

# Sligo Environmental Action Academy Toolkit



**SLIGO**  
ENVIRONMENTAL  
ACTION ACADEMY



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# Sligo Environmental Action Academy Toolkit

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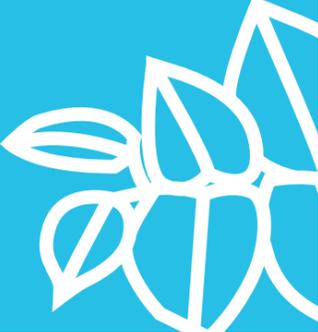
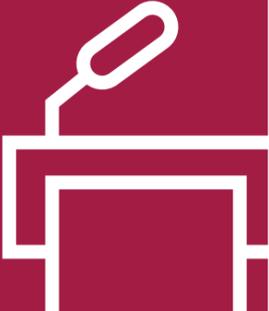
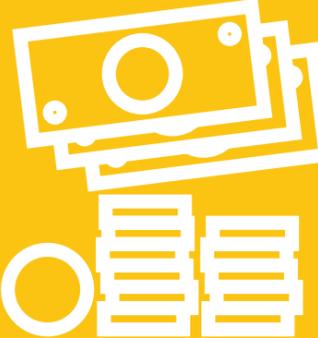
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# Introduction





We would like to extend our deepest gratitude to Sligo PPN and all those involved for their continued support and kindness.

Special thanks to Mr. Paul McNama, Dr. Yvonne Lang, Ms. Sarah Wetherald, Dr. Connie Nell (PhD Social Anthropology; Community Development Worker), Tracy Kilgannon (MSc Education for Sustainability; Teacher), Dr. Aga Piwowarczyk (PhD Biosystems Engineering; Environmental and Soil Scientist).

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# Welcome to the Sligo Environmental Action Academy Toolkit.

Within this toolkit you will find information, tips and resources allowing you and your community to take positive steps towards increasing sustainability, awareness, and environmental initiative. Acknowledging that the community sector of Sligo is increasingly diverse, this toolkit is split into two different parts. Part 1 covers all things outdoor spaces, whether that be increasing biodiversity, tree/ shrub planting, gardening etc.. Part 2 covers event planning and how to make this process more sustainable.

The concept of climate change is so vast that it has become a popular misconception that individual action can make little difference; however, when we come together as a community, we can make a real difference in our local areas. Community action can help to create a sustainable landscape which is rich in biodiversity, helps to revitalize our local habitat, reduces our carbon footprint, and also positively impacts all of the other services and benefits that our local environment provides to us.

This toolkit was designed to provide you with information, ideas, tips, and tricks that, when partnered with your passion, energy, and enthusiasm, could help deliver projects on a local level that have wide reaching benefit.

To date, there have been tremendous interest and work carried out across Sligo by the Sligo Community and interested parties. The aim of this toolkit is to showcase and to build upon previous work carried out and to provide a way for potential work to be showcased/ recorded, allowing community groups, organisations, and the community to start from the beginning and to apply informed decision making. This toolkit may be used to create environmental plans and policies, to keep track of current progress, and to monitor actions as they are completed.

Sligo PPN are passionate about assisting your local community group. For further queries or information contact: [ppn@sligo.coco.ie](mailto:ppn@sligo.coco.ie)



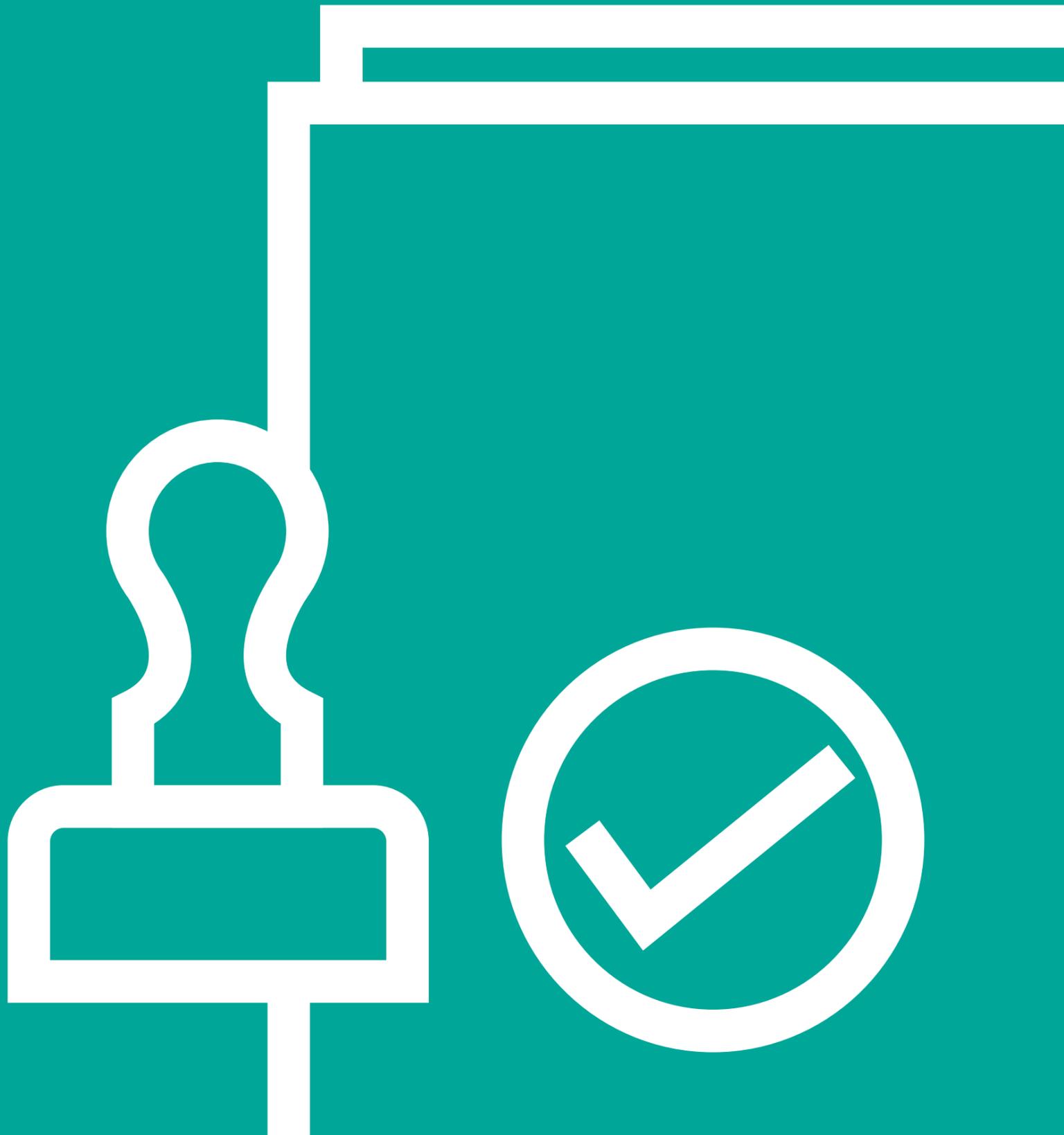
The right to a safe, clean, healthy, and sustainable environment is one of our human rights. In response to the above and other factors such as equality, poverty and hunger, the United Nations adopted the Sustainable Development Goals.

The sustainable development goals (SDG's) are a set of 17 proposals which were adopted by each United Nations member states in 2015. These goals make up the 2030 Agenda for Sustainable Development. The aim of the SDGs is to develop a global partnership between countries while tackling problems related to poverty, health, education, inequality, economic growth, climate change, and ecosystem preservation.

The Sustainable Development Goals, specifically goal 3 - Good health and well-being, goal 11 - sustainable cities and communities and goal 13 - Climate action, play an important role within community-based activities are all deeply interconnected to the work you have been and will be carrying out.

These goals were set out with the hopes that by 2030 all people will be able to live in peace and prosperity. With your help carrying out the actions and ideas within this toolkit, you will bring yourself, your community, and your locality one step closer to realising this possibility.

# Creating an Environmental Policy Framework





**Developing and implementing policy is no easy task; however, following the guidelines laid out in this section will put you and your community group one step closer to realising this goal.**

As sustainability becomes ever more important in our society, creating an environmental policy helps to cement the positive actions which you and your associated group/ organisation hope to achieve. Your policy should consider ideas and inputs from all members and stakeholders, and it can be a handy tool to monitor, manage, and improve on the environmental impact of your group/ organisation.

## Step 1:

**Choose an Environmental officer or Policy manager and set out to Identify the “scope” for the policy.**

- This does not necessarily have to be an individual with a background in environmental action, simply someone who is passionate about improving the way your group operates.
- What is it that your group or organisation wants to improve on; is it event management, biodiversity, waste reduction, or a mixture of all of the above?
- What activities do you currently carry out that may be improved?
- Ensure to include all members in each stage; this helps to build awareness and gives a sense of connection and togetherness to the policy.
- Use examples of environmental policy from other organisations to help guide the layout of your policy. Click the link to see how to create your own and examples:

**Environmental policy:**

[Link](#)



## Step 2:

Gather as much information as possible and ask such questions as:

- Is the understanding accurate and factual?
- Are you using up-to-date best practices and guidelines to steer the policy?
- Have other groups or organisations conducted similar research or implemented similar policy?
- Can you obtain guidance from a third party or competent authority?
- Is the policy aligned with laws, legislation, or other requirements? For example, if the policy is developed by those involved in event management, does the policy align with international standards for sustainable event management such as ISO 20121 - Event sustainability management systems - a voluntary international standard for sustainable event management, created by the International Organization for Standardization.

## Step 3:

Create an "Action Plan":

- Make a list of the areas which you will include in the policy such as waste management, energy, event management, or biodiversity, and decide on some short-term actions you would like to implement: for example, segregating waste into different waste streams, or cutting out the use of weedkiller and employing natural methods to manage weeds instead.
- From your decided short-term goals, try to develop these actions for the future.



## Step 4:

### Create a "Draft Policy":

- Design a draft policy with actions, planned outcomes, and a timescale.
- Present it to your colleagues and stakeholders for recommendations and discussion. This will allow for amendments to take place and will align all involved on the general time frame and route you wish to take to implement the policy.

## Step 5:

### Approve and implement the policy:

- Engage with your committee or other like-minded groups to ensure that your policy is coherent, realistic and in line with your group/ organisation goals.
- How can people/ interested parties access the Policy? Is it displayed on a website, in your place of operation? Is it given to staff/ volunteer members through email or printed copy? Would training be beneficial to increase the impact of the policy?
- How often will the policy be reviewed or monitored? Will it be reported on annually/ biannually?



- Don't forget to share the plan with your community, friends, or other groups who may be interested in creating their own environmental policy. Passing on the knowledge and experience gained from creating your policy may go a long way in influencing the wider community.
- Here are some useful links to help plan and develop your own environmental policy:

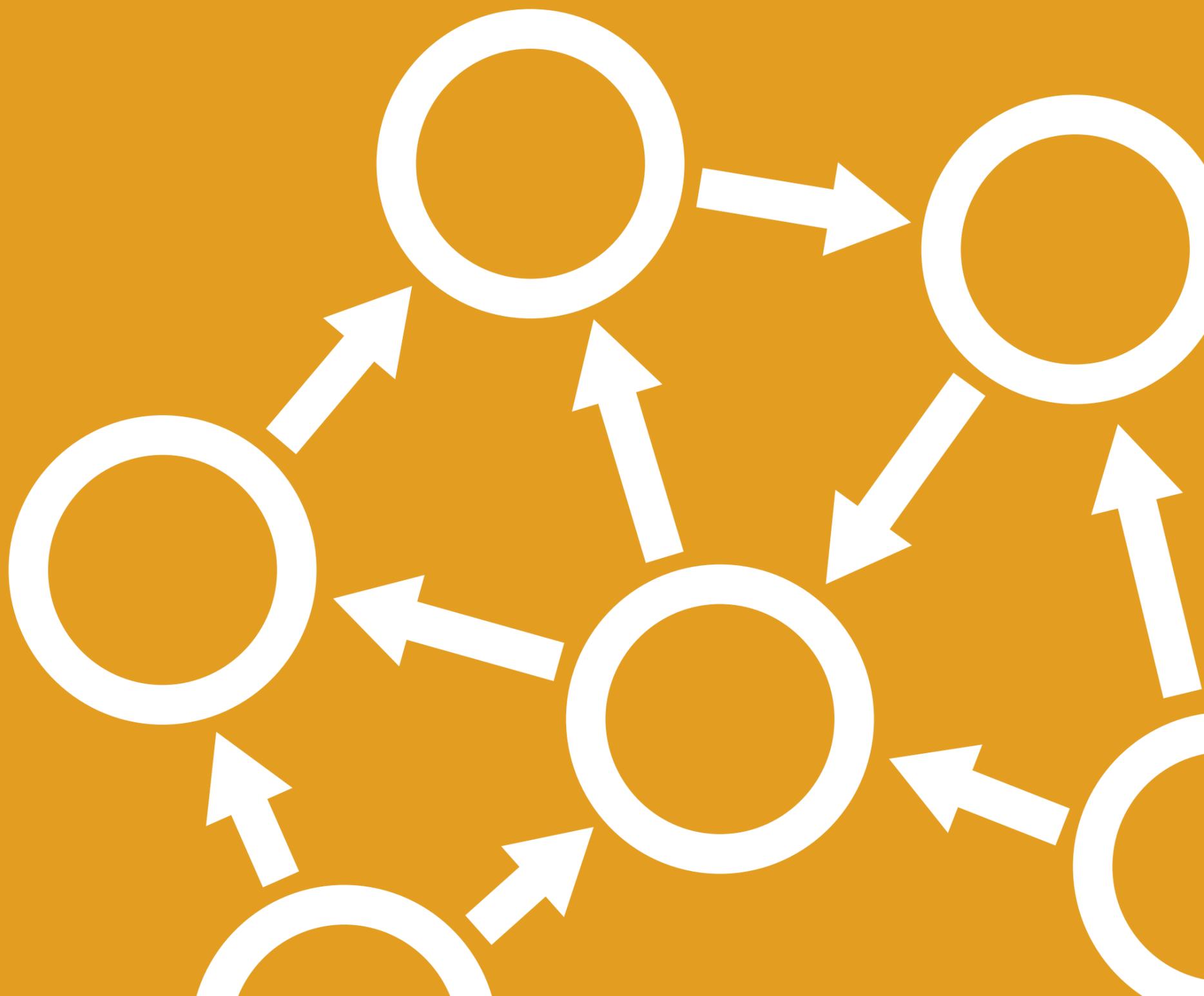
**Guide to environmental policies:**

[Link](#)

**Policies and procedures:**

[Link](#)

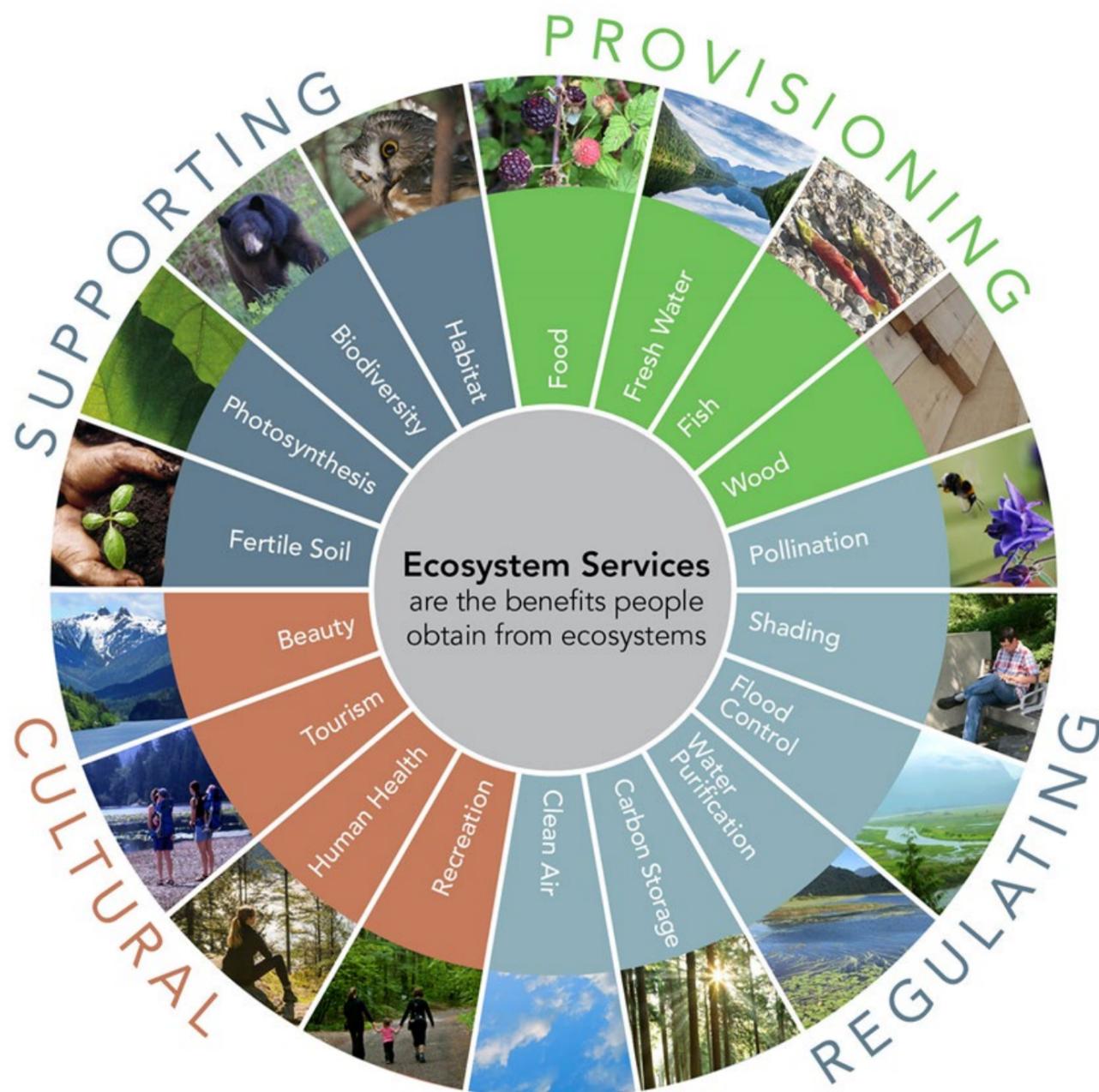
# Ecosystem Services





Ecosystem services are the vast benefits we humans obtain from ecosystems and the environment as a whole.

As seen in figure 1 below, these are broken down into four different categories, supporting, provisioning, cultural, and regulating.



Source: Metro Vancouver Regional Planning 2018



## Supporting services

Supporting services are those which ecosystems fundamentally rely on to function, without these processes such as cycling nutrients, supplying habitats, and forming soil, ecosystems would not survive. Supporting services may be seen as being the foundation for the other services to occur.

## Provisioning services

Provisioning services are those which provide physical benefits to us. These services can be taken from the environment and include food, fuel, and water.

## Regulating services

Regulating services are those which take place to benefit the ecosystem by controlling such things as pollution, flood control, water purification, and clean air.

## Cultural services

Cultural services are those which affect how someone's well being is within their environment. Natural environments have been shown to improve mental and physical health, allow recreational activities, and support knowledge sharing.

## Biodiversity

Biodiversity regulates all of the above, as without healthy levels of biodiversity, all other processes are negatively impacted. As stated by the National Parks and Wildlife Service (NPWS), biodiversity plays a key role in the functioning of ecosystems and the NPWS's ability to provide ecosystem services. The value of biodiversity and benefits from ecosystem services reach far beyond that which can be measured in financial terms.

# Biodiversity



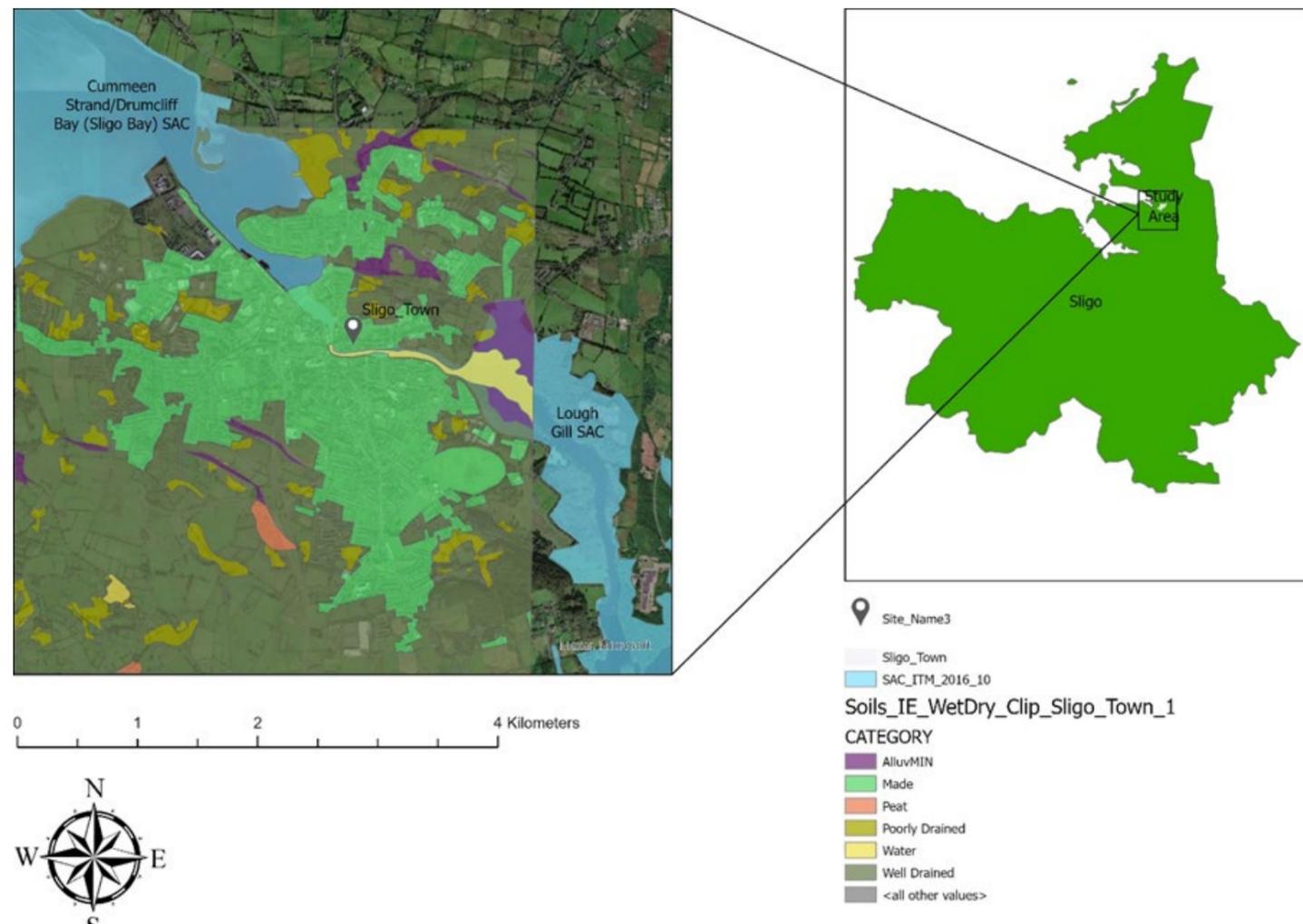


## Biodiversity and Sligo Town.

Biodiversity may be defined as the variety of organisms both plant and animal particularly within one habitat or place. It provides us with many vital benefits and services such as clean air, water, extreme weather/ storm mitigation, pollination of crops, amenities for physical well-being and boosts our mental health. Biodiversity is becoming ever more important for our day-to-day livelihood. The following gives a brief description of our local biodiversity, followed by a variety of steps and actions we can take to benefit our local biodiversity and in turn benefit ourselves.

Nature rich Sligo possesses an array of bio-diverse habitats which are listed as Natural Heritage Areas (NHA) and thus fall within the purview of the Wildlife Amendment Act 2000. These include: Aughris Head and the Glencar Cliffs; 18 Special Areas of Conservation (SAC) implemented under the EU Habitats Directive (92/43 EEC), such as Union Wood and Streedagh Point Dunes; and 8 SPAs implemented under the EU Birds Directive (79/409/EEC), such as Cummeen Strand and Ballysadare Bay. These areas are home to rare/ vulnerable plants, animals, and habitats that are important on a local/ global scale.

Implementing some of the ideas within this toolkit can help create links between the human and natural communities of Sligo, leveraging the area's significant urban and rural biodiversity and natural capital to the well being and betterment of all. Some of the real positive impacts of this might be increased access to food sources for animals and insects, enhanced transportation and habitat corridors, increased oxygen production, and since an increasing number of studies show that time outdoors in nature is a significant reliever of blood pressure, anxiety, and stress, the opportunity to enhance human well being.



Sligo Town categorized by soil type/ drainage quality, with a callout to county and indication of study area location and proximity to SAC.



## Biodiversity Action Plan (BAP)

A biodiversity action plan is simply a guide which sets out to help conservation, management, and monitoring of local biodiversity.

A biodiversity action plan typically outlines the biodiversity within your local area. It also sets out actions which may be achieved within a particular time scale and goals or ambitions that your local community, residents' association, or organization hope to achieve.

The remainder of this document outlines various actions to aid biodiversity and also guides on how to create flexible and resilient plans and policy tailored to specific goals best suited to your local area. Keep in mind that although your plan may be relevant now, it requires monitoring and amending as time goes on. New issues, challenges and ideas will shape the continuation of the plan. As climate changes, so must your plans.

The following links are a set of various local biodiversity action plans commissioned by Laois County Council. They contain very well documented plans and actions, which may be helpful in creating your own action plan or gaining inspiration from.

**Biodiversity action plan:**

[Link](#)

**Shanahoe action plan:**

[Link](#)



## Biodiversity surveying

The first step to becoming more sustainable in your practices is to determine what the starting line is. For example, if we look at taking actions to benefit our local biodiversity, we may first begin by carrying out simple biodiversity surveys. This provides us with knowledge of the current species richness, which then helps to determine key areas to improve and also adds to Ireland's overall biodiversity data pool. These surveys may be carried out with no prior experience in biodiversity surveying. Defining the current biodiversity within your area allows a more concentrated effort to be applied to areas where it may be needed most, while better protecting existing bio-diverse areas. This may include ecologically sensitive areas such as SACs, waterways, rivers, hedgerows or protected species. The National Biodiversity Data Centre has provided a beginner's guide to biodiversity recording which can be found at the link below.

**Guide to recording:**

[Link](#)

Furthermore, the NBDC and iNaturalist have designed smartphone apps which may be downloaded on both Android and IOS devices. The apps may be downloaded from the following links.

**iNaturalist on Android:**

[Link](#)

**NBDC on iOS:**

[Link](#)



## GIS mapping

If you or your community group would like to map specific areas, to record which species and habitats of interest are present, or to classify areas which have increased litter, this can be carried out from the link below. QGIS is an open source, free mapping software which can be used to classify geospatial information and is a good place to start as it will help to present the existing features within Sligo. This may also be used to accompany biodiversity surveys or may be used to monitor previous work or future activities.

**QGIS site:**

[Link](#)

**QGIS Tutorial for Beginners:**

[Link](#)

Google Earth Pro is another option for mapping and classifying features and areas.

**Google Earth Pro:**

[Link](#)



## The All-Ireland Pollinator Plan

The All-Ireland Pollinator plan is Ireland's response to the decline in native pollinators and was an important publication which allowed Ireland to join the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES). The first plan was published in 2015; however, the actions that we will be focusing on are from the revised pollinator plan (2021 – 2025) which presents 6 objectives which contain 186 actions to benefit native Irish pollinators. Of these, 23 actions are best suited to community groups.

Ireland is home to many types of pollinators, hoverflies, moths, butterflies, and bees to name a few. Pollinators play a special role within our environment. The honeybee, although quite vital to biodiversity, is only one of 98 native bee species, a third of which have been in decline since the 1980s. Pollinators have a substantial impact on our crop yields and pollinate 78 % of our wild plants. Without them, the ecosystems in which we live would be lacking in vibrancy and colour and many species rely on plant pollination for their own food source, shelter, and habitats to live.

**Actions are listed in no particular order. It is best to choose actions that suit your specific community group goals, time scale, resources, etc.**

**Action 1:** Protect existing areas which support pollinators (eg., Hedgerows, wildflower patches, bramble/ivy, earth banks and dry-stone walls).

**Action 2:** Aim to create wildflower meadows by reducing mowing. Cut first in April to allow dandelions to sprout. Then cut again in September. This will gradually lower soil fertility and allow a greater number of flower species to grow.



**Action 3:** If a permanent wildflower meadow isn't possible, consider cutting your green area in 6-week rotations. This will promote species like clover and selfheal.

**Action 4:** Allow dandelions to remain. Carry out your first cut in April, allowing them to set seed.

**Action 5:** Consider replacing patches of ground or new areas with clover.

**Action 6:** Try to plant pollinator-friendly trees and shrubs throughout the local community (e.g., crab apple, willow, hawthorn, and white cherry trees, or silverthorn and Japanese aralia shrubs).

A list of recommended plants can be found at the following link:

**Planting code:**

[Link](#)

**Action 7:** Consider planting perennial plants within the community. These will provide food for pollinators from Spring to Autumn (e.g., Dahlia's, perennial sunflowers, and autumn ox eye).

**Action 8:** Consider petitioning local authorities to plant annual species when planting around the community.



**Action 9:** Consider plating urban planters or hanging baskets.

**Action 10:** Consider connecting lone patches of habitat or replacing fencing with pollinator friendly trees and shrubs.

**Action 11:** Hedgerows which contain native species such as hazel, willow, ivy and bramble provide much needed food throughout the seasons. Do not spray the base of the hedgerows. This will allow flowers such as knapweed and clover to grow, ensuring an additional food source for pollinators.

**Action 12:** Consider leaving earth banks or drystone walls unmanaged as these are great nesting/ habitat areas for solitary bees. Earth banks may be created quite easily. All that is required is a spade and some soil. If possible, position the front of the earth bank to face either East or South. Maintain them by scraping the front of the bank back to bare soil each year. The following link provides guidelines on how to create these pollinator-friendly habitats.

**Pollinator guide:**

[Link](#)

**Action 13:** Consider creating small south or east facing holes in wooden structures such as fencing, posts etc for nesting solitary bees. A variety of holes ranging from 4 – 8 mm in width and 110 cm in depth would be best, if possible, at a height of 1.5 – 2 m.

**Action 14:** Bee hotels are also an option to provide nesting habitat for pollinators. However, actions 13 and 14 would be preferred.



**Action 15:** Phase out/ eliminate the use of pesticides for weed control.

**Action 16:** Carry out best practice if pesticide use cannot be avoided such as spot treating areas rather than blanket spraying. Spray in dry conditions with low levels of wind and after sunset if possible as pollinators are less frequent at this time.

**Action 17:** Promote the Junior Pollinator Plan. (Which can be downloaded from the following link:

**Junior pollinator plan:**

[Link](#)

**Action 18:** Promote the All-Ireland Pollinator Plan with local businesses. Consider signing up for the plan if you are a business owner.

**Action 19:** Erect signage which spreads information on the importance of pollinators.

**Action 20:** If you or a fellow community group member are especially passionate on pollinators, consider delivering a training session on topics such as creating nest sites for pollinators, how to identify common pollinator species, how to contribute to the All-Ireland Bumblebee monitoring scheme, and how to collect, store and use local wildflower seed to enhance areas that are being managed. Resources on how to deliver these training seminars may be found online.



**Action 21:** Log Actions for Pollinators on the mapping system. This will help to monitor food, shelter, and pollinator safety in the area. A link to Biodiversity Ireland can be found below:

**Biodiversity Ireland:**

[Link](#)

**Action 22:** Contribute to the Bumblebee Monitoring Scheme. This can be done by walking a fixed route of 1 – 2 km per month between March – October, recording any bumblebees spotted.

If interested contact: [info@biodiversityireland.ie](mailto:info@biodiversityireland.ie)

**Action 23:** Consider entering the Tidy Towns Pollinator Award. Ensure to mention your support of the All-Ireland Pollinator Plan within annual submission to Tidy Towns.

The following linked documents by the National Biodiversity Data Centre provide actions that can be taken by you at home or with your community group to benefit our native pollinators.

**Pollinator actions:**

[Link](#)



The below linked document is the complete most recently published All Ireland Pollinator Plan. It contains up-to-date information regarding pollinators, the overall scope of the plan, current progress, and actions. Objective 02 is especially important to this toolkit as it details how to make public land pollinator friendly.

## All-Ireland Pollinator Plan:

[Link](#)

### Fun Facts:

- Did you know: Pollinators annually contribute an estimated 59 million euro to the Irish economy.
- Pollinators make up a large portion of the diversity of species on planet Earth. 200,000 - 300,000 species - such as butterflies, beetles, moths, flies, mosquitoes, and bees.
- The colour of a flower helps attract and guide insects to the flower for pollination. Bees are often attracted to bright blue and violet colours.
- Apples, strawberries, blackberries, raspberries, onions, avocados, green beans, sunflower oil, tomatoes, cucumbers, grapes, cauliflower, beets, chocolate, kiwi, melon, buckwheat, sugarcane, pumpkin, vanilla, tea, and almonds are just a few of the foods that rely on pollinators.
- Moths pollinate flowers both at day and night.
- Pollinators that tunnel/ burrow in the ground help to improve soil quality by mixing nutrients and aiding water flow around roots.



## Hedgerows

Hedgerows are an important part of the Irish countryside. They provide a habitat corridor for species which stretches all around the Island, provide our pollinators and native species with food sources and a safe means to travel to and fro, and connect isolated areas together. The management of our hedgerows can be problematic at times due to over management, harsh cutting, overgrazing, and minimal landowner incentives. However, this is beginning to change.

The following are a list of some native tree species which are beneficial for both healthy hedgerow development and biodiversity; however, please note that it is vital to source trees for this purpose locally and ensure that they are native to Ireland as they will possess a natural hardiness to Irish soil types, climatic conditions, and disease.



Guelder Rose



Whitethorn



Willow



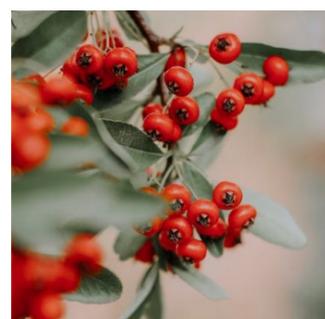
Blackthorn



Elder



Wild Cherry



Rowan

Furthermore, regarding maintenance, as per the Wildlife Management Act 2000, hedgerows must not be cut from the 1st of March to the 31st of August, and only if necessary.



Trimming hedges annually produces less fruit and flowers. It is recommended, if possible, to trim them in a 3-year period. Consider implementing a cutting rotation where different segments are cut each year, allowing the other segments to flower and strengthen. Consider not using herbicides.

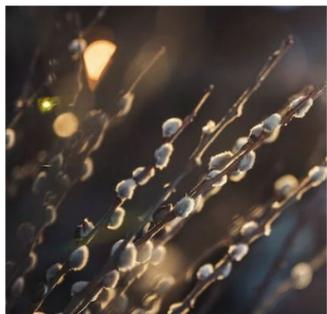
To find more information on recommended species and ideal planting periods, hedgerow management and maintenance, click on the following link by the National Biodiversity Data Centre.

**Hedgerows guide:**

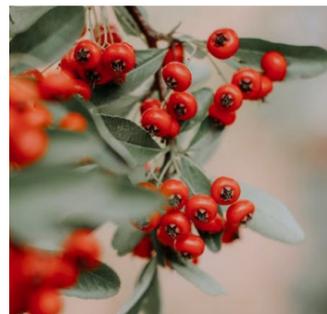
[Link](#)

## Pollinator friendly tree and shrub species

Some pollinator tree species are as follows. It is also important to note that trees and shrubs prefer certain conditions, whether that be soil type, shade, sunlight, dry and damp to name a few.



Willow



Rowan



Silver Birch



Holly



Wild Cherry



Aspen



Ash



Pedunculate/ Sessile Oak



Useful links on pollinator friendly tree species:

**Planting trees for Pollinators:**

[Link](#)

**Biodiversity friendly trees:**

[Link](#)

Some pollinator-friendly shrub species are as follows:



Honeysuckle



Dog Rose



Raspberry



Blackthorn



Currants



Gooseberries



Broom



Spindle Tree

**Pollinator-friendly shrubs:**

[Link](#)



## Pollinator-friendly herbs



Lavender



Foxglove



Geranium



Thyme



Selfheal



Yarrow



Granny's Bonnet



Tutsan

**Pollinator-friendly herbs:**

[Link](#)

**Pollinator-friendly plants:**

[Link](#)



## Grasslands, Gardens and Road Verges

- Reduce mowing to encourage wildflowers to grow. Plant yellow rattle. This will reduce soil quality and lead to reduction of grass growth, allowing wildflowers less competition to grow more abundantly.

### Grass cutting guide:

[Link](#)

- Consider not mowing verges, whether that be around your garden or on the outskirts of your locality. Alternatively, you could plant trees on strips of unused land in your local area, such as narrow grassy patches on the roadside.
- Cut out the use of pesticides and herbicides for weed and pest management and consider greener alternatives such as neem oil for pests, or vinegar and boiling water for weeds.
- Nettles and dandelions are not weeds. They are vital to peacock butterflies and pollinators especially at the beginning of summer.
- Ensure you use native, Irish, and/or local seed mixes when planting wildflower.
- Ensure that when planting trees, shrubs, or wildflowers that you don't hyper-focus on one species and plant a monoculture (one single species). Monocultures provide little bio-diverse value as they tend to suit only a select few species.
- Avoid planting invasive alien species. If you come in contact with them, be very careful. Clean your boots or footwear before you leave the site, if possible, and refer to the Invasive Species section of this manual for more information regarding invasive species and their control.



- Ensure you keep bird feeders clean as they can encourage pests. Be sure to position them where cats cannot interfere.
  - Plant trees and plants with seeds and berries to feed local bird species. Birds are wonderful seed planters, able to disperse seeds all over the country.
  - Use peat-free compost if your own homemade or local compost is not available. Our peat lands are highly valuable carbon sinks and home to some of the most threatened species we have countrywide. They are a habitat to be respected. Buying peat-free compost is a great way of supporting their continuation.
- Piles of logs, leaves and debris make great homes for insects, hedgehogs, and small
- animals. Consider placing them in quiet corners of your garden or community space.
- Construct a pond if possible or fountain. The sound of water attracts birds and
- provides important habitat to a variety of different insects and animals.

**Pollinator pledge:**

[Link](#)

**Housing estate management:**

[Link](#)

# Healthy Soil and Composting





Healthy soil provides us with many vital ecosystem services such as food, water, clean air, carbon sequestration, and flood mitigation, to name a few. It is also habitat to one quarter of all living beings such as fungi, invertebrates (earthworms, insects, spiders) and bacteria. These organisms play a crucial role in maintaining soil quality, regulating water quality and quantity, and implementing pest control. The presence and abundance of these species directly influences soil organic matter, which in turn influences the quality of our food.

## Soil fun facts

- It can take several hundred to one thousand years to form one inch of topsoil.
- Healthy soil has 6 layers known as horizons.
- 1 gram of soil can contain up to 10 billion microorganisms.
- 95 % of food production relies on soil.
- Soil stores more carbon than all the worlds' plants and forests combined.

## The following are some actions which we can take to protect our soil:

- Growing your own vegetables is the most eco-friendly way to obtain food. This can be done on a windowsill, in your back garden, or in an allotment. Growing food also recycles nutrients back into the soil, enhances our connection to our food, and provides valuable organic matter for future crops. If possible, try not to leave the soil bare as it can be prone to wind and rain erosion. In the off season plant some cover crops or seasonal flowers on top to keep it covered, or even place a tarp overhead if possible.



- Composted organic matter comes from decayed plants and animals. When applied to the soil, it helps the soil absorb nutrients and water. The following is a step-by-step guide on how to compost and what to include within your compost.

**Introduction to composting:**

[Link](#)

## Plant soil friendly plants

- Clover helps soil health, attracts helpful insects such as ladybirds and bees, and promotes overall lawn health. It also fixes nitrogen and carbon, which not only benefits soil health, but also sequesters carbon from the atmosphere.
- Legumes are also a helpful addition to any garden. Not only do they taste great, but they also help soil in many ways. Similar to clover, legumes fix nitrogen and carbon. They root deeply in the ground, drawing up nutrients which are deep below ground. Some legumes suggestions would be sweet peas, French runner beans or lentils.
- Trees also have a wonderful impact on soil health. Not only do they help recycle nutrients, they also help to improve drainage, aid water quality, help bind soil together and improve soil structure, and capture carbon and nitrogen from the atmosphere. Trees are one of our best options for improving biodiversity, nurturing soil health, and fighting climate change.



- Cover crops are also a great way to help soil health, whether they are used during crop production or in the off season to keep the exposed soil covered. They help to reduce soil erosion from wind and rain, they retain and recycle plant nutrients, they improve soil structure, and they provide useful organic matter to soil. Many cover crops also provide flowers beneficial to pollinators.

**Greener gardening:**

[Link](#)

# Invasive Species





An invasive species may be defined as any species non-native/alien to the ecosystem whose introduction will cause or is likely to cause harm to the environment, economy or to our health.

Ireland is currently home to roughly 1280 non-native species, these can be plants (such as Japanese Knotweed), animals (such as Canada Goose), insects (Such as Harlequin Ladybird), or microbes (such as Green Sea Fingers - algae).

Luckily, most non-native species are harmless; however, 3 % of 377 risk assessed non-native species were found to have become invasive non-native species.

Each year, invasive non-native species cost the Irish economy over 2.2 million euro.

## Actions we can take to reduce the risk of spreading/ introduction of invasive species

- Be aware of where you dispose of garden, pond, and aquarium plants and soil.
- If you are travelling through an area with invasive species present or suspected, ensure to clean your footwear afterwards before entering another area.
- If you are involved in water sports such as canoeing or angling, remember before you enter and exit waterways to check your boots, equipment, and vessels. Ensure that it is clean and dry as this reduces the risk of transferring non-native alien species.
- If you identify a non-native alien species, be sure to record the sighting and any other useful information on the national Biodiversity Data Centre website:

[Invasive species:](#)

[Link](#)



For more information on how to record data on invasive species and to learn more about how to control and manage invasive species, click the following links.

- This PDF document contains useful user-friendly information on how to view areas containing invasive non-native species and input your own invasive non-native species data.

**Invasives guide:**

[Link](#)

- This link contains useful information on how to manage and control invasive species.

**Invasives control:**

[Link](#)

# Case Study





Here is just some of the wonderful work that local residents' associations and community groups have achieved so far in County Sligo. Their efforts deserve commendation and provide all with inspiration and ideas.

For example, the resident's association in Castle View Ballinafad proposed to the maintenance company which tends to their estate that they would appreciate no weedkiller being used as a form of weed management. The maintenance company now follows a weedkiller free process across the Castle View estate and all of its other associated areas where maintenance work occurs.

## Maugheraboy Residents Association

The following images show some of the great work carried out by the Maugheraboy Residents Association. They incorporated some clever upcycling by reusing old pallets to add colour to the area and to position hanging baskets. Not only did they construct a bee hotel to provide safe habitat for pollinators of all shapes and sizes, they also constructed a local library where books and knowledge may be passed on and openly traded. They even attended online courses which encouraged a mix of herb planting along with their pollinator-friendly planting.



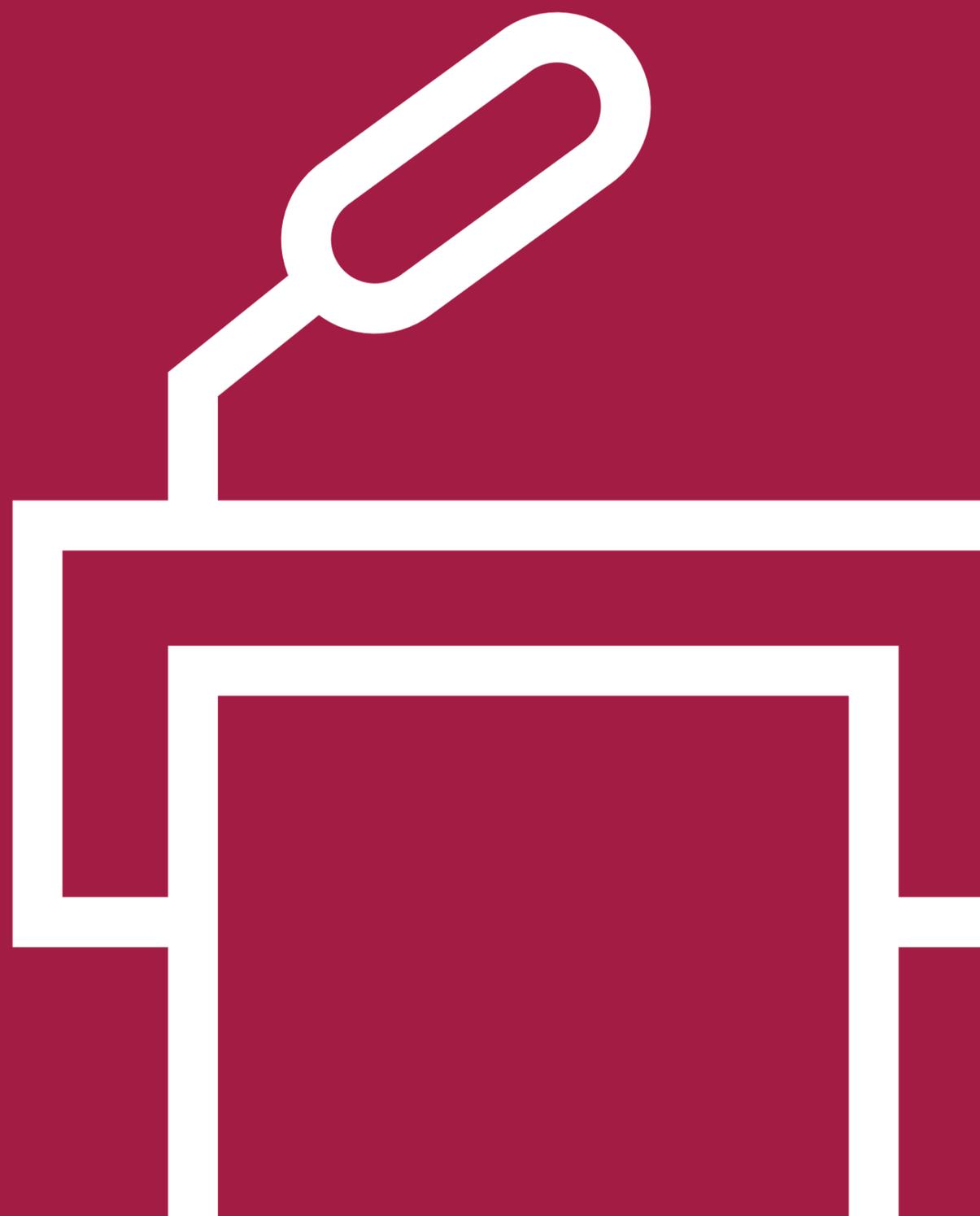








# Sustainable Event Management





Planning an event can be a stressful task, but with actions ranging from applying international standards when carrying out a simple energy audit, to implementing waste management and environmentally friendly catering plans, the following information will serve as a guide you can use to make event management more sustainable.

## First steps to planning an event

- Figure out the goals/ objectives of the event: What do you intend to achieve?
- Consider how specific your goals should be and a general time frame in which to complete it: It doesn't have to be exact, but having a rough idea can help guide the plan regardless.
- Create a budget: Once your general goals have been decided, try to lay down a rough estimate on the various cost involved: for example, catering service, signage, waste facilities, lighting, sound, and speakers etc.. As the plan progresses you will have to amend the budget, but it does help to lay down a rough plan of expenditure. This also reduces the possibility of hidden costs occur later down the line.
- Create a draft plan: Include such topics as the location (online or virtual), general time frame, type of event, and the number of attendees.
- Decide your date and venue: What do weather conditions look like? Is there a caterer available for the specific date?



- Create an Event Team: (If the event is small, this step may be skipped) If not here are some potential roles that may be useful to fill:
  - Event Manager: Supervises the event/ team, responsible for the delivery of the event.
  - Marketing supervisor: Is responsible for the promotion of the event, spreads the information over social media, flyers, local newspaper/ radio.
  - Site leader: May be responsible for contact with suppliers, vendors, caterers.
  - Scheduling assistant: Someone who is responsible for coordinating with speakers or exhibitors.
  - Registration assistant: Someone who is responsible for ticket sales (if viable), who keeps track of numbers attending the event and deals with any issues related to registering.
  - Sponsorship assistant: If sponsorships are needed or possible, this person would work with sponsors, sell sponsor opportunities, and ensure that all sponsorship related processes run smoothly.
- Organise a full event programme: Try to detail the layout and plan for your event as best as possible. Don't worry as promotion of the event can get underway even if changes still need to be made to the plan.
- If the event requires online registration, consider using Eventbrite or creating a Facebook event, or simply emailing an RSVP request.



- The following provide internationally-recognised guidance on how to plan sustainable events as per ISO 20121 and Sligo PPN's Event Greening Guide:

**Sustainable events guide:**

[Link](#)

**Green Festivals Guide:**

[Link](#)

## Event Ideas to get you started

- Globally, deforestation is a key driver of climate change. Consider sending email invites to events or posting on a forum or group online to spread information regarding your event. Websites such as canva allow for the customization of all kinds of invitational material. They even provide premade templates that may be used as an easy format. A simple e-mail can also do the trick. Alternately, if you are a part of a Facebook group or online forum, you can simply schedule an event, and all members will be notified.
- If printing is unavoidable try smaller sized flyers, print double sided, and use recycled or FSC (Forestry Stewardship Council) certified paper with soy ink. Print a quantity in accordance with the number of attendees.
- If signage is an option, consider purchasing and or creating reusable signs, and be sure to not apply permanent dates so that they may be re-used for various events. Reduce the size and or thickness of the signage to reduce material use.



## Reduce, reuse, recycle, reclaim

- When you are choosing materials for your event, try to use recycled, upcycled, or compostable products, if possible. Single use products produce a lot of excessive waste, use up many resources, and damage ecosystems.
- Consider using glass or ceramic drink ware and sipping straws in place of plastic cups and disposable straws.
- Cut out the use of balloons and glitter even if the label states that it is biodegradable. Only 9 % of all plastic ever created has been recycled! The rest is still in circulation whether that be in our oceans, road verges or landfill.
- Ensure adequate refuse bins are present, if possible, consider segregating waste into general waste, and recyclable plastics, glass, metal, and cardboard. Be sure to use signage to remind your attendees to use the correct bin.
- Also consider providing a bin for food waste if composting is possible on site. This will allow nutrients to be reclaimed and may be applied to soil or any plants located on the premises.



- To find out more about what exactly goes in each bin, visit the following link:

**Bin guide:**

[Link](#)

- Consider using local/ native flowers and plants as décor for the event, instead of plastic derived fake foliage etc. Using natural décor also helps to add a connection to nature for the event and may be re-used post event or placed in a compost bin.

## The circular economy

The circular economy is also an important idea to be aware of. It differs from our traditional linear production and consumption-based economy. The goal of the circular economy is to close the loop on product waste by keeping products in use for greater periods of time through repair. Once the product can no longer be repaired, the materials are recovered at the end of life and regenerated. It is the reduction of virgin “new” materials at each stage of the product life cycle, from design to end of use. Below is a useful link to the Department of the Environment, Climate and Communications waste action plan:

**Waste action plan:**

[Link](#)



## Greenify your catering

- Our food system is one of the main drivers of climate change, so allowing more plant-based options is a vital step to greening the overall event.
- Agriculture is Ireland's leading greenhouse gas emitting sector, accounting for 37.5 % of total GHG emissions in 2021.
- Globally agriculture uses 38 % of land surface, with 2/3 of that in use to grow crops for grazing livestock.
- Consider reducing the amount of meat you serve, especially red meat as this has the highest climate impact of all meat. There are numerous plant-based options that are healthier and just as tasty as their meat-based alternative.
- Over-catering or supplying excessive amounts of food to events is also a common occurrence which promotes excessive waste. One third of all food produced globally is wasted. To remedy this, consider accounting for the total number of attendees to limit the amount of food wasted. Also consider possible food allergies.
- If composting facilities are present as seen above in part 2, this can close the loop on food waste, allowing the nutrients from the food waste to be re-used as important organic matter for plants, fruit, or vegetables.



- Consider allowing attendees to take home leftover portions, or donating any excess food to local charities, the homeless, or refugees.

Olio is a food waste app that may be used and is already in use in Sligo town. It simply requires creating an account, and food stuffs can be given/ shared to those who need/ want it.

**Olio on Android:**

[Link](#)

**Olio on iOS:**

[Link](#)

## Local is best

- Sourcing local produce is a great way to reduce overall emissions and to supply your attendees with fresh and healthier alternatives to traditional event cuisine options.
- Many local food suppliers, such as the Organic Centre from County Leitrim, use compostable packaging, drastically reducing the transport emissions involved with getting the food from farm to fork. When you source from local produce companies like this, you are not only supporting the local community, but you are also cutting down on waste involved with packaging.
- One possibility is to source organic or fairtrade items.
- Seasonality is also an important factor when choosing to produce for an event. Consider the seasons and try to choose foodstuff that grow within that particular season.



- The following is a seasonal calendar for Irish produce created by the Environmental Protection Agency (EPA):

**Stop food waste:**

[Link](#)

## Green your transport

- Excess carbon emissions produced by hundreds of single-occupant car journeys can have a harmful impact on the planet, so encourage attendees to find greener alternatives. Consider using the Bolt ebikes. Terminals are dotted all around Sligo town. Detail all public transportation options available in the area where your event is taking place, such as buses, trains, or bicycle routes.

**Sligo Bolt e-bikes:**

[Link](#)

- Encourage attendees to ride share or carpool to events if public transport, walking, or cycling is not possible.

## Energy and renewables

- If you are planning on your event requiring sound equipment or staging, consider hiring solar generators as opposed to fossil fuel powered generators.
- Choose low energy lights such as LED or lights with the ability to dim or shut off instead of traditional constant illuminated bulbs. Swap out old lamps or light systems for more up to date, energy efficient alternatives.



- If hosting an evening event that requires lighting, be mindful of local nesting seasons as this can be disruptive to local bird life activity.
- Consider appointing an energy manager to your event to save on heating costs and on waste electricity. Responsibilities for this person would include, for example, ensuring all lights and equipment not immediately in use or needed are shut off, ensuring all windows and doors are shut, and regulating the room to room thermostats.
- Consider switching to an electricity supplier that solely uses renewable energy such as solar, wind or hydropower.

**Energia:**

[Link](#)

## Look for Sustainable Event Suppliers

- If running a green event is your goal, then ensuring you work in partnership with sustainable event suppliers is a must. Look for suppliers who share similar ethical views as you do.
- Consider creating a list or having an idea of certain requirements when deciding on a supplier. Don't hesitate to ask about the supplier's sustainability initiatives or policies in place, or if they have access to particular green alternatives such as solar generators for outdoor events, or organic/ local products.
- Native Events is an Irish company who provides solar generators for events.

**Native Events:**

[Link](#)



## Social sustainability

- If possible, consider supporting a local non profit or NGO by allowing for donations to be collected at the event. If monetary donations are not feasible, then a food bank may be a viable option, each attendee could bring 1 or 2 canned goods for example.
- Be sure to shed light on the sustainable steps or options taken for the event by both the event organizers and event contractors involved with the event.
- If possible, try to provide educational content to your attendees, by erecting posters, flyers, or booklets. If you are providing gifts or tote bags, try to use sustainable eco-friendly materials, or forgo the use of these altogether.
- Be sure to ask any suppliers or contractors at the event what their sustainable criteria and policies are before hiring them for the event.
- Share information on social media and/or contact local news sites about your community group/organisation's sustainability goals/efforts before, during, or after the event.
- Also consider inviting any local representatives from the area. First, they may be able to assist your event process by sharing it on social media or by helping with funding/organising activities. Second, it is just good public relations to inform them of any sustainable actions carried out by your group. Last, it's an opportunity to learn from each other for the good of the community.

**Sligo Leader:**

[Link](#)



## Fundraising

Fundraising is an important aspect of event management. Here are some steps that you can follow to create your own fundraiser.

- Design and create your fundraiser: Consider such fundraiser events as bake sales, raffle or vintage sales. Even consider an event where you teach local community members about some of the initiatives which your group has applied such as, wildflower planting, garden maintenance, waste segregation, biodiversity surveying. Ensure that carrying out fieldwork that health and safety procedures are followed.

Consider creating a GoFundMe for online donations/ crowdfunding. For more information on how to create a GoFundMe or IDonate, click these links:

**Go Fund Me:**

[Link](#)

**IDonate:**

[Link](#)

Consider hosting the fundraiser on the weekend when most have more free time.

If you or a member of your group are particularly sporty, you could fundraise to run a 10 K, half marathon, or full marathon, for example.

- Share your fundraiser by promoting it on local Facebook groups, Twitter or Instagram, or call local radio stations and ask to be mentioned.

Send emails, or consider creating re-usable signage or posters. Ask local businesses would they allow you to put up signs or notices about the fundraiser within their shop.

- Ask for sponsors or local business to match your donations, provide/donate food or beverages, sponsor the event, or provide prizes for a raffle.



- Host a fundraiser: To find more information about hosting events, read the above guidance on sustainable event management planning at the beginning of the section on sustainable event management.
- Collect donations: Use online donation services such as GoFundMe, or collect donations on the day.

## Energy management

Buildings consume 44 % of Ireland's overall energy supply, with commercial/ public sector buildings accounting for 15 % of that total. For that reason, it is important that we are aware of our building's energy usage, especially regarding events when additional electricity usage may be needed due to performances, lighting, catering etc. An increase of 1 °C in heating translates to an increase of roughly 8 % of heating costs. That is why it may be advised to carry out an energy walkaround within your organisation (if a building or premises is often used). An energy walkaround survey sets about classifying the current energy use of the building and allows for monitoring and reporting to be carried out. The aim of energy management is to achieve an organisation's goals with the least amount of energy to reduce energy costs.

The following is a series of simple steps on how to carry out an energy walkaround survey:

- Appoint an Energy Co-ordinator.
- Assess current energy use by taking a reading of your meter in kW/h, and keep track of it.



- Check your Maximum Import Capacity (MIC) from a previous electricity bill. Ideally you should be on a general tariff if MIC is 50 kVA or less. If your MIC is greater than 50 kVA, then you should contact your energy supplier to discuss options.
- Consider checking the above parameters every month and recording the information. This will create an energy use trend and may be used to measure past/ future energy demand.
- Check when your boiler and heaters were last serviced. When does the heating come on?
- Check thermostats to ensure that they are correctly set. Ideally, they should be set between 19 - 20°C.
- Are windows and doors left open, or are cold draughts coming from them?
- Check to see what type of lighting is being used: Fluorescent tubes, LED, tungsten etc.
- Is exterior lighting switched off when not in use?
- Set out a rough plan and deadlines for completion of upgrades or repairs to take place. Prioritise changes based on cost and time constraints.



## Example energy walk round checklist

Date of energy walk round: <input type="text"/>	Checked	Further action needed y/n
<b>Heating</b> (see page 4)		
Are there staff complaints about the temperature?		
Have heaters/boilers been serviced in the last 12 months?		
Are portable heaters being used?		
Are heaters and air conditioning units operating in the same space?		
How is hot water provided?		
Do all areas have the same heating requirements?		
Is the room thermostat working and set to the correct temperature?		
Are the timers working and on the correct settings?		
Are other heating controls working and on the correct settings?		
Are there obstructions in front of radiators or heaters?		
How are extractor fans controlled (e.g. in toilets)?		
Are windows and doors open when heating or air conditioning is on?		
Are there any cold draughts coming from windows or doors?		
<b>Lighting</b> (see page 7)		
Are lights switched off (is daylight sufficient/room not in use)?		
Are any old large diameter fluorescent tube lights still in use?		
Are lamps, fittings and rooflights clean?		
Are traditional tungsten light bulbs still in use?		
Are light switches arranged conveniently and labelled?		
Is exterior lighting switched off when not needed?		
<b>In the office</b> (see page 10)		
Have computers got built-in energy saving features and are they activated?		
Are computers left on overnight?		
Are monitors switched off when not in use?		
Are photocopiers located in air conditioned areas?		
Are printers and photocopiers left on overnight/at weekends?		
Are vending machines/water coolers left on all the time?		
<b>In the factory/warehouse</b> (see page 12)		
Are pumps/fans/compressed air switched off when the equipment they serve is not in use?		
Do you hear compressed air leaks?		
Are refrigeration units being run efficiently?		

Carbon Trust



## Here are some steps that may be taken to improve energy efficiency:

- Create labels/ signage to remind people to turn off lights if not needed. Ensure unoccupied areas are not unnecessarily lit.
- Consider if full areas need to be lit or if smaller lit zones will suffice.
- Clean dirty light panels and lampshades.
- Repair broken windows or roof lights.
- If draughts are present within the building, try to resolve them with draught strips, filler, or repairs.
- Ensure that doors and windows are not left open unnecessarily.
- Avoid unnecessary heating outside of occupation hours.
- Keep temperatures modest. Turn off radiators/ boilers if not in use.
- Avoid heating unoccupied rooms, space heating if not needed.
- Avoid unnecessary use of hot water.
- Ensure pipework and boilers are well insulated.



More information to improve energy management activities and ideas to save energy can be found in the Sustainable Energy Association Irelands Energy Management Guide and the Green Arts Initiative Ireland guide below. There is also a link from the Carbon Trust which details how to conduct an energy walkaround, and further documentation providing guidance on how to carry out an energy audit.

**SEAI Energy management:**

[Link](#)

**Energy guide:**

[Link](#)

**SEAI Energy audit handbook:**

[Link](#)

## Solar PV grants

If you or your community group are interested in looking into availing of a grant scheme to install solar photovoltaic panels, the following link should provide you with the information required.

**Community grants:**

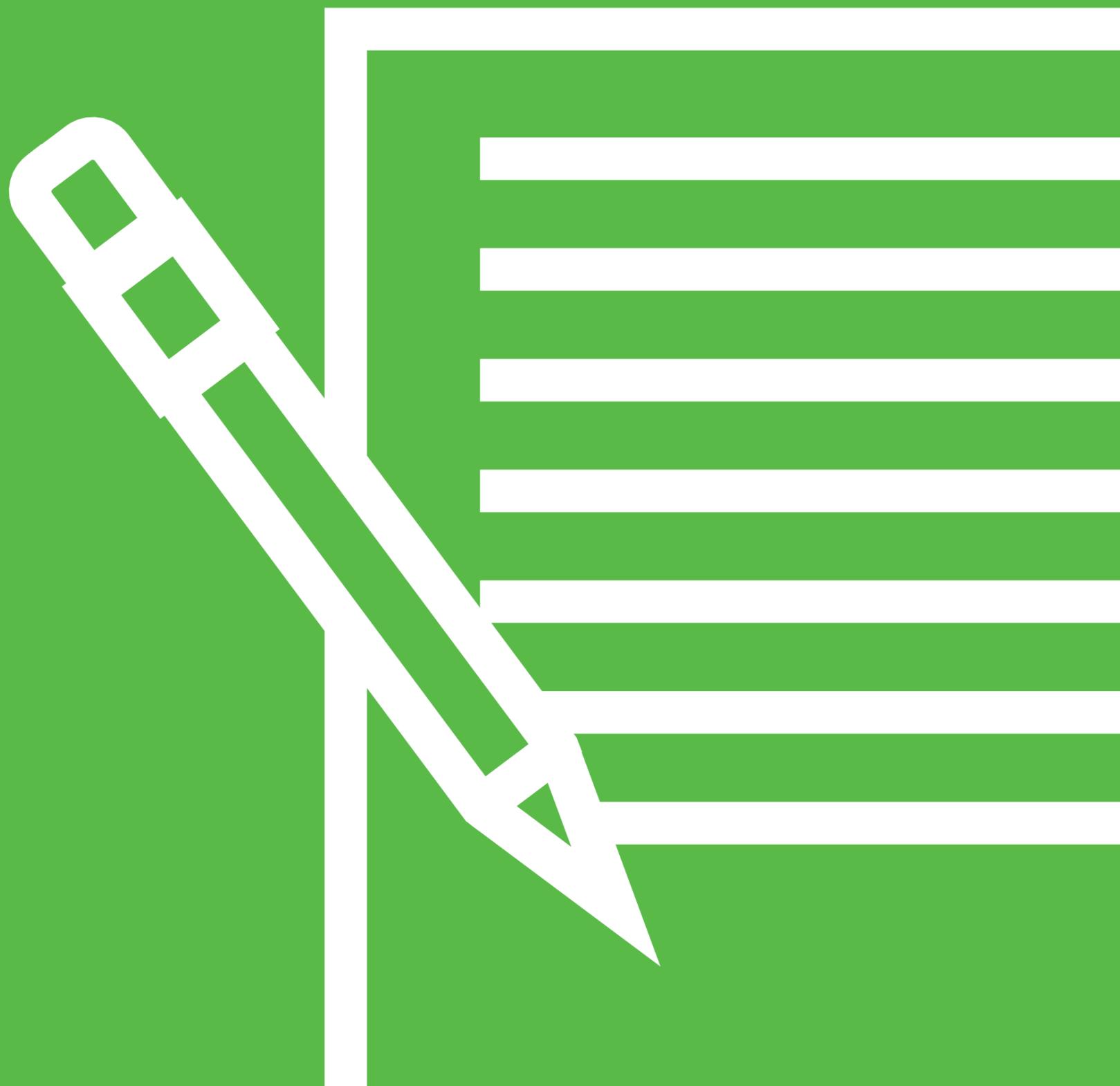
[Link](#)

If you wish to further this enquiry, then consider getting in touch with a project co-ordinator here:

**Community grants contact:**

[Link](#)

# Tracking Actions and Progress





It is important to track the actions which you and your community group have carried out and are in the process of carrying out as this allows for progress to be noted, possible suggestions and limitations to be taken into consideration, and future plans to be evaluated. It is also important for funding applications as many grant providers are requiring groups to demonstrate a commitment to better environmental practice and to show evidence of same.

Although it is important to track actions and progress, it is just as important to share information, whether that be with family members, friends, or other community groups/ organisations within your local community and beyond. Consider hosting occasional meetings whether in person or online. Zoom, Microsoft Teams or Skype can be useful means of communicating, especially for larger groups. They even allow meetings to be recorded so that no information is missed.

**Zoom:**

[Link](#)

**Microsoft Office:**

[Link](#)

**Skype:**

[Link](#)

On the following pages are templates to help monitor and record your actions.

After concluding the project, discuss and analyse the outcome of your actions with your community group. Some questions to consider include:

- What were the successes and failures?
- If you were to conduct future actions, how would they differ from those actions carried out?
- Were there limitations to your success in completing the actions, such as time constraints, budget, manpower, knowledge transfer etc.?





What do you hope to achieve?

What steps are needed?

How long will it take to complete?

What steps have been taken?

How successful was the project?

# Funding





Although there are more factors to consider in the long-term effectiveness of projects, such as leadership, work ethic, time, etc., funding is also an important aspect as it may dictate how successful or ambitious the plan or activities can be. The following are some extra resources to help you apply for additional funding. Also remember that funding can be acquired through donations, fundraisers, activities, and sponsorships, to name a few. See the Sustainable Event Management Toolkit for more info and ideas on fundraising and events.

The Community Foundation for Ireland runs two grant schemes regarding the environment and nature. One grant covers promoting a "circular economy," while the other covers the development of community-based Biodiversity Action Plans and implementation of previous management plans. The Circular Economy grant round will open annually during summer, while the Biodiversity Action Plan grant opens in Spring. More information may be found on their website:

**Community Foundation grants:**

[Link](#)

The Sligo Leader also provides funding opportunities for community groups, in the form of two grants: Community Projects and Rural Recreational Projects. More information may be found on their website:

**Sligo Leader funding:**

[Link](#)

The Department of the Environment, Climate and Communications also provides funding for community groups to work together with local authorities to tackle areas such as waste, biodiversity, climate change, air, and water. More information may be found on gov.ie:

**Environment Action Fund:**

[Link](#)



Wheel.ie is another possible source of funding for your community group.

**Wheel.ie funding:**

[Link](#)

It is important to note that Sligo County Council are working to deliver better environmental practises on an ongoing basis across their grant schemes, so the more your community group can show the steps you've taken to become more sustainable and environmentally friendly, the greater the possibility of securing future grants.

**Sligo County Council Grants:**

[Link](#)

Keep an eye on the Sligo PPN website for notifications of upcoming funding rounds. The second link is a document created by Sligo PPN to help with writing a grant application.

**Sligo PPN funding:**

[Link](#)

**Grant application help:**

[Link](#)

# Useful Links and Resources





## Environmental Toolkits:

Wiltshire:

[Link](#)

South Somerset:

[Link](#)

## Biodiversity:

### Local biodiversity action plans:

Laois biodiversity action plan:

[Link](#)

Shanahoe action plan:

[Link](#)

### Biodiversity surveying:

Recording Ireland's Wildlife:  
A Beginner's Guide

[Link](#)

Citizen Science:

[Link](#)



## Biodiversity mapping:

QGIS site:

[Link](#)

QGIS tutorial:

[Link](#)

Google Earth Pro:

[Link](#)

## The All-Ireland Pollinator Plan:

Pollinator actions:

[Link](#)

Pollinator help:

[Link](#)

## Health benefits of the outdoors:

Prescribing nature:

[Link](#)

Prescribing bird-watching:

[Link](#)



## Funding:

Community Foundation:

[Link](#)

Sligo Leader:

[Link](#)

Environment Action Fund:

[Link](#)

Wheel.ie funding:

[Link](#)

Sligo County Council Grants:

[Link](#)

## Waste:

Mywaste.ie

[Link](#)

BNM Recycling:

[Link](#)

## Event management:

Sustainable events guide:

[Link](#)

PPN Event Greening Guide:

[Link](#)



## Policy:

Sustainability policy:

[Link](#)

## Composting:

Introduction to composting:

[Link](#)

