

CHAPTER 10
Transport, Infrastructure & Energy

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10.1 Aim

To achieve a sustainable, integrated and low carbon transport system with excellent connectivity within and to Westmeath by enhancing existing strategic transportation infrastructure in the County. To provide, improve and extend water, wastewater, surface water and flood alleviation services throughout the county and to prioritise the provision of water services infrastructure, to achieve improved environmental protection and to protect public health. To provide for the development of indigenous energy resources, with an emphasis on renewable energy supplies.

10.2 Introduction

The continued delivery and maintenance of a well-functioning multi modal transport network is essential to delivering the County's economic competitiveness, improved quality of life and better social cohesion. It is further noted that accessibility and mobility for all sections of the community is vital for the future development of the County and therefore the development of an integrated transport policy is of the utmost importance.

The Council acknowledges the importance of the existing road network in Westmeath and fully appreciates the need to maximise benefits from the M4/N4 and M6. It is therefore Council policy to optimise the use of existing and future transport provision. Notwithstanding this, there is a growing realisation that the transport sector is a contributory factor in the growth of greenhouse gas emissions. Ensuring transport infrastructure and services will be able to withstand the likely future impacts of climate change is a big challenge for this Plan.

Census 2016 indicates that Westmeath has one of the highest rates of car reliance in the country with 72.9% of commuters travelling to work by car, compared to 65.6% nationally, with just 3.5% availing of public transport compared to a national average of 9.3%. It is therefore a policy of this plan to improve this pattern as a means of positively impacting on people's quality of life and the environment.

To encourage a modal shift to more sustainable modes of transport and a low carbon transport system the Council will seek to achieve a more balanced and sustainable pattern of movement within the County and will endeavour to facilitate a greater choice of transport modes. Furthermore, this plan supports and encourages sustainable and compact forms of development, which, if realised, will reduce car dependency and lower carbon emissions.

10.3 Legislative and Transport Policy Context

There are a number of National and Regional Policies and Plans which provide a context for the Council's transportation strategy and policies as follows:

10.3.1 The National Planning Framework – Ireland 2040

The NPF is based on nine strategic outcomes, one of which is sustainable mobility. A strong emphasis is therefore placed on electrification of public transport fleets and use of electric vehicles in order to improve the environmental quality of our towns. The transition to more sustainable modes of travel (walking, cycling, public transport) is promoted, particularly within smaller towns and villages and rural areas. This Plan also supports the implementation of planning and transportation strategies for urban areas, with a major focus on improving walking and cycling routes, including continuous greenway networks and targeted measures to enhance permeability and connectivity.

10.3.2 Eastern and Midland Regional Assembly Regional Spatial and Economic Strategy 2019-2031

The RSES supports transition from the private car to alternatives and promotes greater efficiency in the use of our transport networks, which have informed the policy of this Plan, for example;

- Encouraging transition towards sustainable and low carbon transport modes through the promotion of alternative modes of transport and 'walkable communities';
- Support for transport plans for Athlone and Mullingar;
- Support for the delivery of the rail projects including an appropriate level of commuter rail service in the Midlands;
- Support for the delivery of bus projects and the Local Link Rural Transport Programme;
- Support for the appraisal and or delivery of road projects e.g. M4 Mullingar to Longford (and Sligo) and N52 Tullamore to Kilbeggan;
- Promotion of the development of sustainable greenway, blueway and peatway networks;
- Encouraging an increase in electric vehicles;
- Promotion of mobility management and travel plans to bring about behaviour change and more sustainable transport use;
- Support the delivery of the National Broadband Plan;
- Facilitate enhanced international fibre communications links;
- Facilitate a high-quality ICT network throughout the Region;
- Promotion of Ireland as a sustainable international destination for ICT infrastructures such as data centres and associated economic activities at appropriate locations.

10.3.3 Building on Recovery: Infrastructure and Capital Investment 2016-2021

The document 'Building on Recovery – Infrastructure and Capital investment 2016-2021' (Department of Public Expenditure and Reform) sets out future capital spending proposals for investment in infrastructure. €42 billion has been allocated for projects nationally up to 2021. Following a review in 2018, the Government published a new 10-year National Investment Plan for the period 2018- 2027.

10.3.4 Climate Action Plan 2019

This Plan sets out the Government's plan of action in relation to combatting Climate Change and its impacts. It sets out governance arrangements including carbon-proofing our policies, establishment of carbon budgets and a strengthened Climate Change Advisory Council. A central component of the plan is the Government's commitment to undertake the following:

- 70% of the Country's electricity needs will come from renewable sources by 2030.
- Accelerate the take up of EV cars and vans so that we reach 100% of all new cars and vans are EVs by 2030. This will enable achieving our target of 950,000 EVs on the road by 2030.
- This means approximately one third of all vehicles sold during the decade will be Battery Electric Vehicle (BEV) or Plug-in Hybrid Electric Vehicle (PHEV).
- Make growth less transport intensive through better planning, remote and home-working and modal shift to public transport.
- Increase the renewable biofuel content of motor fuels.
- Set targets for the conversion of public transport fleets to zero carbon alternatives.

10.3.5 Smarter Travel – A Sustainable Transport Future - A New Transport Policy for Ireland 2009-2020 (Department of Transport, 2009)

This document sets out how the vision for a sustainable travel and transport system can be achieved. The policy recognises the vital importance of continued investment in transport to ensure an efficient economy and continued social development. The Government reaffirms its vision for sustainability in transport and sets out five key goals:

- (i) To reduce overall travel demand.
- (ii) To maximise the efficiency of the transport network.
- (iii) To reduce reliance on fossil fuels.
- (iv) To reduce transport emissions.
- (v) To improve accessibility to transport.

The National Cycle Policy Framework 2009-2020 (Department of Transport) which is derived from Smarter Travel, sets out a national policy for cycling, in order to create a stronger cycling culture, a safer environment for cycling and improved quality of life.

10.3.6 Spatial Planning and National Roads - Guidelines for Planning Authorities 2012

These Guidelines (DoEHLG, 2012) set out planning policy considerations relating to development affecting National Primary and Secondary roads, including motorways and associated junctions, outside the 50-60 kmph speed limit zones for towns and villages.

The Guidelines seek to achieve and maintain a safe and efficient network of National Roads in the broader context of sustainable development strategies, thereby facilitating continued economic

growth, while encouraging a shift towards more sustainable travel and transport in accordance with the Smarter Travel policy document.

10.3.7 Design Manual for Urban Roads and Streets, 2019

The current Design Manual for Urban Roads and Streets (DMURS) by the Department of Transport, Tourism and Sport sets out design standards for urban roads and streets which balance the "place function" (i.e. the needs of residents and visitors) with the "transport function" (i.e. the needs of pedestrians, cyclists, public transport, cars and goods vehicles).

The Manual sets out design guidance and standards for constructing new and reconfiguring existing urban roads and streets in Ireland, incorporating good planning and design practice and focus on the public realm. It also outlines practical design measures to encourage more sustainable travel patterns in urban areas.

10.3.8 Strategy for the Future Development of National and Regional Greenways, 2018

The objective of this Strategy prepared by the Department of Transport, Tourism and Sport, is to assist in the strategic development of nationally and regionally significant Greenways in appropriate locations constructed to an appropriate standard in order to deliver a quality experience for all Greenways users. It also aims to increase the number and geographical spread of Greenways of scale and quality around the country over the next 10 years resulting in a significant increase in the number of people using Greenways as a visitor experience and as a recreational amenity.

10.3.9 Local Link Rural Transport Programme Strategic Plan 2018 to 2022

The National Transport Authority (NTA) provides rural transport services through the Local Link Rural Transport Programme Strategic Plan 2018-2022. The key priorities of this programme continue to be directed at addressing rural social exclusion and the integration of rural transport services with other public transport services. The services provided under the programme are therefore intended to fulfil a primarily social function, in meeting the needs of communities in towns, villages and rural areas.

10.3.10 Rural Transport Initiative

The Rural Transport Initiative (RTI) supports rural transport services in the County. The RTI Project provides community based, door-to-door, flexible transport services, and facilitates passengers to access a wide range of services, which include shopping, health, day-care and social activities on a regular basis. Services are also scheduled to link with public and private transport services locally. South Westmeath Rural Transport Association is a community-based transport initiative serving a large rural community in the southwest area of County Westmeath.

10.3.11 Westmeath Integrated Transport Initiative

This initiative seeks to improve local transport services and reduce costs by sharing resources and, where necessary, establishing new transport routes to meet the needs of communities and organisations. An online spatial application was developed by the Council showing the transportation routes of the various rural transportation providers as well as pickup points and links to the providers' websites.

Transport	t Infrastructure and Energy– Transport Policies
It is a policy	objective of Westmeath County Council to:
CPO 10.1	Promote and deliver a sustainable, integrated and low carbon transport system with ease of movement throughout County Westmeath by enhancing the existing transport infrastructure in terms of road, bus, rail, cycling and pedestrian facilities.
CPO 10.2	Support the development of a low carbon transport system by continuing to promote modal shift from private car use towards increased use of more sustainable forms of transport such as cycling, walking and public transport.
CPO 10.3	Support the implementation of the following national and regional transport policies as they apply to Westmeath: - The National Planning Framework - The RSES for the Eastern and Midland Region - Smarter Travel, A Sustainable Transport Future 2009 – 2020 - Design Manual for Urban Roads and Streets (DMURS) 2019 - Spatial Planning and National Roads - Guidelines for Planning Authorities 2012 - National Cycling Policy Framework and National Cycle Manual - Strategy for the Future Development of National and Regional Greenways, 2018 The Council also supports the implementation of sustainable transport solutions.
CPO 10.4	Seek to ensure primacy for transport options that provide for unit reductions in carbon emissions. This can most effectively be done by promoting public transport, walking and cycling, and by actively seeking to reduce car use in circumstances where alternative options are available.

10.3.12 Integration of Land Use Planning and Transportation

The integration of land use and transportation is a fundamental principle of the national policy document *Smarter Travel: A Sustainable Transport Future, 2009 - 2020* which will inform policies and objectives in this Plan. By shaping the pattern of development and influencing the location, scale, density, design and mix of land-uses, the integration of land-use and transportation can help reduce the need to travel and facilitate sustainable urban development.

The Plan therefore promotes an integrated approach to land-use and transportation which aligns with the Core Strategy and directs future development into existing towns and settlements within Westmeath, in order to reduce car dependency. The Plan strongly supports the creation of compact urban growth, consolidation of existing settlements and prioritisation of the development of brownfield lands across the settlement hierarchy which in turn will encourage the use of public transport, cycling and walking as viable alternatives to the private car.

Furthermore, allowing higher density development to occur along public transport corridors increases the number of people within the walking catchment of the public transport service, which in turn increases the patronage of the service, and leads to an increase in its financial and economic viability and in turn a positive environmental impact.

Land Use and Transportation Strategies also play a vital role in supporting better coordination and integration of development planning. It is Council policy to prepare an Area Based Transport Plan for Athlone in conjunction with Roscommon County Council, in order to realise its role as a Regional Centre. An Area based Transport Plan will also be prepared for Mullingar to support its role as a Key town.

Transport,	Transport, Infrastructure and Energy Policy Objectives - Integration of Land Use	
Planning and Transportation Policy		
It is a policy	objective of Westmeath County Council to:	
CPO 10.5	Encourage transition towards sustainable and low carbon transport modes, through the promotion of alternative modes of transport, and 'walkable communities' together with promotion of compact urban forms close to public transport corridors to encourage more sustainable patterns of movement.	
CPO 10.6	Support the enhancement of the County's existing transport infrastructure in order to ensure its optimal use and seek to undertake appropriate traffic management measures to reduce congestion and minimise travel times.	
CPO 10.7	Integrate the County's transport and tourism strategies to promote increasingly sustainable travel patterns and improved linkages between Athlone, Mullingar and other towns and villages.	
CPO 10.8	Prepare in conjunction with Roscommon County Council and relevant agencies, An Area Based Transport Plan for Athlone to facilitate the growth of Athlone as a regional economic driver.	
CPO 10.9	Prepare an Area based Transport Plan for Mullingar in conjunction with relevant agencies, to support the growth of Mullingar as a Key Town.	

10.4 Sustainable Transport

10.4.1 Walking and Cycling



Walking and cycling are the most sustainable modes of transport and are key components to movement and accessibility in urban and inter-urban areas. Benefits accruing for both the environment and population, include reducing air and noise pollution and traffic congestion as well as contributing to healthy and more active lifestyles. Encouraging and promoting walking and cycling as a sustainable mode of transport and moving away from reliance on the private car will depend on providing well connected and integrated pedestrian and cycling infrastructure. Pedestrian and cycle facilities will be most successful where they form a coherent network, place an emphasis on safety, directly serve the main areas where people wish to travel, provide priority over vehicular traffic at junctions, are free from obstructions and have adequate public lighting where considered appropriate.

Infrastructure and Mobility Policy Objectives - Walking and Cycling It is a policy objective of Westmeath County Council to: CPO 10.10 Promote walking and cycling as efficient, healthy and environmentally friendly modes

of transport by securing the development of a network of direct, comfortable, convenient and safe cycle routes and footpaths, particularly in urban areas and in the vicinity of schools.

CPO 10.11	Improve pedestrian and cycle connectivity to stations and other public transport interchanges.
CPO 10.12	Design pedestrian and cycling infrastructure in accordance with the principles,
	approaches and standards set out in the National Cycle Manual, the Design Manual
	for Urban Roads and Streets and international best practice.
CPO 10.13	Encourage and seek sustainable transport movement at the earliest design stage of
	development proposals, to ensure accessibility by all modes of transport and all
	sections of society and promote the provision of parking space for bicycles in
	development schemes.
CPO 10.14	Improve the streetscape environment for pedestrians, cyclists, and people with
	special mobility needs by providing facilities to enhance safety and convenience,
	including separation for pedestrian infrastructure from vehicular traffic.
CPO 10.15	Provide better sign posting and public lighting where considered appropriate and
	ensure that the upgrading of roads will not impact negatively on the safety and
	perceived safety of cyclists.
CPO 10.16	Work with the National Trails Office, Coillte, the Department of Planning, Housing
	and Local Government, the Department of Transport, Tourism and Sport, and other
	relevant stakeholders, to improve on the existing level of infrastructure and facilities
	for walking and cycling.

10.4.2 Greenways

In recent years, the Council has significantly invested in developing a network of strategic greenways across the County such as:

- Old Rail Trail extending 42km from Mullingar to Athlone forms part of the of the proposed 277km Dublin to Galway National Cycle Network (NCN).
- Royal Canal Greenway.
- Lough Owel Greenway.

Consent has recently been granted for a greenway along the former Kilbeggan Branch of the Grand Canal, from the Harbour building in Kilbeggan to the County Offaly border.

The Council recognises the numerous benefits arising from the further development of Greenways in Westmeath, in particular as a tourism product with significant potential to attract overseas visitors, for local communities in terms of economic benefits, and for all users as an amenity for physical activity and a contributor to health and wellbeing. Accordingly, it is Council policy to continue to expand and create an integrated network of greenways across the County and maximise pedestrian and cycle access to same.

Transport a	Transport and Infrastructure Policy Objectives – Greenways	
It is a policy of	It is a policy objective of Westmeath County Council to:	
CPO 10.17	Continue to develop an integrated and connected network of sustainable greenways and green routes within Westmeath and to adjoining counties, in accordance with the "Strategy for the Future Development of National and Regional Greenways".	
CPO 10.18	Progress the expansion of the National Cycle Network westwards from Athlone to the Roscommon County boundary.	
CPO 10.19	Support the development of a greenway extending northwards of Athlone, along Lough Ree to the Longford County border, in accordance with a habitat management plan for Lough Ree.	
CPO 10.20	Support the development of a greenway extending northwards from the River Brosna in Kilbeggan along the Westmeath Way via Ballinagore, linking into the southern end of Lough Ennell at Lilliput. In this regard, due cognisance will be given to the habitat management plan prepared for Council owned land at Lilliput.	
CPO 10.21	Support the development of a greenway linking the Hill of Uisneach to the Old Rail Trail, subject to the protection of the archaeological significance of Uisneach.	
CPO 10.22	Support and promote the development of additional greenway links from the various towns/villages to the Old Rail Trail and Royal Canal Cycleways, subject to Environment and Habitats Requirements.	
CPO 10.23	Maximise both pedestrian and cycle connectivity to the network of existing greenways within the County.	
CPO 10.24	Protect established Greenways within the County against inappropriate new vehicular accesses and increased traffic movements.	

10.4.3 Public Transport

The Council acknowledges the importance of the provision of high-quality public transport services and will facilitate transport service providers where possible during the expansion and improvements in the quality of services on offer.

Future growth, both in terms of employment and residential development must be based on sustainable modes of transport. Given the strategic position of County Westmeath in terms of the national transport infrastructure and arterial public transport routes, consideration should be given to the development of integrated transport hubs within the County and the promotion of public transport connectivity between designated towns and villages within the County.

10.4.4 Rail

Athlone and Mullingar are both accessible by rail and are positioned on the Galway / Dublin / Westport and the Dublin/Sligo rail lines respectively. Trains operate on each route several times daily. Currently there are no other train stations operating within the County although a disused station is located at Killucan on the Dublin/Sligo line.

larnród Éireann in their strategic policy document "Rail Vision 2030: The Future of Rail Transport in Ireland" seeks to provide for the maintenance and renewal of existing rail infrastructure, to avoid the asset being "run down" over time. The strategy undertook an appraisal of proposed new rail lines and suggested the reinstatement of the double track rail link between Athlone and Mullingar. This would also facilitate greater connectivity not just within the County but also on a national level providing improved cross linkages, with services to the two main stations in the capital and enabling increases on the Galway to Dublin rail line.

In the longer-term, electrification of key routes including the Dublin to Galway line is promoted. It is also envisaged that capacity will be increased through double tracking the line from Portarlington to Athlone and from Mullingar to Maynooth to cater for hourly services between Galway and Connolly Station (alternative to Heuston). This would serve to further strengthen public transport interconnectivity by connecting the Galway/Mayo rail line with the Sligo rail line and potentially provide an additional line option for the Galway-Dublin service.

10.4.5 Bus

The development of a quality bus system as an alternative to private car use is an essential element of an integrated and balanced land use transport system. Westmeath is well serviced by Bus Éireann expressway services, which primarily mirror the national primary routes and traverse the County on an east-west axis. There is a need for increased bus services to improve connectivity between the main urban centres in the north and south of the County and to regional centres. Greater integration of bus and rail services would provide for enhanced services and facilitate the transfer from private car to bus and rail.

The provision of Quality Bus Corridors (QBC) is in keeping with the principles of Smarter Travel to encourage a modal shift to public transport. The aim is to make taking the bus more attractive, thereby taking private vehicles off the roads. The Council supports the provision of QBC's, as part of the delivery of a seamless and fully integrated public transport service.

The promotion of permeability within and connectivity between the existing urban towns and settlement remains a key transport goal of the Council. In addition to community bus routes operated under the Rural Transport Initiative, a number of private bus operators service both urban centres and rural communities in the County. It is important that these services are retained and improved, to maintain access to public services for all citizens.

10.4.6 Public Transport in Rural Areas

The availability of public rural transport plays a major role in combatting rural isolation and acts as a catalyst in creating models of partnership, at all levels, where key sectors actively engage in transport provision, to ensure equality of access for all.

Local Link Longford Westmeath Roscommon provides public transport for rural people living, working and visiting rural areas. This service operates 70 different routes with 66 door to door scheduled services. 56 services operate weekly with 3 evening services.

This invaluable service provides access to public services, employment, training, health and social facilities. In recognition of the importance of improving access to and from rural locations, the Council supports the extension of the *Rural Transport Programme* and other such initiatives which respond to local travel needs throughout the County.

10.4.7 Park and Ride Facilities

The purpose of a 'Park and Ride' facility is to encourage car commuters to transfer to public transport, thereby reducing congestion and promoting public transport. This Plan will promote and support, as a transitional arrangement, the development of Park and Ride facilities at appropriate locations in the County, subject to a full appraisal of each location and in consultation with the relevant public transport providers.

Park and Ride sites often use valuable land adjacent to high-capacity public transport stations/stops which might be better used to provide trip intensive development. Having regard to the importance of reducing the carbon footprint, cognisance will be given to the inclusion of dedicated fully functional Electrical Vehicle (EV) charging points through appropriate objectives.

10.4.8 Park and Stride

The purpose of a "Park and Stride" facility is to encourage car commuters to transfer to a healthy and ecologically sound mode of transport, i.e. walking for the final element of their journey, thus reducing car journeys and easing congestion.

Transport a	and Infrastructure - Public Transport Policies	
It is a policy of	It is a policy objective of Westmeath County Council to:	
CPO 10.25	Support the continued integration of national, regional and local bus and rail services to ensure the delivery of a seamless and fully integrated public transport service.	
CPO 10.26	Promote the use of and facilitate improvements to existing public transport services to support initiatives designed to improve bus/coach/rail interchange facilities.	

CPO 10.27	Support public transport improvements by reserving corridors for any such improvements free of development, including provision of setbacks along public transport corridors.
CPO 10.28	Continue to work with the relevant transport providers, agencies and stakeholders to facilitate the integration of active travel (walking, cycling etc.) with public transport, thereby making it easier for people to access and use the public transport system.
CPO 10.29	Support the improvement of existing rail transport infrastructure, including the provision of increased frequency of services on the Dublin to Sligo and Dublin to Galway Lines.
CPO 10.30	Safeguard all existing rail infrastructure and encourage the re-opening of rail stations including Killucan and preserve disused stations/halts and track appropriate to future strategic and public transport needs.
CPO 10.31	Support the reopening of the Mullingar to Athlone Rail Line and Moate Railway Station, thereby increasing connectivity between these Towns.
CPO 10.32	Support the operation of existing bus services and facilitate the provision of improved facilities for bus users in towns and villages, including the provision, in collaboration with the relevant agencies, of set down areas for coaches and bus shelters for passengers. Such provision is particularly required in towns and villages bypassed by National Routes.
CPO 10.33	Support bus priority measures on existing and planned road infrastructure, where appropriate, in collaboration with the National Transport Authority, Bus Éireann and the Transport Infrastructure Ireland.
CPO 10.34	Support and encourage public transport providers and rural community transport initiatives to enhance the provision of public transportation services linking the rural villages to the main towns within Westmeath.
CPO 10.35	Support the Rural Transport Initiative and the provision of an integrated rural community public transport system as a means of reducing social isolation and as a viable long-term sustainable public transport option.
CPO 10.36	Investigate the potential of providing a number of 'Park and Ride' facilities in appropriate locations in the County, subject to environmental assessment of identified locations.
CPO 10.37	Investigate the potential of providing a number of 'Park and Stride' facilities in appropriate locations in the County, subject to environmental assessment of identified locations.

CPO 10.38	Investigate the feasibility of providing a 'Bike Sharing Scheme' for Athlone Town and
	Mullingar Town to facilitate and encourage Modal Shift.

10.4.9 Electric Vehicles

Electric Vehicles (EV) refer to both Battery Electric Vehicles (BEV) and Plug-in Hybrid Electric Vehicles (PHEV). Benefits of Electric vehicles include the emission of zero tailpipe greenhouse gas emissions thereby helping to improve air quality in our towns and cities, as well as reducing noise pollution. Ireland's target is to achieve 10% electric vehicle usage by 2020. There are a number of charging points around the County and this Plan promotes the further installation and expansion of charging points for these vehicles. In 2019, there was a total of 23 electric charging points registered in Westmeath located in Athlone (7) Moate (2) Mullingar (6) Kilbeggan (5) and Ballinalack (3).

The Council will continue to support and facilitate the development of infrastructure to increase the usage of Electric Vehicles by the inclusion of dedicated fully functional Electrical Vehicle (EV) charging points through appropriate objectives.

Transport and Infrastructure Policy Objectives – Electric Vehicles	
It is a policy of	bjective of Westmeath County Council to:
CPO 10.39	Facilitate the provision of electricity charging infrastructure for electric vehicles both on street and in new developments in accordance with car parking standards prescribed in Development Management Standards Chapter 16 of this plan.
CPO 10.40	Support the growth of Electric Vehicles with support facilities, through a roll-out of additional electric charging points in collaboration with relevant agencies at appropriate locations.
CPO 10.41	Support the prioritisation of parking for Electric Vehicles in town centre locations.

10.5 Road Infrastructure

The Council acknowledges the importance of Westmeath's strategic road infrastructure in providing intra and inter county movement of goods and services. Whilst the plan supports the promotion of sustainable transport, it is recognised that the roads infrastructure maintains a central position in the overall transportation network.

10.5.1. National Roads

Due to its strategic location in the middle of the country, Westmeath and its main urban centres are particularly well served by a hierarchy of roads including sections of motorways, national roads, regional roads, local roads and urban roadways. The M6/N6, M4/N4, N51, N52, N55 and N62 traverse the County providing important linkages and networks within, into and out of the County.

Westmeath has a total public road network accounting for 2,332 km in length of which approximately 193 km comprise of National Primary and Secondary roads.

The Council will preserve a corridor to enable design options for National Road improvement and upgrade projects to be advanced.

Significant investment and improvements in the existing road infrastructure have been made by the Local Authority in terms of upgrades, realignments, maintenance, traffic management measures, traffic calming measures and road safety measures, and it is important to protect and maintain the carrying capacity of this road network in the future as deemed necessary and as resources allow. In doing so, regard will be made to the Spatial Planning and National Roads Guidelines for Planning Authorities 2012, relating to development affecting National Primary and Secondary roads, including motorways and associated junctions.

The policy objectives within this Plan will seek to support and encourage sustainable and compact forms of development which will have minimal impact on the carrying capacity, efficiency and safety of the road network.

Transport a	Transport and Infrastructure Policy Objectives – National Roads	
It is a policy ob	ojective of Westmeath County Council to:	
CPO 10.42	Maintain and protect the safety, capacity and efficiency of National roads and associated junctions in accordance with the Spatial Planning and National Roads Guidelines for Planning Authorities, DECLG, (2012) and the Trans-European Networks (TEN-T) Regulations.	
CPO 10.43	Protect national roads from inappropriate access in order to protect the substantial investment in the national road network, to preserve the carrying capacity and safety of the National Road Network and to prevent the premature obsolescence of the network.	
CPO 10.44	Support and provide for improvements to the national road network, including reserving corridors for proposed routes, free of development, so as not to compromise future road scheme.	
CPO 10.45	Prevent, except in exceptional circumstances, the creation of additional access points from new developments or the generation of increased traffic from existing accesses to national roads, to which speed limits greater than 60 kph apply.	
CPO 10.46	Require all applications for significant development proposals to be accompanied by a Traffic and Transport Assessment (TTA) and Road Safety Audit (RSA), carried out by suitably competent persons, in accordance with the TII's Traffic and Transport Assessment Guidelines.	

CPO 10.47	Seek to implement the Road Improvement Schemes indicated in Table 10.1. The
	corridor and route selection process for such schemes shall be undertaken in
	accordance with Section 10.5.3 of the Plan.

Table 10.1 Schedule of National Road Improvements

Road no.	Project Description
N4	Realignment and Upgrade from Mullingar to Longford County Boundary
N52	Realignment and Upgrade from Kilbeggan to Offaly County Boundary
N55	Realignment and Upgrade from the N6 Athlone to the Longford County Boundary
N51	Realignment and Upgrade from Delvin to Meath County Boundary
N52	Realignment offline Delvin Bypass
N52	Realignment offline Clonmellon Bypass
N62	Realignment from Fardrum to Offaly County Boundary including Ballinahown Bypass

10.5.2 Non-National Roads

Both regional and local roads provide vital links between the towns and villages to retail, service and employment centres throughout the County and to adjoining Counties. There are 306 km of regional routes in the County and 1900 km of local roads.

In order to safeguard the carrying capacity and safety of these roads, access for residential development will be restricted onto a regional route including the former N6 (R446) where access to a lower category road is available. Regard shall be had to the requirement in the Spatial Planning and National Roads Planning Guidelines 2012, to preserve the carrying capacity of these routes and safeguard their strategic role in providing connections to the National Road Network.

There are six (6) Strategic Regional Roads in County Westmeath linking the main County towns to the national routes and motorways. These are shown in the table below:

Table 10.2 Schedule of Strategic Regional Roads in Westmeath

Road No.	Road Location and Description
R390	Mullingar- Ballymore - Athlone
R392	Mullingar - Moyvore - Longford County Boundary
R394	Tullaniskey - Castlepollard- Finnea – Cavan County Boundary
R395	Delvin - Castlepollard – Lismacaffrey- Longford County Boundary

R400	Mullingar – Rochfortbridge- Offaly County Boundary
R446	Kinnegad – Kilbeggan- Moate- Athlone - Roscommon County Boundary

Table 10.3 Schedule of Regional Road Improvements

Road No.	Road Location and Description
R390	Realignment at Walderstown, Athlone
R394	Realignment from Taughmon to Gartlandstown

In addition, account shall be taken of the *Sustainable Rural Housing Guidelines 2005* in relation to the consideration of new housing development proposals affecting all Regional Roads as follows:

- Avoid unnecessary new accesses, where access could be provided off a nearby local road.
- Ensure that necessary new entrances are located in such a manner as to provide effective
 visibility for both users of the entrance and users of the public roads so that opportunities for
 conflicting movements are avoided, taking account of all relevant considerations such as
 traffic levels, typical vehicle speeds, plans for realignment.
- Avoid the premature obsolescence of regional roads in particular, through creating excessive levels of individual entrances.

For new developments, access onto the road network is a key issue, particularly in rural areas. The intensification of use of an existing access is normally preferable to the creation of a new access onto a rural road. Where new entrances are necessary, the relevant road design standards will be applied (DMRB in rural situations i.e. the *Design Manual for Roads and Bridges* - and DMURS in urban situations within the 50/60kph zone – *Design Manual for Urban Roads and Streets 2019*). Such road standards are required to guarantee the safety of the general public in the County and protect the carrying capacity of the road network.

Transport and Infrastructure Policy Objectives – Non-National Roads	
It is a policy of	objective of Westmeath County Council to:
CPO 10.48	Safeguard the carrying capacity and safety of the County's regional and local road network.
CPO 10.49	Implement the recommendations of the Design Manual for Urban Roads and Streets (DMURS 2019) in relation to urban streets and roads within the 50/60 kph zone.
CPO 10.50	Improve the standards and safety of our Regional and Local roads and to protect the investment of public resources in the provision, improvement and maintenance of this public road network.

CPO 10.51	Seek the reduction of through-traffic passing through town centres.
CPO 10.52	Increase the safety of children at schools by assessing safe routes to schools for school children and by the installation of traffic management measures. Require School Travel Plans to be submitted with applications by schools or colleges in accordance with actions as set out under Smarter Travel, A Sustainable Transport Future 2009 – 2020.
CPO 10.53	Promote road safety measures throughout the County, including traffic calming, road signage and parking.
CPO 10.54	Ensure that environmental improvements, traffic calming, and parking provision are provided for, which will respect and enhance the urban form and create a well-designed public realm in towns and villages.
CPO 10.55	Protect strategic regional roads listed in Table 10.2, against development where a maximum speed limit applies, except in exceptional circumstances, in order to protect the carrying capacity and safety of such roads.
CPO 10.56	Seek to implement Regional Road Improvement Schemes as indicated in Table 10.3.
CPO 10.57	Require all applications for significant development proposals affecting Regional or Local Roads to be accompanied by a Traffic and Transport Assessment (TTA) and Road Safety Audit (RSA), carried out by suitably competent persons, in accordance with the TII's Traffic and Transport Assessment Guidelines.

10.5.3 Corridor and Route Selection Process

The Council will preserve a corridor to enable design options for road improvements and upgrades to be advanced. In this regard, the following Corridor and Route Selection Process will be undertaken for relevant new infrastructure:

Stage 1 – Route Corridor Identification, Evaluation and Selection

- Environmental constraints (including those identified in Section 4 of the SEA Environmental Report) and opportunities (such as existing linear infrastructure) will assist in the identification of possible route corridor options;
- Potentially feasible corridors within which infrastructure could be accommodated will be identified and these corridors assessed. The selection of the preferred route corridor will avoid constraints and meet opportunities to the optimum extent, as advised by the relevant specialists; and
- In addition to the constraints identified above, site-specific field data may be required to identify the most appropriate corridors.

Stage 2 - Route Identification, Evaluation and Selection

- Potentially feasible routes within the preferred corridor will be identified and assessed. The
 selection of preferred routes will avoid constraints and meet opportunities to the optimum
 extent, as advised by the relevant specialists, taking into account project level information and
 potential mitigation measures that are readily achievable;
- In addition to the constraints identified above, site specific field data may be required to identify the most appropriate routes; and

In addition to environmental considerations, the identification of route corridors and the refinement of route lines is likely to be informed by other considerations.

10.6 Mobility Management Plans

Mobility planning by business, educational facilities and institutions that have high numbers of employees is a way of promoting sustainable means of access, reducing traffic congestion in urban areas and making more efficient use of land by reducing the need for car parking. It is Council policy to promote the use of mobility management and travel plans to bring about behaviour change and more sustainable transport use and the achievement of reduced car dependency.

Mobility management plans will be required to accompany planning applications for significant new developments or trip intensive developments. Mobility management plans must address:

- The need to provide adequate, affordable and sustainable means of access for employees, visitors and others (e.g. students).
- The need to promote and support alternative means of transport to the private car, i.e. public transport, cycling, walking.
- The need to minimise the impact of traffic and parking generated by the business, educational facility or institution in the surrounding areas.
- The need to manage on-site parking (if any is to be provided).

Transport a	and Infrastructure Policy Objectives – Mobility Management Plans
It is a policy of	objective of Westmeath County Council to:
CPO 10.58	Require mobility management plans to be submitted with applications for trip intensive developments.

10.7 Car Parking

The management of parking in the County is important to its efficient economic development. Providing for additional parking in towns encourages further use of private cars and makes public transport a less attractive or viable option. Access to the town centre is essential for the successful operation of business.

There is a balance to be achieved between facilitating necessary parking in the short term, and the overall objective, of having improved public transport as a viable alternative and as that becomes available of discouraging use of private cars. That can only be achieved in the medium term.

In this regard, it is Council policy that a reduced car parking requirement will operate in both Mullingar and Athlone town centres, in order to encourage the establishment and the expansion of small businesses in these towns.

Car parking standards will also be reviewed in Town Centres to reflect the proposed modal shift away from the private car to more sustainable forms of transport, such as public transport, cycling and walking.

Transport and Infrastructure Policy Objectives – Parking		
It is a policy	objective of Westmeath County Council to:	
CPO 10.59	Allow for the reduction in car parking standards in suitable town centre locations in order to encourage a modal shift away from the private car to more sustainable forms of transport, such as public transport, cycling and walking.	
CPO 10.60	Manage on-street and off-street car-parking to accommodate longer term parking in less convenient and under-utilised off street car parks.	
CPO 10.61	Facilitate and support purpose built off-street car parks including multi-storey carparks, in preference to on-street parking.	
CPO 10.62	Ensure that applications for surface car parking are accompanied by landscaping proposals.	
CPO 10.63	Seek and promote the provision of Aged Friendly parking arrangements and further provide for the improvement of parking arrangements for people with disabilities.	

10.8 Bicycle Parking Facilities

Cycling is becoming increasingly recognised for the contribution it provides as a sustainable and healthy form of transport for work, education and leisure trips within and around the County. Provision of secure cycle parking facilities is essential for supporting the promotion and development of cycling as a more sustainable mode of transport. A lack of appropriate cycle parking facilities is often cited as a barrier to cycling and cycle ownership and could be a constraint on the future growth of cycling. In that regard, high quality secure cycle parking at origins and destinations is considered to be a key element of any strategy aimed at encouraging cycling. High quality cycle parking should be regarded as an integral part of any new development.

Transport and Infrastructure Policy Objectives – Bicycle Parking Facilities

It is a policy objective of Westmeath County Council to:

CPO 10.64

Ensure the provision of appropriate Bicycle parking facilities as part of any new applications in urban areas to assist with supporting modal shift away from private cars to more sustainable modes of transport i.e. Cycling, Walking, Public Transport.

10.9 Water Infrastructure and Irish Water

The sustainable growth of the County is dependent on the provision of services and infrastructure. A plan led approach, in accordance with the County's Core Strategy and Settlement Strategy is required for the delivery of such services in order to ensure there is adequate capacity to support the future development of the County. Potential challenges to the future provision of services include the effects of climate change such as flooding or periods of drought which would have impacts on drinking water, water quality, foul drainage and wastewater.

The Council aims to deliver high standards of protection for water and air, promote sustainable waste management through education and regulation and to prevent and mitigate the anticipated impacts of Climate Change by reducing our dependency on finite resources and committing to a low carbon future.

The Council will work closely with Irish Water to inform and influence the timely provision of infrastructure within the County in line with the Core Strategy. The Council remains the designated Water Authority for the assessment and approval of on-site waste water treatment systems and is responsible for surface water drainage, flooding, monitoring of water pollution and is an agent of Irish Water for the maintenance of operational facilities throughout the County. There have been significant changes in responsibilities for water supply and waste water treatment.

Irish Water was formed in July 2013 as a semi-state company under the Water Services Act 2013. As of January 2014, Irish Water replaced local authorities as a single provider of water and wastewater services. It is responsible for the operation of public water and waste water services including management of national water assets, maintenance of the system, investment and planning, and managing capital projects.

10.10 Water Supply and Distribution

The protection of our surface and groundwater resources is one of the most fundamental challenges facing Westmeath in the future, as it is directly related to our health, well-being and ultimately our quality of life.

Water catchment areas in Westmeath are designated around the River Shannon, Lough Owel and Lough Lene, in recognition of the important role these lakes and rivers play in the supply of potable

water for much of the County. There is a need to safeguard these vital resources. The challenge is to ensure that existing water services infrastructure and capacity is adequately managed, which includes the ongoing implementation of a Water Conservation Programme.

In 2018, under the Service Level Agreement with Irish Water, Westmeath County Council produced an average of 33,393m³ (7.3 million gallons) per day of drinking water from three water supply sources (Lough Owel, Lough Lene and the River Shannon) to serve a population of approximately 75,400 in the major towns and villages in the County as well as a wide rural area, through an extensive network of public water mains and public group water supply scheme extensions to the public mains.

The Council will continue to engage with Irish Water to ensure that the future demands of the County are provided for and will continue to promote water conservation in conjunction with Irish Water.

10.11 Water Supply Projects

Irish Water has identified key projects for the County which are included in Project Ireland 2040 to support planned development and maintain and improve existing services. Specifically, the Water Supply Project for the Eastern and Midlands Region is required to ensure sufficient treated water is available to meet the long-term water supply needs of the County to provide for projected growth up to 2050 and contribute to resilience and security of supply for the Region.

10.11.1 Water Supply Project for the Eastern and Midland Region

Irish Water has identified key projects for the County which are included in Project Ireland 2040 to support planned development and maintain and improve existing services. In this context, Irish Water is currently progressing the first National Water Resources Plan (NWRP) which will set out the strategy of how we will move towards an environmentally sustainable, secure and reliable drinking water supply over the next 25 years. This plan involves assessing the external factors that will affect our water supplies, including changing environmental legislation, government policy on growth, spatial planning, water usage patterns and climate change. The Plan will provide a framework for developing new water supply assets to improve the reliability, sustainability and resilience of the water supply over future investment cycles.

10.11.2 South Westmeath Regional Water Supply Scheme

The South Westmeath Regional Water Supply scheme will address water quality and capacity issues with the existing water supply for South Westmeath including Athlone and its town environs, Moate and extending east towards Rochfortbridge and Mullingar. The project is due for commencement by 2020 and is due to be completed by 2022. This project forms part of the NWRP and in particular, it is intended that the shortfall of water supply and capacity within the existing Athlone Water Treatment Plant will be addressed through short term improvements and operational upgrades / maintenance, to provide and address water quality and capacity issues for the supply of Athlone town and environs. Medium to long term solutions for the Athlone, Mullingar and north Westmeath supplies will be further evaluated and developed through Irish Water's NWRP.

10.11.3 Leakage Reduction

Water conservation efforts will continue to be concentrated on the Lough Owel (Portloman) as a result of the depleted resources in Lough Owel, following the drought in 2018, and on the Athlone Water Supply network as a result of the high rates of leakage being experienced in Athlone. Irish Water "Find and Fix" Contractors and dedicated County Council crews will continue to be deployed to work on detecting watermains with high leakage rates and abandoning duplicated cast iron mains with high losses throughout the County. The area in greatest need of attention is Athlone where unaccounted for water (UFW) is currently running at 52% and both Council and Irish Water teams are currently actively involved in tackling problematic areas here in order to reduce this level of leakage. Irish Water continues also to monitor domestic water meters and where there is higher than normal usage of water, Irish Water offers a free "Find and Fix" service to homeowners to help them identify and repair leaks.

10.11.4 Water Networks Programme

Irish Water continue to invest in the replacement of problematic sections of watermain throughout the County under their Water Networks Programme funding stream where a significant history of frequent bursts arises on particular watermains and watermain replacement projects are identified as a result.

10.11.5 Rural Water Programme

The Rural Water Programme was established by the Government to improve the quality and efficiency of Ireland's group water schemes. Through this programme, the construction of new group water and group sewerage schemes, the upgrade of group water schemes and taking-in-charge of existing group water schemes are undertaken, together with grants towards provision of new or upgrade of existing private water supply wells, and upgrades of existing water services infrastructure under the Small Schemes Programme.

Water Supply Policy Objectives		
It is a policy of	It is a policy objective of Westmeath County Council to:	
CPO 10.65	Support Irish Water in the implementation of their capital investment programme	
	to ensure the timely delivery of water and waste-water infrastructure for the	
	County.	
CPO 10.66	Collaborate with Irish Water in relation to the preparation of their Investment Plans	
	in order to align the supply of water services with the County Settlement Hierarchy.	
CPO 10.67	Ensure the efficient and sustainable use and development of water resources and	
	water services infrastructure, in order to manage and conserve water resources in	
	a manner that supports a healthy society, economic development requirements and	
	a cleaner environment.	
CPO 10.68	Assist Irish Water in their commitment to water conservation and support efforts to	
	tackle leakage through find and fix (active leakage control) and water mains	
	rehabilitation.	

CPO 10.69	Support Irish Water in the implementation of Capital Projects to strengthen the
	Regional Water Supply Scheme, subject to environmental assessment.
CPO 10.70	Support the implementation of the Water Supply Project for the Eastern and
	Midland Region, subject to environmental assessment.
CPO 10.71	Support the implementation of the Rural Water Programme.
CPO 10.72	Minimise wastage of water supply and promote water conservation measures by
	requiring, where appropriate, water conservation measures and the installation of
	water meters in all new developments.
CPO 10.73	Ensure that delivery and phasing of water services are subject to the required
	appraisal, planning and environmental assessment processes and avoid adverse
	impacts on the integrity of the Natura 2000 network.
CPO 10.74	Protect, safeguard and strictly control development within the water catchment
	areas of Lough Owel and Lough Lene, and other major sources of public water supply
	that would give rise to pollution of these water sources.
CPO 10.75	Ensure that new development proposals connect into the existing public water
	mains, where available.

10.12 Water Quality and Groundwater

The EU Water Framework Directive (WFD) sets out the protection and enhancement of the country's water resources. The River Basin Management Plan 2018-2021 was published in April 2018 and outlines the measures required to improve water quality and achieve 'good' ecological status in water bodies (rivers, lakes, groundwaters) by 2027. The plan encompasses a new approach to catchment management and includes selected waterbodies for action. Westmeath County Council samples the Lakes and Rivers under the National Monitoring Programme. For the purposes of the WFD, most of Westmeath is located within the Shannon River Basin District Region, but a portion to the east of the County, part of the Boyne Catchment, is within the Eastern River Basin District Area.

The Council supports the development of Drinking Water Protection Plans in line with the requirements of the Water Framework Directive and the current and future cycles of River Basin Management Plans. In this regard, the Council supports mitigation and protection measures for all protected areas, including Drinking Water Protected Areas and associated Source Protection Plans.

Development management can play a significant role in the prevention of further deterioration of water status and in the protection of existing high and good quality waters. Water protection measures are best incorporated into site selection and site design plans. Therefore, developers should adequately assess environmental risks, take account of site limitations and prepare a water protection plan. Site selection should take account of sensitive areas and sensitive water bodies. Water protection plans should aim to prevent contamination of storm water, minimise soiled and waste waters, install proper containment for material storage, install appropriate treatment and disposal arrangement for soiled and waste waters and take account of legal requirements for discharges to ground and surface waters.

10.12.1 Ground Water

Ground waters are of importance as a water source for private wells, group schemes and local authority supplies and for use in a range of commercial activities. Groundwater directly and indirectly contributes to and sustains a variety of important ecosystems, the most important of which in Westmeath include turloughs and fens, in particular rich fens and flushes and marl lakes. If groundwater becomes contaminated, surface water quality can also be affected and so the protection of groundwater resources is an important aspect of sustaining surface water quality.

Over 60% of the public drinking water supply in Westmeath is sourced from Lough Owel and Lough Lene (surface water bodies). These lakes are fed by springs (groundwater), with many private homes in the County also relying on individual wells for drinking water supply, so the protection of groundwater in Westmeath is of considerable importance. The Council ensures that groundwater is protected by ensuring compliance with the following:

- The appropriate control of development in areas of high groundwater vulnerability
- Implementation of the Programme of Measures as required in the River Basin Management Plans (Eastern and Shannon).
- Licensing of discharges of effluent to groundwater, having particular regard to the requirements of the EC Environmental Objectives (Groundwater) Regulations, 2010 (S.I. No. 9 of 2010).
- Implementation of the EC (Good Agricultural Practice for Protection of Waters) Regulations, 2010 (S.I. No. 610 of 2010, which give effect to several EU Directives including in relation to protection of waters against pollution from agricultural sources ("the Nitrates Directive"), dangerous substances in water, and protection of groundwater.
- It is essential that ground water resources and abstraction points are recognised, and such sources and their zones of contribution are protected and safeguarded in the interest of the common good and public health.

10.12.2 Private Wells

The use of private wells to provide water to single houses remains the responsibility of the householder. Private wells are not regulated under the *European Communities (Drinking Water)* Regulations 2014 and Irish Water has no role in relation to private water supplies. The Local Authority is responsible for providing advice and guidance in relation to the protection of the supply.

Water Qua	Water Quality and Groundwater Policy Objectives	
It is a policy of	objective of Westmeath County Council to:	
CPO 10.76	Support the implementation of the relevant recommendations and measures as outlined in the relevant River Basin Management Plan 2018-2021, and associated Programme of Measures, or any such plan that may supersede same during the lifetime of the plan. Development proposals shall not have an unacceptable impact on the water environment, including surface waters, groundwater quality and quantity, river corridors and associated woodlands.	
CPO 10.77	Collaborate with Irish Water in contributing towards compliance with the European Union (Drinking Water) Regulations Drinking Water Regulations 2014 (as amended) and compliance of water supplies with the parameters identified in these Regulations.	
CPO 10.78	Contribute towards, as appropriate, the protection of existing and potential water resources, and their use by humans and wildlife, including rivers, streams, wetlands, groundwater and associated habitats and species in accordance with the requirements and guidance in the EU Water Framework Directive 2000 (2000/60/EC), the European Union (Water Policy) Regulations 2003 (as amended), the European Communities Environmental Objectives (Surface Waters) Regulations 2009 (as amended), the Groundwater Directive 2006/118/EC and the European Communities Environmental Objectives (groundwater) Regulations 2010 (as amended) and other relevant EU Directives, including associated national legislation and policy guidance (including any superseding versions of same).	
CPO 10.79	In conjunction with Irish Water, have regard to the EPA 2019 publication "Drinking Water Report for Public Water Supplies 2018" (and any subsequent update) in the establishment and maintenance of water sources in the County.	
CPO 10.80	In conjunction with Irish Water, support recommendations made by the EPA arising from any failure to meet drinking water standards and any enlistment on the EPA's Remedial Action List.	
CPO 10.81	Ensure that in assessing applications for developments, that consideration is had to the impact on the quality of surface waters having regard to targets and measures set out in the River Basin Management Plan for Ireland 2018-2021 and any subsequent local or regional plans.	
CPO 10.82	Ensure that development would not have an unacceptable impact on water quality and quantity including surface water, ground water, designated source protection areas, river corridors and associated wetlands.	
CPO 10.83	Discourage the over-concentration of individual septic tanks and treatment plants to minimise the risk of groundwater pollution.	
CPO 10.84	Support the preparation of Drinking Water Protection Plans and Source Protection Plans to protect sources of public water supply, in accordance with the requirements of the Water Framework Directive.	

10.13 Foul Drainage and Wastewater Treatment

Since 2014 Irish Water is responsible for the waste water infrastructure and treatment facilities where public waste water facilities exist in towns and villages. It is the policy of the Council to work in conjunction with Irish Water to protect existing wastewater infrastructure, to maximise the potential of existing capacity and to facilitate the timely delivery of new wastewater services infrastructure to facilitate future growth.

The Council acknowledges that the provision of well-maintained quality waste water treatment infrastructure is essential to facilitate sustainable development of the County in line with the Core Strategy while also protecting the environment and public health and the requirements of the River Basin Management Plan.

The Council operate and maintain 23 waste water treatment plants on behalf of Irish Water, with the foul sewer network collecting effluent from approximately 14,800 premises in the County. Monitoring of the treated effluent from the plants is carried out as required in accordance with the Urban Waste Water Treatment Directive and conditions of the Discharge Licences and Certificates of Authorisation issued by the Environmental Protection Agency.

10.13.1 Wastewater Treatment and Disposal Systems Serving Single Houses

In unserviced areas and outside the main towns and villages, the main method of sewage disposal is by means of individual septic tanks and proprietary systems.

In order to protect human health and water quality from the risks posed by domestic waste water treatment systems the EPA's *National Inspection Plan for Domestic Waste Water Treatment Systems 2018-2021* now requires each local authority to develop a local site selection plan, which documents the application of the site selection methodology and outlines the justification for the selection of priority areas and individual sites. The Local Authority should retain the associated documents to facilitate future auditing by the EPA.

10.13.2 EPA Code of Practice 2009

The purpose of this Code of Practice is to provide guidance on the provision of wastewater treatment and disposal systems for single houses with a population equivalent (p.e.) of less than or equal to 10 and contains the following:

- An assessment methodology to determine site suitability for on-site wastewater treatment systems and to identify minimum environmental protection requirements.
- A methodology to select suitable wastewater treatment systems for sites in un-sewered rural areas.
- Information on the design and installation of septic tank systems, filter systems and
- packaged treatment systems.
- Information on tertiary treatment systems.
- Maintenance requirements.

It shall be a policy of the Council to require that individual septic tank drainage systems be provided in accordance with the standards set out in this Code of Practice. The control of development in areas of high groundwater vulnerability is a priority for the Council. Where existing clusters of septic tanks in vulnerable areas are augmented with additional septic tanks, the risk of pollution increases significantly and therefore the protection of these areas is paramount.

Wastewat	er Policy Objectives
It is a policy	objective of Westmeath County Council to:
CPO 10.85	Collaborate with Irish Water in contributing towards compliance with the relevant provisions of the Urban Waste Water Treatment Regulations 2001 and 2004 and the Waste Water Discharge (Authorisation) Regulations 2007 as amended.
CPO 10.86	Ensure that development will only be permitted in instances where there is sufficient capacity for appropriate collection, treatment and disposal (in compliance with the Water Framework Directive and River Basin Management Plan) of waste water.
CPO 10.87	Liaise with and work in conjunction with Irish Water during the lifetime of the plan for the provision, extension and upgrading of waste water collection and treatment systems in all towns and villages of the County to serve existing populations and facilitate sustainable development of the County, in accordance with the requirements of the Settlement Strategy and associated Core Strategy.
CPO 10.88	Support strategic wastewater treatment infrastructure investment and provide for the separation of foul and surface water networks to accommodate future growth in the County.
CPO 10.89	Resist the discharge of additional surface water to combined sewers and promote Sustainable Urban Drainage Systems (SuDs) and solutions to maximise the capacity of towns with combined drainage systems.
CPO 10.90	Promote the changeover from septic tanks to collection networks in all cases where this is feasible (subject to connection agreements with Irish Water) and that all new developments utilise and connect to the public wastewater infrastructure.
CPO 10.91	Protect against development proposals, involving individual treatment systems, which would increase effluent loading within existing housing clusters located within areas of high groundwater vulnerability.
CPO 10.92	Ensure that private wastewater treatment plants, where permitted, are operated in compliance with EPA's Code of Practice Wastewater Treatment and Disposal Systems Serving Single Houses (PE. ≤10) (EPA 2009), as may be amended.
CPO 10.93	Support the implementation of the Athlone Main Drainage Project subject to appropriate environmental assessment.
CPO 10.94	Support appropriate options for the extraction of energy and other resources from sewerage sludge in the County.
CPO 10.95	Support the servicing of rural villages (serviced sites) to provide an alternative to one-off housing in the countryside, in line with RPO 4.78 of the Eastern and Midland Regional Spatial and Economic Strategy.

10.14 Flood Risk

A Strategic Flood Risk Assessment (SFRA) has been prepared to inform this Draft Plan (contained in Volume 5). The following sections outline the recommended text and policy detail contained therein. Flooding and climate change are challenging issues that require a direct response by Westmeath County Council. With a substantial length of rivers, arterial drainage networks and streams there are already significant impacts on the existing environment. The additional impacts placed on our environment from the impacts of climate change will be significant. Flood risk is generally accepted to be a combination of the likelihood (or probability) of flooding and the potential consequences arising.

Flood risk can be expressed in terms of the following relationship:

Flood Risk = Probability of Flooding x Consequences of Flooding

The assessment of flood risk requires an understanding of the sources, the flow path of floodwater and the people and property that can be affected. The *source - pathway - receptor model*, shown in the figure below which illustrates this and is a widely used environmental model to assess and inform the management of risk.

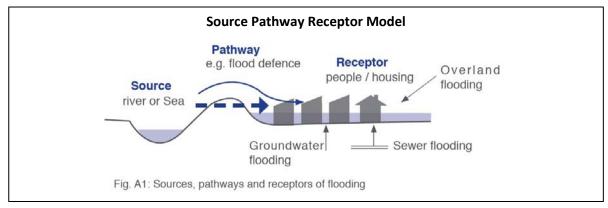


Figure 10.1 The source - pathway - receptor model.

Principal sources of flooding are rainfall or higher than normal sea levels while the most common pathways are rivers, drains, sewers, overland flow and their defence assets. Receptors can include people, their property and the environment. All three elements must be present for flood risk to arise. Mitigation measures, such as defences or flood resilient construction, have little or no effect on sources of flooding but they can block or impede pathways or remove receptors. The planning process is primarily concerned with the location of receptors, taking appropriate account of potential sources and pathways that might put those receptors at risk.

10.15 Flooding Policy Context

The Planning System and Flood Risk Management Guidelines (DoEHLG/OPW 2009, referred to as the Planning Guidelines) and PL2/2014 describe good flood risk practice in planning and development

management. Planning authorities are directed to have regard to the Planning Guidelines in the preparation of Development Plans and Local Area Plans, and for development management purposes. The Planning Guidelines recommend a sequential approach to spatial planning, promoting avoidance rather than justification and subsequent mitigation of risk. The implementation of the Planning Guidelines on a settlement basis is achieved through the application of the objectives contained within the County Development Plan and this should be applied throughout all the lower tier plans within the County as and when they are updated or varied.

The OPW is the lead agency for flood risk management in Ireland and is the national competent authority for the EU 'Flood' Directive. The Council works in close cooperation with the OPW in delivering both the Catchment Flood Risk Assessment and Management (CFRAM) Programme for the watercourses of Westmeath and the Athlone Flood Relief Scheme.

The National CFRAM programme commenced in 2011 and is the principal response to EU 'Flood' Directive (2007/60/EC) on the assessment and management of flood risk. It was transcribed into Irish law under SI No.122 of 2010. Detailed flood maps were published in 2014-15 and the final Management Plans were published in 2018. Within County Westmeath, the CFRAM targeted areas of significant flooding which included the settlements of Athlone, Mullingar and Kilbeggan. The CFRAM Management Plans will set out the long term strategies and measures required to manage risk in these areas. Both the mapping and the proposed flood management strategy will be incorporated under the Strategic Flood Risk Assessment that informs the County Development Plan.

10.15.1 Flood Source and Climate Change

The management of flood risk is defined by the objectives set out within the following section, these policies focus on the key sources of flooding which are defined as;

- Fluvial or riverine flooding arising from rivers and streams;
- Pluvial flooding in low spots following heavy rainfall;
- Drainage flooding due to the failure or inadequacies of the drainage system.

Climate change is a key consideration under the CFRAM, all flood relief schemes and the Planning Guidelines. The SFRA defines the approach to the assessment of climate change impacts.

Flood Risk Policy Objectives	
It is a policy ob	ejective of Westmeath County Council to:
CPO 10.96	Implement and comply fully with the recommendations of the Strategic Flood Risk
	Assessment prepared as part of the Westmeath County Development Plan 2021-
	2027.
CPO 10.97	Have regard to the Guidelines for Planning Authorities on the Planning System and
	Flood Risk Management (DoEHLG/OPW 2009) and Circular PL2/2014, through the

	use of the sequential approach and application of the Justification Tests in
	Development Management.
CPO 10.98	Ensure that a flood risk assessment is carried out for any development proposal, in
	accordance with the Planning System and Flood Risk Management (DoEHLG/OPW
	2009). This assessment shall be appropriate to the scale and nature of risk to the
	potential development.
CPO 10.99	Support the implementation of recommendations in the CFRAM Programme to
	ensure that flood risk management policies and infrastructure are progressively
	implemented.
CPO 10.100	Support the implementation of recommendations in the Flood Risk Management
	Plans (FRMP's), including planned investment measures for managing and reducing
	flood risk.
CPO 10.101	Consult with the OPW in relation to proposed developments in the vicinity of
	drainage channels and rivers for which the OPW are responsible, and to retain a
	strip on either side of such channels where required, to facilitate maintenance
	access thereto.
CPO 10.102	Assist the OPW in developing catchment-based Flood Risk Management Plans for
	rivers in County Westmeath and have regard to their provisions/recommendations.
CPO 10.103	Protect and enhance the County's floodplains and wetlands as 'green
	infrastructure' which provides space for storage and conveyance of floodwater,
	enabling flood risk to be more effectively managed and reducing the need to
	provide flood defenses in the future, subject to normal planning and environmental
	criteria.
CPO 10.104	Protect the integrity of any formal (OPW or Westmeath County Council) flood risk
	management infrastructure, thereby ensuring that any new development does not
	negatively impact any existing defense infrastructure or compromise any proposed
	new infrastructure.
CPO 10.105	Ensure that where flood risk management works take place that the natural and
	cultural heritage, rivers, streams and watercourses are protected and enhanced.
CPO 10.106	Ensure each flood risk management activity is examined to determine actions
	required to embed and provide for effective climate change adaptation as set out
	in the OPW Climate Change Sectoral Adaptation Plan Flood Risk Management
	applicable at the time.
CPO 10.107	Consult, where necessary, with Inland Fisheries Ireland, the National Parks and
	Wildlife Service and other relevant agencies in the provision of flood alleviation
	measures in the County.

10.16 Storm Water Management

The management of surface and storm water is important so as to avoid increased flood or pollution risk in the storm water network, rivers and streams in the County's towns, villages and rural areas. The Council will require compliance with best practice guidance for the collection, reuse, treatment and disposal of surface waters for all future development proposals.

Traditionally, rain falling on impervious surfaces was directed into a receiving watercourse through surface water drainage systems. While such drainage systems are effective at transferring surface water quickly, they provide only limited attenuation causing the volume of water in the receiving watercourse to increase more rapidly, thereby increasing flood risk.

Sustainable Drainage Systems, commonly known as SuDS is an approach that seeks to manage the water as close as possible to its origin by various engineering solutions that replicate natural drainage processes, before it enters the watercourse. The incorporation of SuDS techniques allows surface water to be either infiltrated or conveyed more slowly to water courses using porous surface treatments, ponds, swales, filter drains or other installations.

SuDS provide an integrated approach which addresses water quantity, water quality, amenity and habitat. The Council will require the application of SuDS in development proposals, for example through reducing the extent of hard surfacing, and using permeable pavements.

For new developments, the Council will require that all developments incorporate 'Sustainable Urban Drainage Systems' (SuDS) as part of the development proposals. Sustainable Urban Drainage Systems (SuDS) are effective technologies which aim to reduce flood risk, improve water quality and enhance biodiversity and amenity.

The objective of SuDS in new developments is to replicate, as closely as possible, the surface water drainage regime of the predevelopment 'greenfield' situation. The surface water runoff rate from the developed site must be limited to the 'greenfield' runoff rate to reduce the risk of flooding. Best practice guidance is available from The Greater Dublin Strategic Drainage Study (GDSDS). It is Council policy that all large-scale developments incorporate Sustainable Urban Drainage Systems as part of development proposals.

Stormwater Management Policy Objectives	
It is a policy objective of Westmeath County Council to:	
CPO 10.108	Support in conjunction with Irish Water the improvement of storm water infrastructure to improve sustainable drainage and reduce the risk of flooding in urban environments.
CPO 10.109	Implement policies contained in the Greater Dublin Strategic Drainage Study (GDSDS) in relation to SUDS and climate change.
CPO 10.110	Ensure new development is adequately serviced with surface water drainage infrastructure which meets the requirements of the Water Framework Directive, associated River Basin Management Plans and CFRAM Management Plans.
CPO 10.111	Require that planning applications are accompanied by a comprehensive SUDs assessment that addresses run-off quantity, run-off quality and its impact on the existing habitat and water quality.
CPO 10.112	Ensure that in public and private developments in urban areas, both within developments and within the public realm, seek to minimise and limit the extent of hard surfacing and paving and require the use of sustainable drainage

	techniques for new development or for extensions to existing developments, in order to reduce the potential impact of existing and predicted flooding risks.
CPO 10.113	Ensure appropriate maintenance of surface water drainage infrastructure to avoid flood risk.

10.17 Waste Management

The Council seeks to ensure the provision of the highest standards of waste management and environmental services to prevent and control water, air and noise pollution. Prevention, Reduction, Reuse and Recycling is the preferred options in managing household waste to reduce the amount of waste being produced. With approximately 62% of waste in County Westmeath going to landfill, the Council will support and encourage more sustainable methods of waste management.

The Eastern Midlands Region Waste Management Plan 2015 -2021 was adopted in May 2015 and the Council has signed up to same. The overall vision of the Regional Waste Management Plan is to rethink the approach taken towards managing waste and that waste should be seen as a valuable material resource. The Plan also supports a move towards achieving a circular economy which is essential if the region is to make better use of resources and become more resource efficient. A circular economy is one where materials are retained in use at their highest value for as long as possible and are then reused or recycled, leaving a minimum of residual waste.

This Plan supports the move to a more circular economy as this will save resources, increase resource efficiency, and help to reduce carbon emissions. The successful implementation of circular economy principles will help to reduce the volume of waste that the County produces.

Waste Management Policy Objectives	
It is a policy objective of Westmeath County Council to:	
CPO 10.114	Support the implementation of the Eastern Midlands Region Waste Management
	Plan 2015-2021 and any updates made thereto.
CPO 10.115	Encourage and support waste prevention, minimisation, reuse, recycling and
	recovery as methods of managing waste.
CPO 10.116	Facilitate the transition from a waste management economy to a green circular
	economy to increase the value recovery and recirculation of resources.
CPO 10.117	Encourage and support the provision of separate collection of waste in accordance
	with the requirements of the Waste Management (Food Waste) Regulations 2009,
	the Waste Framework Directive Regulations, 2011 and other relevant legislation.
CPO 10.118	Promote and facilitate communities to become involved in environmental
	awareness activities and community based recycling initiatives or environmental
	management initiatives that will lead to local sustainable waste management
	practices.

CPO 10.119	Ensure that the Council fulfills its duties under the Waste Management
	(certification of historic unlicensed waste disposal and recovery activity)
	Regulations 2008 (S.I. No 524 of 2008), including those in relation to the
	identification and registration of closed landfills.

10.18 Air Quality

Poor air quality both in the urban and rural environment can lead to major environmental problems and be detrimental to the health of citizens of the County. The most sensitive areas in relation to air quality are built-up urban areas and major transport developments. Air pollution continues to present challenges including;

- transport emissions, especially road transport emissions of NOx, fine particulate matter (PM2.5) and black carbon arising from increase in diesel cars and buses in our cities and towns;
- power generation and emissions from industry, agriculture and agricultural activities that lead to methane and nitrous oxide emissions;
- burning of fossil fuels e.g. gas, peat, and coal resulting in carbon dioxide emissions and the
 persistent problem of 'smoky' emissions from the use of solid fuel in homes and backyard
 burning.

Air pollution is monitored by the Environmental Protection Agency (EPA) and Westmeath County Council. The Council recognise the need to ensure the highest standards of air quality.

Air Quality Policy Objectives	
It is a policy objective of Westmeath County Council to:	
CPO 10.120	Promote the preservation of best ambient air quality compatible with sustainable development in accordance with the EU Ambient Air Quality and Cleaner Air for Europe (CAFE) Directive (2008/5/0/EC) and ensure that all air emissions associated with new developments are within Environmental Quality Standards as out in the Air Quality Standards Regulations 2011 (SI No. 180 of 201) (or any updated/superseding documents).

10.19 Noise Pollution

The impact of noise pollution is an important consideration in assessing all new development proposals as it can impact on people's quality of life and health. The Environmental Noise Regulations 2006 give effect to EU Directive 2002/49/EC relating to the assessment and management of environmental noise. The Council will seek through the Development Management process to reduce noise and/or vibration at site boundaries or within adjacent sensitive areas, especially residential areas, by measures such as layout, design and/or attenuation mechanisms.

The Council will require the submission of Noise Impact Assessments where it is proposed to introduce noise creating uses in proximity to noise sensitive uses, such as residential areas, and if permission is being granted may impose conditions mitigating impact. Similarly, where noise sensitive uses are proposed within proximity to a noise source, such as national roads, rail lines, etc., proposals shall include noise and/or vibration attenuation measures in any planning application.

The Council has prepared the Westmeath Noise Action Plan 2013-2018 which sets out an approach to the strategic management and control of environmental noise.

Noise Pollution Policy Objectives	
It is a policy objective of Westmeath County Council to:	
CPO 10.121	Support the implementation of the Noise Directive 2002/49/EC and associated
	Environmental Noise Regulations 2006.
CPO 10.122	Support the Implementation of the Westmeath Noise Action Plan 2013-2018 (and
	any revision made thereto)
CPO 10.123	Require all developments to be designed and operated in a manner that will
	minimise and contain noise levels.

10.20 Light Pollution

While adequate lighting is essential for a safe and secure environment, light spillage from excessive or poorly designed lighting is increasingly recognised as a potential nuisance to surrounding properties and a threat to wildlife. The Council will consider the potential problems of light pollution relating to new development and the intensification or alteration of existing development. The limitation of light pollution is important in the interests of nature conservation, residential amenity and energy efficiency.

Light Pollution Policy Objectives	
It is a policy objective of Westmeath County Council to:	
CPO 10.124	Control lighting in urban and rural areas and in particular in sensitive locations, in order to minimise impacts on residential amenity, habitats and species of importance.
CPO 10.125	Require the use of energy efficient public lighting in all new development proposals.

10.21 Major Accidents – Seveso Sites

The European Communities (Control of Major Accident Hazards Involving Dangerous Substances) Regulations 2006 transposes the SEVESCO II Directive 96/82/EC (relating to the prevention of major accidents involving dangerous substances) into Irish Law. The Directive aims to prevent accident hazards from dangerous substances and to limit the consequence of such accidents through the following measures:

- The siting of new establishments
- Modification of existing establishments
- Development in the vicinity of an establishment which by virtue of its type or siting is likely to increase the risk or consequence of a major accident
- Site specific emergency planning by the local authority and site operator.

The Health and Safety Authority (HSA) provides advice to Planning Authorities, where appropriate, in respect of planning applications for development within a certain distance of the perimeter of these sites. There is a single known SEVESO site in County Westmeath, the following policy is applicable in respect of same and any future proposal involving dangerous substances.

Major Accidents – Seveso Sites Policy Objectives		
It is a policy ob	It is a policy objective of Westmeath County Council to:	
CPO 10.126	To have regard to the provisions of the Major Accidents Directive, relating to the	
	control of major accident hazards involving dangerous substances, and the	
	recommendations of the Health and Safety Authority in the assessment of all	
	planning applications located within the consultation distance of such sites.	
CPO 10.127	Require developers to submit a detailed consequence and risk assessment with all	
	Environmental Impact Statements and/or legislative licence applications for all	
	Seveso sites.	

10.22 Renewable Energy Sources

With projected increases in population and economic growth, the demand for energy is set to increase in the coming years. A secure and resilient supply of energy is critical to a well-functioning economy, being relied upon for heating, cooling, and to fuel transport, power industry, and generate electricity. Renewable energy comes from natural sources that are continuously replenished by nature and is, therefore, a more sustainable alternative to our dependency on fossil fuels.

The main sources are wind energy, solar energy, water energy (hydro, wave and tidal energy), geothermal energy (from heat below the surface of the earth) and biomass (wood, biodegradable waste and energy crops).

The Government of Ireland has committed to wider climate change goals whereby one of these goals is to achieve a 33% energy efficiency improvement by all Irish public bodies by the year 2030, as defined by SI 426 of the European Union (Energy Efficiency) Regulations 2014. This target was reinforced in 2017 through the publication of the "Public Sector Energy Efficiency Strategy". In its latest performance report entitled "Annual Report 2018 on Public Sector Energy Efficiency Performance", the Sustainable Energy Authority of Ireland (SEAI) have credited Westmeath County Council with 19.4% energy savings against its 2009 energy usage baseline.

In transitioning to a low carbon economy, future diversification and adaptation to new energy technologies is vital. Renewable energy such as wind, solar and biomass will assist in managing the transition of the local economies of such areas in gaining the economic benefits of greener energy.

The National Climate Policy Position establishes the national objective of achieving transition to a competitive, low carbon, climate-resilient and environmentally sustainable economy by 2050. This objective will shape investment choices over the coming decades in line with the National Mitigation Plan and the National Adaptation Framework.

Project Ireland 2040 - New energy systems and transmission grids will be necessary for a more distributed, renewables-focused energy generation system, harnessing both the considerable onshore and off-shore potential from energy sources such as wind, wave and solar and connecting the richest sources of that energy to the major sources of demand. Regard shall be had to the following national plans, policies and strategies when considering proposals for renewable energy;

- The National Renewable Energy Action Plan 2010 (Irish Government submission to the European Commission);
- The Government's Strategy for Renewable Energy 2012 2020 (DCENR);
- The Government's White Paper on Energy Policy Ireland's Transition to a Low Carbon Energy Future 2015-2030 (DCENR);
- The Government's National Mitigation Plan, July 2017 (DCCAE).

Energy Policy Objectives	
It is a policy ob	pjective of Westmeath County Council to:
CPO 10.128	Support local, regional, national and international initiatives for limiting emissions
	of greenhouse gases through energy efficiency and the development of renewable
	energy sources which make use of the natural resources in an environmentally
	acceptable manner and having particular regard to the requirements of the
	Habitats Directive.
CPO 10.129	Facilitate measures which seek to reduce emissions of greenhouse gases and
	support the implementation of actions identified in the Westmeath County Council
	Climate Change Adaptation Strategy 2019-2024 and any future amendments.
CPO 10.130	Promote and support the use of renewable forms of energy as a contribution to the
	energy demand of all new buildings where it is consistent with the proper planning
	and sustainable development of an area.

10.23 Wind Energy

Ireland is one of the leading countries in its use of wind energy, the largest contributing resource of renewable energy in Ireland. It is both Ireland's largest and cheapest renewable electricity resource and is the second greatest source of electricity generation after natural gas. In 2018, Wind provided 85% of Ireland's renewable electricity and 30% of our total electricity demand.

The Government White Paper entitled 'Ireland's Transition to a Low Carbon Energy Future, 2015-2030' (Department of Communications, Energy and Natural Resources, December 2015) sets out that a 2020 national target of 40% renewables energy is likely to require a total of 3,500 - 4,000 megawatts of onshore renewables generation capacity.

The Council recognises the importance of wind energy as a renewable energy source which can play a vital role in achieving national targets in relation to reductions in fossil fuel dependency and therefore greenhouse gas emissions and seeks to enable renewable and wind energy resources of County Westmeath to be harnessed in a manner that is consistent with proper planning and sustainable development of the area. There are a number of issues which must be taken into consideration when dealing with applications for wind energy development including; visual impact; landscape protection; impacts on residential amenity; impact on wildlife and habitats; connections to the national grid and impact of construction and ancillary infrastructure including access roads.

The Council will have regard to the Wind Energy Development Guidelines for Planning Authorities, prepared by the Department of Environment, Heritage and Local Government, or any update made thereto. Further, regard should be taken of the Landscape Character Assessment of the County which is contained in the accompanying Volume 2 of this Plan.

In addition, potential applicants are advised to consult with the Department of Arts, Heritage and the Gaeltacht, The Forestry Service, the Irish Aviation Authority and other appropriate statutory and non-statutory bodies in areas which may require special protection. In general, the Council will encourage wind energy, provided such developments would not have an adverse effect on residential amenities, special landscape character, views or prospects, Natura 2000 sites, protected structures, aircraft flight paths or by reason of noise or visual impact. Applications for such developments will not be encouraged in Areas of High Amenity.

10.23.1 Micro-Renewable Energies and Small-Scale Wind Energy Development

The Council encourages the development of small-scale wind energy development and single turbines in urban and rural areas, including residential areas, and industrial parks, provided that they do not negatively impact upon the environmental quality, landscape, wildlife and habitats or the residential amenity of the area.

Community ownership of wind energy projects enables local communities to benefit directly from local wind energy resources being developed in their local areas, ensuring long-term income for rural communities. The Council will encourage communities to co-operate in the development of suitable wind energy projects, be they in rural or urban locations.

10.23.2 Industrial Scale Wind Farms

The Regional Economic and Spatial Strategy for the Eastern and Midland Region (RSES) refers specifically to the after use of peatlands and consideration of their potential contribution to climate change mitigation and adaptation including renewable energy production. With a strong history of

energy production and an extensive electricity transmission network in place, the potential exists in such peatland areas for a smooth transition to renewable energy sources. This approach should be informed by the preparation of a Holistic Management Plan that will address the future uses of worked out industrial peatlands. The preferred locations for large scale energy production, in the form of windfarms, is onto cutover cutaway peatlands in the County, subject to nature conservation and habitat protection requirements being fully addressed.

Wind Energy	Wind Energy Policy Objectives	
It is a policy ob	ejective of Westmeath County Council to:	
CPO 10.131	Have regard to the principles and planning guidance set out in Department of Housing, Planning and Local Government publications relating to 'Wind Energy Development' and the DCCAE Code of Practice for Wind Energy Development in Ireland and any other relevant guidance which may be issued in relation to sustainable energy provisions.	
CPO 10.132	 Provide the following separation distances between wind turbines and residential dwellings: 500 metres, where height of the wind turbine generator is greater than 25 metres but does not exceed 50 metres. 1000 metres, where the height of the wind turbine generator is greater than 50 metres but does not exceed 100 metres. 1500 metres, where the height of the wind turbine generator is greater than 100 metres but does not exceed 150 metres. More than 2000 metres, where the height of the wind turbine generator is greater than 150 metres. 	
CPO 10.133	Ensure the security of energy supply by supporting the potential of the wind energy resources of the County in a manner that is consistent with proper planning and sustainable development of the area.	
CPO 10.134	Encourage and support the development of small-scale wind energy development and single turbines in urban and rural areas and Industrial Parks, provided they do not negatively impact upon environmental quality, landscape, wildlife and habitats or residential amenity.	
CPO 10.135	Encourage large-scale energy production projects, in the form of Wind Farms, onto cutover cutaway peatlands in the County, subject to environmental, landscape, habitats and wildlife protection requirements being addressed. In the context of this policy, industrial scale/large-scale energy production projects are defined as follows: Projects that meet or exceed any of the following criteria: - Height: over 100m to blade tip, or - Scale: More than five turbines - Output: Having a total output of greater than 5MW	

	Developments sited on peatlands have the potential to increase overall carbon
	losses. Proposals for such development should demonstrate that the following has
	been considered:
	Peatland stability; and
	Carbon emissions balance.
CPO 10.136	Ensure that proposals for energy development demonstrate that human health has
	been considered, including those relating to the topics of:
	Noise (including consistency with the World Health Organisation's 2018
	Environmental Noise Guidelines for the European Region);
	Shadow Flicker (for wind turbine developments, including detailed Shadow
	Flicker Study);
	Ground Conditions/Geology (including landslide and slope stability risk
	assessment);
	Air Quality; and Water Quality;
	 Assessment of impacts on collision risk species (bird and bats).
CPO 10.137	With regard to wind energy developments, to ensure that the potential for visual
	disturbance should be mitigated by applying an appropriate setback distance,
	which, where relevant, complies with available Ministerial Guidelines.
CPO 10.138	Support the preparation of a Management Plan for the Industrial Peatlands in the
	County, in consultation with stakeholders and adjacent Local Authorities. The Plan
	should focus on recreational opportunities, renewable energy, hydrological and
	ecological considerations subject to environmental assessment and the
	requirements of Article 6 of the Habitats Directive.

10.24 Solar Energy

Solar energy is any type of energy generated by the sun. It is a renewable energy source which reduces demand for electricity supply from the national grid where energy is mainly sourced from finite fossil fuels. Solar can be a passive energy source i.e. sunlight heating up a room or an active energy source where sunlight is harvested and converted to electricity in solar cells. Solar technology is developing at a rapid pace and has minimal impact on the environment. The Council will continue to encourage solar energy in commercial and residential developments, subject to design and other environmental considerations.

Solar Energy Policy Objectives	
It is a policy objective of Westmeath County Council to:	
CPO 10.139	Support Ireland's renewable energy commitments outlined in national policy by facilitating solar power where such development does not have a negative impact on the surrounding environment, landscape, historic buildings or local amenities.
CPO 10.140	Encourage and support the development of solar energy infrastructure, including solar PV, solar thermal and seasonal storage facilities.
CPO 10.141	Ensure that proposals for solar farms consider the following criteria:

- The Landscape Character of the County.
- Visual impact particularly on raised/elevated sites.
- Zone of visual influence and visual impact of the structures.
- Glint and glare report and potential impact on adjoining road networks and dwellings.
- Road access and impact on road network serving the site during the construction phase (A pre and post construction impact report may be required).
- Archaeological Impact.
- Incorporation of security measures use of CCTV/surveillance cameras and security fencing.
- The suitability/strength of the grid and accessibility to it.
- The suitability of the site, having regard to other land use policies, including the need to protect areas of important built and natural heritage.
- Decommissioning of obsolete infrastructure and after-use.

10.25 Geothermal

Geothermal energy refers to heat energy stored in the ground. Heat is supplied to the ground from two sources, namely the hot core of the planet and the sun. It can be classified as either 'deep' or 'shallow' depending on the depths from which it is sourced.

The deep geothermal energy can only be accessed through geological processes or by drilling through the surface. The second source of heat in the ground is from radiation from the sun. This energy can be regarded as stored energy which stays relatively warm throughout the year. This heat can then be extracted by using a ground source heat pump.

Geothermal Energy Policy Objectives		
It is a policy ob	It is a policy objective of Westmeath County Council to:	
CPO 10.142	Support Ireland's renewable energy commitments outlined in national policy by	
	facilitating the exploitation of geothermal energy where such development does not	
	have a negative impact on the surrounding environment, landscape, biodiversity or	
	local amenities.	
CPO 10.143	Ensure that any proposal for geothermal technologies or any other subsurface	
	exploration does not impact on groundwater quality.	

10.26 Bio-Energy

Bio-energy is derived from bio-fuels such as biodiesel, biogas and biomass through the use of a wide variety of technologies. These energy sources are considered to be "CO2 Neutral", not adding to the

carbon dioxide level in the atmosphere and are more reliable in terms of consistency in supply than many other renewable energy technologies.

There are many bio energy fuel sources and technologies, and several conversion alternatives (i.e. indirect sources that can be converted into biofuel). All dry resources; wood and wood residues (forest or sawmill residues) and dry agricultural residues such as straw, can be combusted to produce heat, electricity or both, and can also be co-fired in existing solid fuel systems. Energy crops, principally short rotation coppice, can also produce dry fuels for combustion. Wet resources can be processed through anaerobic digestion, producing a methane rich gas for combustion. Such resources include agricultural slurries, sewage sludge, food and catering wastes and the biodegradable fraction of municipal solid waste. An additional bio-energy resource is landfill gas, which can be collected at landfill sites and then combusted to extract its energy value.

Given the grassland and cattle dominance of Westmeath, there is considerable potential to exploit the energy potential from grass and slurry waste as a feedstock for technologies such as anaerobic digestion. The Council will encourage the production of bio-crops and forestry for biomass in the generation of renewable energy as well as production units in appropriate locations. In addition to the "CO2 Neutral" status of this energy source, the Council recognises that this sector also offers opportunities for farm diversification and rural employment. The Council will seek to promote and facilitate the development of bioenergy technologies, subject to environmental, habitats and landscape protection.

10.27 Hydro

River hydro projects may play a part in the County's renewable energy mix. The Council encourages the use of rivers, where suitable, within the County for the development of hydro energy and in particular, will be supportive of individual developments along the banks of rivers which propose hydro energy to provide an element of their energy requirements, subject to environmental considerations. The Council will not encourage the use of the canal system, which is designated for tourist and amenity use, for this purpose.

Renewable	Renewable Energy Policy Objectives	
It is a policy ob	It is a policy objective of Westmeath County Council to:	
CPO 10.144	Support and advance the provision of renewable energy resources and programmes in line with the Government's National Renewable Energy Action Plan (NREAP), the Governments' Energy White Paper "Irelands Transition to a Low Carbon Energy Future (2015-2030) and any other relevant policy adopted during the lifetime of this plan.	
CPO 10.145	Work in partnership with local communities to develop energy efficient and renewable energy projects to benefit the local area subject to development management standards	
CPO 10.146	Support the production of sustainable energy from renewable sources such as wind, solar, bio-energy and the development of waste to energy/Combined Heat and	

	Power Schemes at suitable locations and subject to compliance with the Habitats Directive.
CPO 10.147	Promote the application and uptake of technologies and solutions that utilise grass for energy extraction such as anaerobic digestion, subject to proper planning and environmental considerations.
CPO 10.148	Promote and prioritise utilisation of existing waste streams from agricultural and forestry sectors for renewable energy projects including anaerobic digestion, subject to proper planning and environmental considerations.
CPO 10.149	Prepare a Renewable Energy Strategy for the County over the lifetime of this plan and subject to the availability of resources. This strategy will support the development of renewable energy infrastructure to deliver government objectives in relation to energy efficiency and the transition to a low carbon future.
CPO 10.150	Support future projects and funding initiatives to support renewable energy usage in Westmeath.

10.28 Sustainable Building and Design

The Council will support and encourage the use of sustainable building principles and retrofitting existing buildings and other sustainability principles to improve energy performance. The introduction of the Building Energy Rating (BER) certification process, requires dwellings to be assessed on their energy performance, which will reduce energy demand in buildings and reduce CO₂ emissions.

A key area for consideration in sustainable construction and building design specification is in the area of CO2 and energy with particular reference to embodied CO2 and embedded energy. The focus should be directed towards the use of green construction materials.

Arising from the Recast of the European Performance of Buildings Directive 2010/30/EU, from 1 January 2019, every new public building will have to be designed to nearly zero energy building standards. Also, all other new buildings will have to comply with the new nearly zero energy buildings standards from 1 January 2021. The Council will have regard to the DoEHLG publication Towards Nearly Zero Energy Buildings in Ireland Planning for 2020 and Beyond and the EU Energy Performance of Buildings Directive (2010/31/EU) which promote the increase in nearly Zero Energy Buildings (nZEB). The Council promotes the development of low carbon buildings.

Energy efficiency and the renewable requirements for new buildings including new residential development are addressed in the Building Regulations Part L. The aim of Part L is to limit the use of fossil fuel energy and related CO2 emissions arising from the operation of the building. The introduction of the BER label, Building Energy Rating, allows for dwellings to be assessed on their energy performance. The provision of this label system allows individuals to make informed decisions regarding the energy efficiency of a building. There are exemptions for Protected Structures, proposed Protected Structures and buildings protected under National Monuments Legislation.

Sustainable	Sustainable Building and Design Policy Objectives	
It is a policy ob	It is a policy objective of Westmeath County Council to:	
CPO 10.151	Support the implementation of National and County initiatives for limiting	
	emissions of greenhouse gases by incorporating energy efficiency measures into	
	the design of new buildings.	
CPO 10.152	Inform and encourage new developments to mitigate against, and adapt to, where	
	possible the impacts of climate change through the location, layout and design of	
	the development.	
CPO 10.153	Encourage low-energy design through measures including information provision (in	
	conjunction with other Directorates) and through the development of Westmeath	
	specific standards/guidelines in respect of spatial requirements within the remit of	
	planning (e.g. solar orientation) especially during planning process including pre-	
	planning consultations.	
CPO 10.154	Encourage improved energy efficiency of existing building stock and to promote	
	energy efficiency and conservation in the design and development of all new	
	buildings, including Local Authority dwellings.	
CPO 10.155	Develop guidelines and standards to assist property owners in respect of energy	
	retrofitting and planning considerations.	
CPO 10.156	Support and promote the development and use of passive solar design	
	principles in all new developments taking account of national guidelines and	
	development management policies for rural and urban areas.	

10.29 Non-Renewable Energy

10.29.1 Electricity

The provision of electricity infrastructure is necessary to sustain economic growth. The electrical grid includes both transmission and distribution networks at various voltages. Given the traditional industrial peat extraction and power plants, there is a significant transmission network in the Midland region. A 220kv grid passes through the southern part of the County and 400kv lines pass through northern Offaly, to the south of Westmeath serving the main power plants.

Eirgrid the national body responsible for the management of the electricity transmission network, have planned key investments, upgrading of the transmission network and new circuit build and reinforcement, to cater for continued demand in the Linked Gateway towns of Athlone and Mullingar.

The upgrading of the transmission network will facilitate power flows from both renewable and conventional sources to maximise the use of existing power corridors.

The Government Policy Statement on the Strategic Importance of Transmission and Other Energy Infrastructure (July 2012) acknowledges the strategic and economic importance of investment in networks and energy infrastructure. The Government endorses the major investment underway in the high voltage electricity system under EirGrid's Grid 25 Programme. The Planning Authority recognises

the need for development and renewal of energy networks, in order to meet both economic and social policy goals.

According to EirGrid's grid development strategy, GRID25 the demand for electricity in the midland's region is expected to increase by over 40% by 2025. Electricity Supply Board (ESB) Networks is the key provider of electricity infrastructure in Ireland and works closely with Eirgrid, which is responsible for the operation and the development of the transmission system.

EirGrid's grid development strategy, GRID25, is designed to ensure that the transmission network has the capacity to provide for growth in electricity demand between now and 2025 (although it is noted that this strategy is being updated and will be replaced by a new grid/transmission strategy plan). EirGrid and the ESB have a range of major electrical infrastructure projects planned for the coming years. More recent EirGrid projects undertaken in the County include a new 25km 110kv transmission line which ran from Mullingar to Killaskillen, Co. Meath which was essential to improve the security of electricity supply to the Mullingar region.

Council will support EirGrid's Implementation Plan 2017 – 2022 and Transmission Development Plan (TDP) 2016 and any subsequent plans prepared during the lifetime of the RSES that facilitate the timely delivery of major investment projects subject to appropriate environmental assessment and the outcome of the planning process.

The Council will continue to support the infrastructural renewal and development of electricity and gas networks. A balanced progressive approach will be adopted to minimise the impact on the environment while providing for the County's energy needs. The sustainable provision of energy networks is therefore encouraged provided that it can be demonstrated that:

- The development is required in order to facilitate the provision or retention of significant economic or social infrastructure.
- The route proposed has been identified with due consideration for social, economic, environmental and cultural impacts.
- Where impacts are inevitable mitigation features have been included.
- Where it can be shown the proposed development is consistent with international best practice.

10.29.2 Natural Gas

The gas pipeline crosses the south of the County between a point immediately south of Athlone town at the western end and north of Kinnegad at the eastern end. The towns of Athlone and Mullingar are connected to the line and Moate and Kilbeggan are intended to be connected as part of Phase 2.

Electricity/0	Gas Policy Objectives	
It is a policy of	It is a policy objective of Westmeath County Council to:	
CPO 10.157	Support and promote the sustainable improvement and expansion of the electricity transmission and distribution network that supply the County, subject to landscape, residential, amenity and environmental considerations.	
CPO 10.158	Support the provision of electricity and gas transmission networks to Athlone and Mullingar to provide for the medium to long-term future needs of these towns, subject to landscape, residential, amenity and environmental considerations.	
CPO 10.159	Support and promote the improvement and extension of gas infrastructure to serve the County.	
CPO 10.160	Co-operate and liaise with statutory and other energy providers in relation to power generation, in order to ensure adequate power capacity for the existing and future needs of the County.	
CPO 10.161	Support the implementation of EirGrid's Grid 25 Investment Programme, subject to landscape, residential, amenity and environmental considerations.	
CPO 10.162	Support and facilitate the development of enhanced electricity and gas supplies, which do not negatively impact on environmental quality, landscape, wildlife, habitats or residential amenity and which are critical to the economic development of the County.	
CPO 10.163	Support roll-out of the Smart Grids and Smart Cities Action Plan enabling new connections, grid balancing, energy management and micro grid development.	
CPO 10.164	Support and facilitate the development of enhanced electricity and gas supplies, and associated networks, to serve the existing and future needs of the Region and facilitate new transmission infrastructure projects that might be brought forward in the lifetime of this Strategy including the delivery of the necessary integration of transmission network requirements to facilitate linkages of renewable energy proposals to the electricity and gas transmission grid in a sustainable and timely manner subject to appropriate environmental assessment and the planning process	

10.30 Information Communications and Technology

Westmeath County Council continue to support Information Communications and Technology and are currently preparing a Westmeath Digital Strategy to encourage and support communities and businesses to reap the full rewards of a digitally enabled society. The strategy itself will provide an overarching vision for the County by setting out strategic goals and objectives aimed at harnessing digital opportunities for County Westmeath.

Information Communication and Technology investment is essential for furthering the social and economic development of County Westmeath. The provision of an efficient broadband service is critical in the development of a knowledge-based economy. To this end, the need to build new infrastructure to provide increased capacity in order to raise the quality of coverage and to meet the demand for services is recognised.

10.30.1 Broadband

Major advancements in relation to digital infrastructure have taken place within the telecommunications sector over the last two decades and Westmeath is serviced by the most up to date digital exchange technology. The County is served with broadband fibre optic connectivity to the trunk and junction network of the country's main switching centres. Located on the Western Digital Corridor, Westmeath can facilitate international e-commerce businesses. Important also, is the availability of high-speed broadband services suitable for multinational companies including local area networks (LAN) connected to a wide area network (WAN).

The towns serviced by the Metropolitan Area Network (MAN) presents opportunities for the development of e-working centres throughout the region in line with Smarter Travel Policy of reducing the number of journeys to work by car. The development of e-working centres throughout the region will align employment and transport policies and support uptake of the MANs network.

Mullingar and Athlone have fully operational, vendor-independent, high-speed fibre-optic Metropolitan Area Networks (MANs). There are also a number of mobile voice and data service providers operating across the County including Vodafone, O2, Three and Meteor.

Westmeath continues to benefit from the rollout of several Government led broadband schemes (including the National Broadband Scheme, Rural Broadband Scheme and Broadband for Schools), ensuring that broadband services are available in communities across the County. Broadband is central to the development of a knowledge-based economy throughout Ireland. Broadband also helps to combat social exclusion. Areas without broadband will be less able to take advantage of internet-centred developments in education, banking, research, business, etc.

10.30.2 Telecommunications

An efficient telecommunications system is important in the development of the economy. The deregulation of the industry has brought choice and competition but has given rise to duplication and overprovision of certain facilities. The Council will have regard to the guidelines issued by the Department of the Environment, Heritage and Local Government, 'Planning Guidelines for Telecommunications Antennae and Support Structures' (1996) and Circular Letter PL 07/12. The assessment of individual proposals will be governed by the guidelines and the controls scheduled in the Development Management section of this plan.

ICT and Broa	ICT and Broadband Policy Objectives	
It is a policy objective of Westmeath County Council to:		
CPO 10.165	Support and facilitate delivery of the National Broadband Plan	
CPO 10.166	Promote and facilitate the sustainable development of a high-quality ICT network throughout the County in order to achieve balanced social and economic development, whilst protecting the amenities of urban and rural areas	
CPO 10.167	Support the national objective to promote Ireland as a sustainable international destination for ICT infrastructures such as data centres and associated economic activities at appropriate locations.	
CPO 10.168	Support the delivery of high capacity Information Communications Technology Infrastructure, broadband connectivity and digital broadcasting, throughout the County, in order to ensure economic competitiveness for the enterprise and commercial sectors and in enabling more flexible work practices e.g. teleworking.	
CPO 10.169	Seek to provide public Wi-Fi zones in public spaces where possible.	
CPO 10.170	Support the co-ordinated and focused development and extension of broadband infrastructure throughout the County.	
CPO 10.171	Co-operate with the Department of Communications, Climate Action and Environment and public and private agencies where appropriate, in improving high quality broadband infrastructure throughout the County.	
CPO 10.172	Achieve a balance between facilitating the provision of telecommunications infrastructure in the interests of social and economic progress and sustaining residential amenity and environmental quality.	
CPO 10.173	Ensure that the location of telecommunications structures should minimise and /or mitigate any adverse impacts on communities, public rights of way and the built or natural environment.	
CPO 10.174	Encourage co-location of antennae on existing support structures and to require documentary evidence as to the non-availability of this option in proposals for new structures. The shared use of existing structures will be required where the numbers of masts located in any single area is considered to have an excessive concentration.	
CPO 10.175	Facilitate the provision of telecommunications infrastructure throughout the County in accordance with the requirements of the "Telecommunications Antennae and Support Structures – Guidelines for Planning Authorities".	



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