; ornamental sections with biodiversity and pollinator friendly plants; ivy wall; rainwater collection systems; a community seed bank; a wooden greenhouse; and a sheltered stage designed for workshops and summer events.

Impact: Increase in people's knowledge and access to fresh produce, green spaces reduce air pollution, access to compositing facilities, encouragement of healthier lifestyles and building stronger communities. An abandoned site was recovered for use and there was also a reduction in anti-social behaviour in that area.

Learn more:
https://waterfordcouncilnews.com/2021/10/12/top-of-the-city-community-garden-a-success/

Creggan Country Park - Community Fridge

Background: Creggan Country Park in Derry is a not-for-profit organisation providing a variety of outdoor pursuits, education facilities and green and blue spaces.

Project: Creggan Country Park setup a Community Fridge in 2022 to redistribute surplus food to local people. There are storage, fridge, and freezer facilities. No registration is required, and food is collected and redistributed on the same day. Visitors can go for a walk in the local surroundings, bring along a reusable bag and just take what they want from the fridge and shelves during its opening hours.

Impact: This Community Fridge has distributed over 1-tonne of surplus food to local families and in doing so has resulted in a 4-tonne reduction in carbon dioxide emissions. Community fridges help tackle climate change at a local level as food waste can produce large amounts of greenhouse gases. The facility also encourages knowledge sharing, community building and social inclusion.

Learn more: https://www.facebook.com/creggan.countrypark.18/

Oher examples: https://carrickmacross.ie/community/carrick-community-allotments-ltd/#

Things to consider for Food and Waste

Composting and Wormeries

• Composting facilities and wormeries in community spaces typically do not require planning permission as they are for community use but would need the consent of the residents and/ or landowner.

• A waste licence or permit would be required for larger quantities of waste (incl. animal waste) and for commercial purposes. Community use is typically a resource for reuse within the group rather than waste processing. It is best to check with MCC to find out if a license is required.

• It is important to check such projects would be covered by your insurance provider.

Allotments and Gardens

• Allotments are plots of land rented to individuals/ families, while a community garden is worked on by all members of the community together.

• They can be set up on private or public land. Planning permission is often required, so it is best to contact the Planning Department in MCC to check.

• Community Gardens Ireland have a useful design and implementation guide for community gardens and allotments which contains some excellent advice on a number of topics for every community group such as how to set up allotments and gardens, where to get advice, designing for full access for all, polytunnel advice, biodiversity and green recycling.

Community Fridge

• Community fridges need to comply with relevant food safety and food hygiene legislation.

• In some cases, groups may be required to register as a food business with their local environmental health office.

Available resources

• My Waste have a Food Waste Campaign Toolkit and other resources available on their website for individuals, businesses and community groups.

• FoodCloud is an Irish social enterprise which rescues and redistributes surplus food from shops and businesses. They have a Community Foodlink network which maps organisations around the country assisting people who need help with accessing food.

Theme 4: Shopping & Recycling

Projects of interest under this theme would promote the reduction, reuse and repair of materials, and increase the number of recycling facilities.

Renew – Recycled paint

Background: Renew, a social enterprise in Waterford City provides bike repairs, paint recycling and upcycled furniture.

Project: The organisation collects used waterbased paints from local civic amenity sites and repurposes the paint so it can be used again. The paint is filtered, remixed and a range of colours are then available. Interior and exterior wall paint is available for purchase.

Impact: Diverts reusable paint from disposal and provides affordable paint for reuse by the public and community organisations. This promotes the circular economy locally.

Learn more: https://waterford-news.ie/2023/09/01/waterfords-renew-enterprises-adds-life-purpose-to-repurposing/

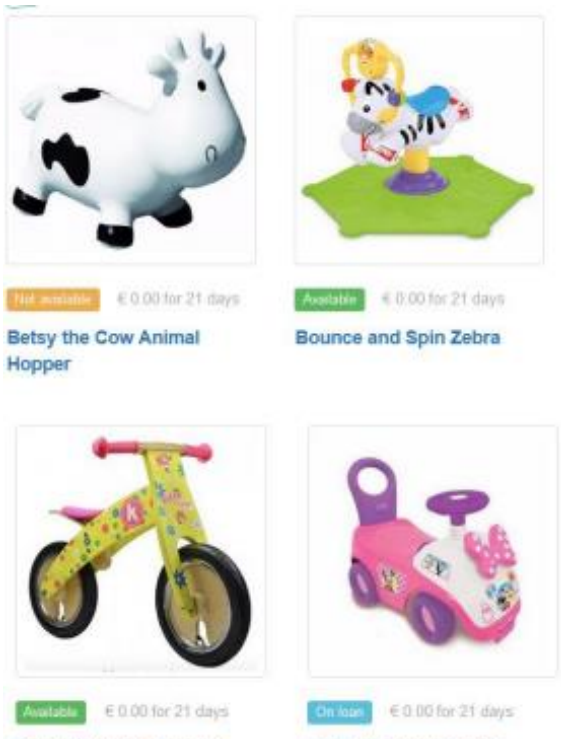
Carrickmacross Toy Library - Community resource sharing

Background: The not-for-profit initiative in Monaghan aims to address the environmental challenge around children's toys through a sustainable toy lending service.

Project: The Toy Library promotes play for children aged 0-6 by enabling families to borrow, not buy quality, sustainably sourced toys. Users can borrow up to four toys, puzzles or games for up to three weeks at a time. Parents pay a small membership fee that goes towards repairing or replacing broken toys.

Impact: This project encourages resource sharing, reduces waste, and promotes the circular economy. 80% of children's toys end up in landfill or in the sea after being used for an average of six months. Toys are difficult to recycle as they can contain materials that cannot be easily separated.

Learn more:
https://carrickmacrosstoylibrary.lend-engine.com/



Things to consider for shopping and recycling projects.

Waste Collection Permits

• If a community group is planning on collecting waste as part of a circular economy project, they may need a waste collection permit. There are exemptions depending on the type of group and waste.

• It is best to check with MCC to find out if a permit is required.

• My Waste have a useful and searchable database explaining how and where to dispose of many different types of waste.

Zero Waste Communities

VOICE Ireland and Zero Waste Cashel have a useful guide available for communities who want to become zero waste. It contains advice on a number of topics such as understanding waste in your community, people's mindsets, developing a waste masterplan and communication strategies.

Theme 5: **Local climate and environmental action** 

Projects of interest under this theme would take a holistic approach to positively managing the local environment, including in relation to climate action.

Monaghan Tidy Towns - Dispersed Urban Orchard (DUO)

Background: Monaghan Tidy Towns has been working on the biodiversity of their area since 2010 with works including a habitat survey; maintaining a 4 KM wildlife corridor along the Ulster Canal Greenway; identification of key habitat spaces for bees; planting pollinator attractive plants etc.

Project: Their 2014-15 DUO project created routes for bees between their key habitat spaces and Greenway. The routes were mainly made up of residential housing, so they provided fruit trees for the local residences along these routes to plant in their gardens, thereby creating routes for pollinators to travel. Uptake was hugely popular among the community.

Impact: In 2016 Monaghan Tidy Towns won the Local Authority Pollinator Award. Their overall work has increased biodiversity, made public and private land more pollinator friendly, encouraged community engagement in the local environment and reconnection with nature.

Learn more: https://pollinators.ie/monaghans-dispersed-urban-orchard-for-pollinators/

ReWild Wicklow - Wicklow Uplands Peatland Restoration

Background: ReWild Wicklow a voluntary environmental organisation, in collaboration with National Parks and Wildlife Services (NPWS) rangers carried out a peatland restoration trial project on a small area of degraded peatland on the Barnacullian Ridge in the Wicklow Mountains.

Project: In 2022, volunteers helped the rangers spread heather mulch, grass seed and fertiliser, build over 100 small timber dams and erect sheep fencing around the project site. This trial proved very successful with considerable areas revegetating and the dams successfully slowing the runoff of water, creating pools and stopping the runoff of peat. This project was funded through Local Authorities Water Programme. The peatland restoration will ultimately reduce the runoff of peat into the rivers at their source, thereby improving the quality of the water for drinking, agriculture and wildlife to exist in it.

Impact: With the success and enthusiasm from the volunteers, the group hope to expand on this project. This project has benefits for water quality, climate change mitigation and biodiversity. Restored peatlands are also one of the most effective carbon sinks for tackling emissions.

Learn more: https://rewildwicklow.ie/projects/peatland-restoration

Ripple Project in Ballina - Creation of green spaces and water resilience

Background: Greenhills Estate in Ballina, Mayo took part in the Ripple project. The aim of the project was to understand, map and record the local community's experience, perspectives, and knowledge about their neighbourhood's green spaces, in relation to water and climate change.

Project: Following a series of workshops, residents shared their insights, aspirations and hopes for their neighbourhood. They designed a number of projects to improve the movement of water, biodiversity, and amenity value of parts of the estate. They ultimately selected to create a garden in a neglected part of the estate in 2023. The garden includes raised vegetable beds, a mini orchard of heritage apple trees, seating, native pollinator plants, and a tree nursery. Water will be gathered and directed into a rain garden.

Impact: The garden will be a positive space for wildlife and the residents. The collection of water will slow the flow of heavy rain and allow rain tolerant planting to absorb some of the water.

Learn more: https://twitter.com/ripple_ballina?lang=en

Stoneybatter Rain Garden Project, Dublin – Rainwater planters for urban runoff

Background: A social enterprise in Dublin develop a nature-based solution for urban runoff called the NatureRx Rain Garden Pilot. These projects use rain gardens to deal with urban runoff .

Project: 10 Dublin city centre homes took part in the pilot project. Rain planters were constructed into available space adjacent to their downpipes. Rain flowed into the rain planters instead of straight into drains. Plants which could adapt to damp and dry periods were selected.

Impact: Resulted in reducing overflow of sewer water into rivers during heavy rainfall thus reducing pollutants entering our waterways; provide habitats for pollinators; reconnect people to nature; and create attractive garden features.

Learn more: https://www.biurban.ie/rain-garden-project

Things to consider for Local Climate and environmental action projects.

Pollinator/ Biodiversity projects

• There are many well-meaning but sometimes ineffective pollinator projects. Groups should consult the advice provided on the All-Ireland Pollinator Plan website and their specific resources available for Community Groups and Sports Clubs, which cover everything from managing and planting hedgerows, increasing the diversity of native plants, mowing guidelines, signage etc.

• Plant selection, management and signage are important elements in pollinator/ biodiversity projects.

Water Quality and Conservation Audit

• To get a better understanding of your water use, potential sources of pollution and opportunities for water conservation, you could carry out a local assessment.

• There are examples of simple water audits you can carry out available on the GAA Green Clubs website.

Water Management

• Coastal, pluvial (when the ground is saturated) and fluvial (river) flooding are likely to increase with worsening climate change.

• There are ways to reduce the risk of flooding and lessen the impact on waterways and biodiversity. For example, water harvesting, creating buffer zones around rivers or water courses with plants and trees, creating rain gardens and using porous paving so more rainwater can penetrate into the ground.

• There is specific advice available for community groups including project examples available on the Local Authority Waters Programme website