

## Chapter 7 Infrastructure, Utilities & Environmental Protection

*“To support and encourage investment and improvement in utilities, water, wastewater, electricity and gas infrastructure and support the development and enhancement of digital infrastructure”*

### 7.1 Introduction

Galway County Council recognises that the delivery of infrastructure and utilities in a sustainable manner are critical to the future development of the county. This plan will support the investment for both new and enhanced infrastructure and utilities particularly from a water and wastewater perspective which are critical to ensuring economic growth and investment, the delivery of employment opportunities, compact growth of our settlements and more sustainable communities.

The Council recognises the importance of waste management and will promote the circular economy principles, prioritising prevention, reuse, recycling and recovery, and to sustainably manage residual waste which will contribute to more sustainable communities for the existing and future population of County Galway. The Council also recognise the importance of the provision of enhancement of digital infrastructure from both a domestic residential perspective and also in terms of supporting the economic growth of the county.

### 7.2 Strategic Aims

Galway County Council shall work with the appropriate agencies and state bodies to ensure that infrastructure and utilities are provided and will accord with the following strategic aims:

- To protect, preserve and conserve the County’s water resources and comply with the requirements of the River Basin Management Plan for Ireland 2018-2021 and any subsequent revisions or updates to this plan;
- To facilitate in a sustainable manner the provision of necessary water and wastewater infrastructure in all of our towns and villages;
- To support the delivery of the Greater Galway Area Drainage Study;
- To support the implementation of the Waste Plan for Connacht Ulster Region 2015-2021;
- To minimise the amount of waste creation within the County and promote a practice of reuse, recycling and recovery prioritised in that order, over the disposal of waste;
- To ensure that residual waste is disposed of in an appropriate and environmentally friendly fashion;
- To promote and facilitate the provision and continued development of broadband and ICT infrastructure within the County in order to further enhance economic/social development, particularly in the more peripheral and coastal areas of the County.

### 7.3 Strategic Context

This chapter is prepared in the context of the following National and Regional Plans, Policies and Guidelines:

National Planning Framework – Ireland 2040
National Development Plan 2018-2027
Regional Spatial and Economic Strategy for the Northern and Western Region 2020-2032
Climate Action Plan 2019
National Mitigation Plan 2017
Water Services Strategic Plan, A Plan for the Future of Water Services

Irish Water’s National Water Resources Plan (expected in 2021)
Irish Water’s Capital Investment Plan 2020-2024 (awaiting determination by the Commission for Regulation of Utilities)
Connacht and Ulster Waste Management Plan 2015-2021
Delivering a Connected Society – A National Broadband Plan for Ireland (NBP)
Galway County Council Digital Strategy 2020-2023

### 7.3.1 National Planning Framework

The National Planning Framework (NPF) is based on 10 national strategic outcomes, which include 1) compact growth, 8) Transition to a Low Carbon and Climate Resilient Society and 9) Sustainable Management of Water, Waste and other Environmental Resources. These national strategic outcomes particularly are of relevance to Infrastructure and Utilities.

The NPF places significant emphasis on the delivery of infrastructure and services in tandem with growth as well as the enhancement of water quality and the sustainably management of waste management. The policy objectives contained in this chapter will accord with the strategic outcomes as outlined in the NPF.

### 7.3.2 Regional Spatial and Economic Strategy

The Regional Spatial and Economic Strategy (RSES) supports the enhancement of water quality, waste infrastructure, waste management and improved Information, Communications Technology, which have informed the policy objectives of this Plan, for example;

- Supports local authorities in identifying and prioritising a program for the provision of serviced sites within smaller towns and villages
- Promotion of the development of the Greater Galway Area Drainage Study;
- Support the provision of adequate broadband capacity;
- Support the delivery of the National Broadband Plan;
- Facilitate enhanced international fibre communications links.

### 7.4 Climate Change

The provision of high-quality infrastructure in appropriate locations such as water and wastewater infrastructure and access to telecommunications infrastructure such as broadband should give consideration to the climate action agenda. The following are key parameters in addressing climate change:

- Enhanced water and wastewater infrastructure within settlements to ensure both compact growth of the communities and to ensure economic opportunities can be accommodated;
- Enhanced ICT infrastructure to facilitate remote working and to facilitate wider economic development with the county at appropriate locations in close proximity to our communities.

The policy objectives to follow will accord with the National Strategic Outcome (NSO) no.8 of the NPF and will support the county’s transition to a low carbon and climate resilient society. In addition, Chapter 14 *Climate Change, Energy and Renewable Resource* will also address in more detail Climate Change and the interrelationship between the policy objectives of this chapter and the transition to a resilient society.

## 7.5 Water and Wastewater

The sustainable growth of the county is dependent on the provision of both water and wastewater infrastructure. Irish Water is responsible for the provision of public water supply, wastewater collection and treatment services. The Council's role is to facilitate the provision of adequate water services, in conjunction with Irish Water, at a local level, through Service Level Agreements (SLAs) and any subsequent arrangements into the future.

The Council will work closely with Irish Water to ensure the timely provision of infrastructure at appropriate locations throughout the county. These infrastructure provisions need to be implemented in a manner that protects public health and are environmentally appropriate and economically effective.

In 2015 Irish Water prepared its *Water Services Strategic Plan (WSSP)* setting out the strategic objectives for the delivery of water services over a 25 year period up to 2040 and sets a context for investment and implementation plans. This plan details the current and future challenges which affect the provision of water services and identifies the priorities to be tackled in the short and medium term.

Irish Water are currently developing the National Water Resource Plan (NWRP) outlining how to move to a sustainable, secure and reliable public drinking water supply over a 25year period while safeguarding the environment. The NWRP will outline how Irish Water intends to maintain the balance between our supply from water sources around the country and demand for drinking water over the short, medium and long-term. This will allow preparation for the future and ensure the provision of sufficient safe, clean drinking water to facilitate the social and economic growth of our country. The National Water Resources Plan will outline the longer-term plan for the Galway area.

### 7.5.1 Irish Water Investment Plan

The Irish Water Investment Plan 2020 – 2024 sets out Irish Water's budgetary plan from 2020-2024 in line with their strategic objectives as detailed in the Water Services Strategic Plan (WSSP). The Draft Investment Plan has been approved by Irish Water's regulator the Commission of the Regulation of Utilities (CRU) and work has commenced within Irish Water to review and to align it with Irish Water's Strategic Funding Plan and their work plans and programmes. Irish Water will keep the Council informed of this process. It is anticipated that once finalised this will result in the planning and delivery of numerous projects in the county with respect to both water and wastewater. A list of water and sewerage projects that have been completed to date in the county under Irish Water's Investment Plan up to 2020 is listed in table 7.5 below.

Scheme Name	Contract Name	Water(W)/Sewerage(S)
Clifden Sewerage Scheme	New Wastewater Treatment Plant	Sewerage
Baile Chláir & Milltown Sewerage	New Wastewater Treatment Plant	Sewerage
Kinvara Sewerage Scheme	New Wastewater Treatment Plant	Sewerage

Oughterard Sewerage Scheme	New Wastewater Treatment Plant	Sewerage
Lough Mask Ext. to Williamstown	Network	Water
Glenamaddy Sewerage Scheme	New Wastewater Treatment Plants	Sewerage
Athenry Sewerage Scheme	Wastewater Treatment Plant Upgrade	Sewerage
Dunmore/Glenamaddy Water Supply	Water Treatment Plant Upgrade	Water
Gort Water Supply Scheme	Water Treatment Plant Upgrade	Water
Ballinasloe Water Supply & Main Drainage	Water Treatment Plant Upgrade	Water
Spiddal Water Supply	Water Treatment Plant Upgrade	Water
Tuam Sewerage Scheme	Wastewater Treatment Plant Upgrade	Sewerage
An Cheathrú Rua Water Supply	Water Treatment Plant Upgrade	Water
Leenane Water Supply	Water Treatment Plant Upgrade	Water
Mid-Galway Water Supply	Water Treatment Plant Upgrade	Water
Portumna Water Supply	Water Treatment Plant Upgrade	Water
Ballinasloe Sewerage Scheme	Wastewater Treatment Plant Upgrade	Sewerage
Gort Sewerage Scheme	Wastewater Treatment Plant Upgrade	Sewerage
Ballinasloe Contract 2	Network	Sewerage & Water

**Table 7.5: Works Completed in County Galway Under the Irish Water's Investment Plans up to 2020**

### 7.5.2 Water Supply

Drinking water in the County is drawn from a variety of sources. There are 38 no. public water supply schemes dispersed throughout the County and approximately 80% of the treated water supplied

through this infrastructure network is abstracted from surface water sources. Private supplies provide the alternative for those areas that are not served by a public water supply and comprise mainly of wells for single dwellings and certain private group water schemes for rural settlements.

Table 7.6 contains a list of the other public water supply schemes which are included and approved in the Proposed Capital Investment Plan 2020 – 2024 for County Galway. These projects entail improvements/upgrading works and are envisaged to be completed during the lifetime of the *Galway County Development Plan 2022– 2028*. In addition to the standalone infrastructure projects listed below, minor upgrades and improvement works are continually carried out on a nationally prioritised basis through Irish Water’s National Programmes e.g. capital maintenance, mains renewal programmes.

<b>Tuam RWSS Ext to Loughrea</b>	Due for completion early 2021	Tuam RWSS Extension to Loughrea is currently coming to the end of construction. Approx. 21km of watermain, 2 new pumping stations and a 1,000cum reservoir completed. Existing water treatment plants at Lake Road and Knockanimma will be decommissioned. Once complete, source of water for Loughrea, Craughwell and environs will change from Lough Rea to Lough Corrib, (treatment at Luimnagh). Will be substantially complete by June, 2021.
<b>Gort Water Supply</b>	New reservoir	Commencing construction early 2021. Completion due in same year.

Table 7.6: Water Supply Projects Proposed to be Completed in County Galway under the *Proposed Capital Investment Plan 2020 – 2024*, subject to funding and environmental constraints.

### 7.5.3 Water Quality and Ground Water Protection Scheme

The EU Water Framework Directive (WFD) sets out the approach to the protection and enhancement of the country’s water resources. The Water Framework Directive applies to rivers, lakes, groundwater, estuaries and coastal waters and aims to improve our water quality. The Water Framework Directive required Ireland to produce a River Basin Management Plan (RBMP). The government published the River Basin Management Plan 2018-2021 in April 2021. This plan outlines a programme of actions which aim to meet the environmental objectives and requirements of the Water Framework directive.

The Council supports the development of Drinking Water Safety Plans in line with the requirements of the Water Framework Directive and the current and future cycles of River Basin Management Plans. The Council is committed to the protection and improvement of all drinking water, surface water and groundwaters in the county in accordance with the WFD and the RBMP.



## Policy Objectives for Water Supply

### **WS 1 Enhancement of Water Supply Infrastructure**

Liaise with Irish Water, to maximise the potential of existing capacity and to facilitate the timely delivery of new water services infrastructure, to facilitate existing and future growth.

### **WS 2 Protection of Water Supplies**

Collaborate with Irish Water and the Group Water Federation Scheme to protect, conserve and enhance all existing and potential water resources in the County to ensure 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.

### **WS 3 River Basin Management Plan for Ireland 2018-2021**

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 this plan.

### **WS 4 Requirement to Liaise with Irish Water – Water Supply**

Ensure that new developments are adequately serviced with a suitable quantity and quality of drinking water supply and require that all new developments intending to connect to a public water supply liaise with Irish Water with regard to the water (and wastewater) infrastructure required.

### **WS 5 Private Water Supply**

Support the provision of a private water supply in instances where there is no public water supply or where the existing supply does not have sufficient capacity to serve the proposed development. This will only be considered where it can be demonstrated that the proposed water supply meets the standards set out in the EU and national legislation and guidance including adherence to *Article 6 of the EU Habitats Directive*, and would not be prejudicial to public health or would not significantly impact negatively on the source or yield of an existing supply.

### **WS 6 Water Framework Directive**

Support the preparation of Drinking Water Safety Plans and Source Protection Plans to protect sources of public water supply, in accordance with the requirements of the Water Framework Directive.

### **WS 7 Water Quality**

Require that new development proposals would ensure that there would not be an unacceptable impact on water quality and quantity including surface water, ground water, designated source protection areas, river corridors and associated wetlands.

### **WS 8 Proliferation of Septic Tanks**

Discourage the over-concentration/proliferation of individual septic tanks and treatment plants to minimise the risk of groundwater pollution.

## **7.5.4 Conservation of Water Supply**

Galway County Councils Water Management Strategy is focused around the conservation of water even where adequate supplies exist, to ensure optimal use of this precious commodity. Conservation measures include not only the monitoring of usage of water and early detection of leaks but also an

awareness programme for consumers. Works under the Water Conservation Programme for the County have been progressed and continue to progress under the three stages as outlined in Table 7.6.

<b>Stage 1</b>	The 38 no. public water supply schemes in the County had water management systems installed. These public water supply schemes are sub-divided into 190 district meter areas.
<b>Stage 2</b>	Defects, leaks and enabling works in the water mains network were identified and repaired. Pressure management to reduce leakage have resulted in savings.
<b>Stage 3</b>	Works are constantly ongoing in the rehabilitation of water mains throughout the County. To date 42km of rehabilitation has been completed.

**Table 7.7: Details Pertaining to Galway County Council Water Conservation Programme**

<b>Policy Objectives Conservation of Water Supply</b>	
<b>CWS 1</b>	<b>Water Conservation with all Developments</b> To ensure all developments incorporate water conservation measures such as rain water harvesting to minimise wastage of water supply.
<b>CWS 2</b>	<b>Water Mains Rehabilitation</b> To 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.
<b>CWS 3</b>	<b>Promotion of Water Conservation</b> To support Irish Water in promoting public awareness and involvement in water conservation measures by households, business and industry.

### 7.5.5 Wastewater

Irish Water is responsible for the treatment and disposal of wastewater in towns and villages where public wastewater treatment facilities are in place. It is a policy objective 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 Environmental Protection Agency is the statutory body tasked with ensuring that appropriate standards are put in place in the provision of wastewater infrastructure.

In the case of single house developments, these requirements are set out in the *EPA Code of Practice for Waste Water Treatment Systems and Disposal Systems Serving Single Houses (2009)*. In the case of larger developments, *the EPA Wastewater Treatment Manuals – Treatment Systems for Small Communities, Business, Leisure Centres and Hotels (1999)* is the relevant document that all developments are required to comply with.

In the case of small cluster type developments (<5 houses) within settlements which do not have the benefit of Irish Water public sewer infrastructure the Council will facilitate proposals which can provide individual wastewater treatment systems to serve each individual house separately. Proposals such as these will need to meet the requirements are set out in the *EPA Code of Practice for Waste Water Treatment Systems and Disposal Systems Serving Single Houses (2009)*. In instances such as these developers will need to be mindful of Policy Objective WS 8 which ‘Discourage the over-concentration/proliferation of individual septic tanks and treatment plants to minimise the risk of groundwater pollution’.

<b>An Spidéal Sewerage</b>	New WWTP	Due to commence Q3, 2021
<b>Ahascragh Sewerage</b>	New WWTP	Due to commence Q3, 2021
<b>An Cheathrú Rua</b>	New WWTP	Due to commence Q2, 2023 At detailed design stage
<b>Roundstone Sewerage Scheme</b>	New WWTP	Due to commence Q2, 2023 At detailed design stage
<b>Athenry Sewerage Scheme</b>	Network	Commencing construction late 2022/early 2023
<b>Galway City Agglomeration wastewater network</b>	Drainage Area Plan followed by Network upgrades	Network extends into Oranmore and Bearna DAP Stage 3 due for completion Q3, 2022
<b>Greater Galway Area Drainage Strategy</b>	WWTP and Network	This strategy will commence in 2021 and investigate options to provide for the targeted growth in the greater Galway area in the medium and long-term.

**Table 7.8: Wastewater Projects included in County Galway Under Irish Water’s Proposed Capital Investment Plan 2020-2024, subject to funding and environmental constraints**

In addition to the standalone infrastructure projects listed above, minor upgrades and improvement works are continually carried out on a nationally prioritised basis through Irish Water’s National Programmes e.g. capital maintenance, inlet works, sewer renewal programmes.

### **7.5.6 Types of Wastewater Systems in County Galway**

In County Galway there are a number of different types of wastewater systems, from public schemes, individual septic tanks and individual proprietary treatment systems (not septic tanks). There were a total of 62,729 types of sewerage system in the county as per CSO 2016 Census. The actual types of the waste water treatment facilities are detailed in Figure 7.6.



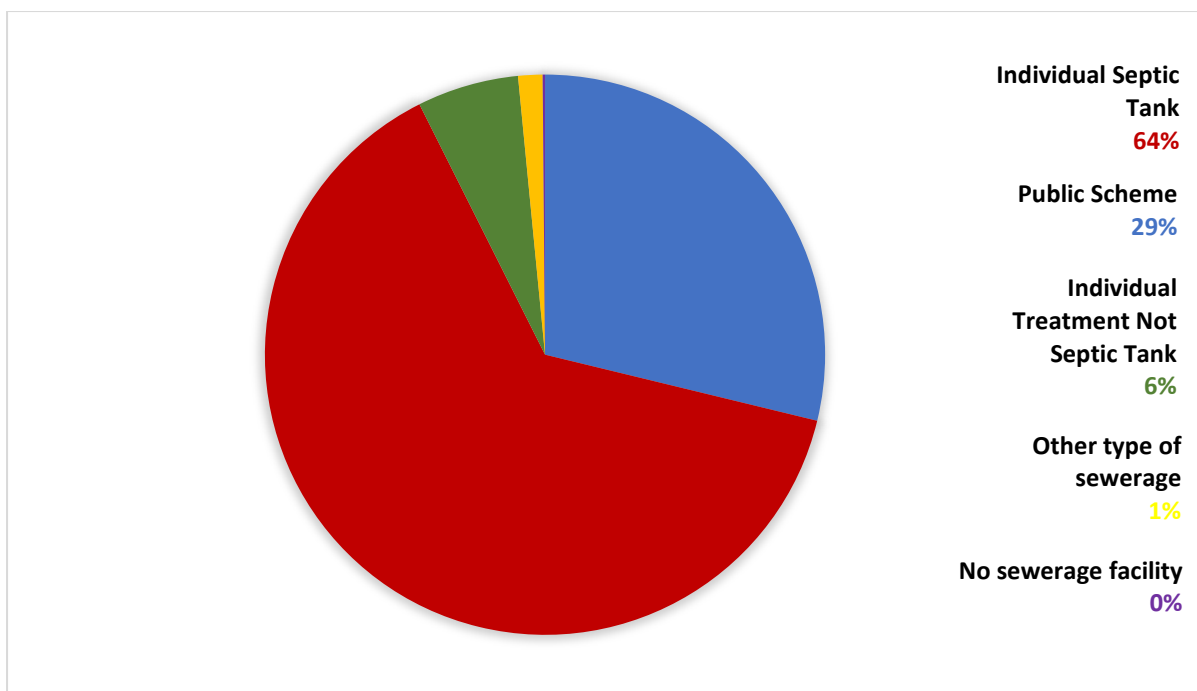


Fig 7.6: Types of Wastewater Systems in County Galway (Source: CSO 2016)

### 7.5.7 Public Wastewater Schemes in County Galway

Irish Water provides public wastewater schemes in the form of collection, treatment and disposal facilities in many of the settlements throughout the County. Infrastructure of this nature is currently operational in varying capacities in the towns and villages of the County outlined in the Table 7.9:

Tuam	Portumna	An Fhairche	Ballymoe
Ballinasloe	Dunmore	Mountbellew	Williamstown
Loughrea	Headford	Moylough	Woodford
Galway City (Oranmore & Bearnna)	Leenane	Glenamaddy	Athenry
Clifden	Ballygar	Eyrecourt	Gort
Killimor	Kilkerrin	<i>Ahascragh</i>	Maigh Cuilinn
Letterfrack	Oughterard	Newbridge	An Spidéal
An Cheathrú Rua	Kinvara	Roundstone	Baile Chláir
Milltown			

Table 7.9: Waste Water Schemes in County Galway

### 7.5.8 Greater Galway Area Drainage Study

The Regional Spatial and Economic Strategy (RSES) for the Northern and Western Regional Assembly has detailed that the delivery of the Galway East Main Drainage Scheme is necessary to deliver the growth model outlined in the RSES. The Galway East Main Drainage Scheme is being progressed by Irish Water as part of the Greater Galway Area Drainage Study. This project is an infrastructural project of strategic importance. The delivery of this infrastructure would be a potential catalyst for the future development and expansion of the settlements (MASP) on the eastern environs of Galway city.

### 7.5.9 Surface and Storm Water/ Sustainable Drainage Systems

All new development throughout the County will be required to minimise surface water discharge through on-site systems such as Sustainable Drainage Systems (SuDs). It will be a requirement that all proposals for development (including extensions to existing developments) will be required to demonstrate the use of SuDs mechanisms. This will also include limiting the extent of unnecessary hard standing surfaces and paving. Proposals shall be accompanied by a comprehensive SuDs assessment to demonstrate run off quantity, quality and an assessment on the potential impacts on habitats and water quality.

### 7.5.10 Sludge Management

Irish Water is responsible for the treatment and disposal of the sludge that is generated from both its water and wastewater treatment plants. Irish Water has prepared a National Wastewater Sludge Management Plan (NWSMP) which outlines Irish Water's strategy to ensure a nationwide standardised approach for managing wastewater sludge over a 25-year period. It is proposed that the NWSMP will have ongoing five yearly reviews. The current plan covers 2016-2021 and will be revised and updated in 2021 for the period 2022-2027. A separate plan will be prepared in relation to sludge produced at drinking water plants. The NWSMP proposes to develop a Sludge Hub Centre and Satellite Dewatering Site network for wastewater sludge treatment, optimised on a regional rather than county basis.

#### Policy Objectives Wastewater

##### **WW 1            Enhancement of Wastewater Supply Infrastructure**

Work in conjunction with Irish Water to maximise the potential of existing capacity and to facilitate the delivery of new wastewater services infrastructure, to facilitate future growth in the county.

##### **WW 2            Delivery of Wastewater Infrastructure**

Liaise and co-operate with Irish Water in the implementation and delivery of the Water Services Strategic Plan (2015) and the Irish Water Investment Plan 2020-2024 and other relevant investment works programmes of Irish Water in the delivery of infrastructure within the county.

##### **WW 3            The Greater Galway Area Drainage Study**

To seek to accelerate and support the delivery of the Greater Galway Area Drainage Study and the associated solutions as identified in the RSES as an essential infrastructure requirement in conjunction with the Department of the Environment, Climate and Communications, Irish Water and Galway City Council.

**WW 4 Requirement to Liaise with Irish Water – Wastewater**

Ensure that new developments will only be permitted which are adequately serviced with sufficient capacity for appropriate collection, treatment and disposal (in compliance with the Water Framework Directive and River Basin Management Plan) to the public sewer unless provided for otherwise by the plan. Developers shall liaise with Irish Water with regard to the waste water (and water) infrastructure to ensure sufficient capacity is available prior to the submission of a planning application.

**WW 5 Serviced Sites**

Support the servicing of small towns and villages including initiatives to provide an alternative to one-off housing in the countryside, in accordance with the National Planning Framework.

**WW 6 Private Wastewater Treatment Plants**

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.

**WW 7 Sustainable Drainage Systems**

To require the use of Sustainable Drainage Systems to minimise and limit the extent of hard surfacing and paving and require the use of SuDS measures be incorporated in all new development (including extensions to existing developments). All development proposals shall be accompanied by a comprehensive SuDS assessment including run-off quantity, run off quality and impacts on habitat and water quality.

**WW 8 Storm Water Infrastructure**

To support the improvement of storm water infrastructure and to increase the use of sustainable drainage and reduce the risk of flooding in urban environments.

**WW9 Municipal Wastewater Treatment Plants in An Cheathrú Rua**

There shall of be a minimum 100m setback for all new wastewater treatment plants in An Cheathrú Rua.

<b>Core Strategy Settlement</b>	<b>Wastewater Capacity</b>	<b>Water Capacity</b>	<b>Water Service Capital Investment Programme 2020-2024</b>
<b>Metropolitan Area</b>			
<b>Baile Chláir</b>	Adequate Capacity	Adequate Capacity	
<b>Bearna</b>	Limited Capacity	Limited Capacity	Drainage Area Plan will identify network issues and needs. Provision for medium and long-term growth will be considered as part of Greater Galway Area Drainage Strategy.

			Water supply options will be assessed in the National Water Resource Plan.
<b>Briarhill</b>	Limited Capacity	Adequate Capacity	
<b>Oranmore/ Garraun</b>	Limited Capacity	Adequate Capacity	A local network reinforcement project in Galway city will improve existing capacity constraints at Oranmore main pumping station. Drainage Area Plan will identify network issues and needs. Provision for medium and long-term growth will be considered as part of Greater Galway Area Drainage Strategy.
<b>Key Towns</b>			
<b>Ballinasloe</b>	Adequate Capacity	Limited Capacity	Water supply options will be assessed in the National Water Resource Plan.
<b>Tuam</b>	Adequate Capacity	Adequate Capacity	
<b>Strategic Potential</b>			
<b>Athenry</b>	Limited Capacity	Adequate Capacity	Wastewater Treatment Plant Upgrade has been completed. Network contract due to commence construction in 2022.
<b>Self Sustaining Towns</b>			
<b>Gort</b>	Adequate Capacity	Limited Capacity	Provision of storage underway.
<b>Loughrea</b>	Limited Capacity	Limited Capacity	Extension of Tuam RWSS Ext to Loughrea due for completion early 2021.  Wastewater network hydraulic study to be undertaken.
<b>Small Growth Towns</b>			
<b>Clifden</b>	Adequate	Limited Capacity	Water supply options will be assessed in the National Water Resource Plan.

	Capacity		
<b>Maigh Cuilinn</b>	Adequate Capacity	Limited Capacity	
<b>Oughterard</b>	Adequate Capacity	Adequate Capacity Short Term	Water supply options will be assessed in the National Water Resource Plan.
<b>Portumna</b>	Limited Capacity	Limited Capacity	Water supply options will be assessed in the National Water Resource Plan.
<b>Headford</b>	Adequate Capacity	Adequate Capacity	
<b>Small Growth Villages</b>			
<b>An Cheathrú Rua</b>	Sea Outfall- No Treatment	Adequate Capacity Short-Term	Project to provide new WWTP at detailed design stage.  Water supply options will be assessed in the National Water Resource Plan.
<b>An Spidéal</b>	Sea Outfall- No Treatment	Adequate Capacity	New WWTP scheduled to commence construction 2021.
<b>Ballygar</b>	Limited Capacity	Adequate Capacity	Wastewater Infrastructure Improvements expected.
<b>Dunmore</b>	Adequate Capacity	Adequate Capacity	
<b>Glenamaddy</b>	Adequate Capacity	Adequate Capacity	
<b>Kinvara</b>	Adequate Capacity	Adequate Capacity	
<b>Moylough</b>	Adequate Capacity	Adequate Capacity	

**Table 7.10: Indicative Infrastructure Capacity for Core Strategy Settlements**

## 7.6 Waste Management

The management of waste in Ireland is set out on a statutory basis under the Waste Management Act and a specific statutory instrument namely the Waste Management (Planning) Regulations 1997 (as amended). This legislative instruments have divided the country into three regions namely the Connacht-Ulster, Eastern-Midlands and Southern regions. The county of Galway is located within the Connacht-Ulster region which encompasses Galway County, Galway City, Leitrim, Mayo, Sligo, Roscommon, Cavan, Donegal and Monaghan.

The Connacht-Ulster Waste Management Plan 2015-2021 (CUWMP) provides a framework for the prevention and management of waste in a sustainable manner in Galway and the other local authority areas. The Connacht-Ulster Waste Management Plan was adopted in May 2015. This plan contains a comprehensive list of policies to achieve the overarching strategy and targets of the plan. Some of the key measures for local authorities and industry contained in the plan can be summarised as follows:

- Encourage more reuse and repair activities in the region particularly at civic amenity facilities;
- Deliver communication, awareness and on the ground activities which lead to a lasting change in the behaviours of citizens and businesses towards their wastes;
- Increase the level of source-segregated kerbside collections in the region with a strong focus on ensuring that a three bin system becomes commonplace at household and commercial levels;
- Implement and regulate the new national pay-by-weight charging system;
- Enforce the regulations related to household and commercial waste to tackle the problem of unmanaged waste and other issues;
- Plan and develop higher quality waste treatment infrastructure including new reprocessing, biological treatment, thermal recovery and pre-treatment facilities;
- Grow the biological treatment sector, in particular composting and anaerobic digestion, by supporting the development of new facilities;
- Support the development of thermal recovery in the region which meets the needs of the region and the State in reducing the export of residual wastes for treatment abroad;
- Ensure existing and future waste facilities do not impact on environmentally sensitive sites through proper assessments and siting.

Galway County Council will continue to work in tandem with Connacht Ulster Waste Region and the Environmental Protection Agency in the implementation and execution of its waste management responsibilities and duties throughout the duration of the lifetime of the plan.

### Policy Objectives Waste Management

#### **WM 1 Connacht and Ulster Waste Management Plan 2015-2021**

Support the implementation of the Connacht and Ulster Waste Management Plan 2015-2021 or any updated version of this document within the lifetime of the plan.

#### **WM 2 Requirements for Waste Management**

Support and promote the circular economy principles, prioritising prevention, reuse, recycling and recovery, and to sustainably manage residual waste. New developments will be expected to take account of the provisions of the Waste Management Plan for the Region and observe those elements of it that relate to waste prevention and minimisation, waste recycling facilities, and the capacity for source segregation.

**WM 3 Waste Recovery and Disposal Facilities**

Support and facilitate the provision of adequate waste recovery and disposal facilities for the county.

**WM 4 Waste Legalisation**

To require that all waste disposal shall be undertaken in compliance with the requirements of the Environmental Protection Agency and relevant Waste Management Legislation.

**WM 5 Construction and Environmental Management Plans**

Construction Environment Management Plans shall be prepared in advance of the construction of relevant projects and implemented throughout. Such plans shall incorporate relevant mitigation measures which have been integrated into the Plan and any lower tier Environmental Impact Statement or Appropriate Assessment. CEMPs typically provide details of intended construction practice for the proposed development, including:

- (a) location of the sites and materials compound(s) including area(s) identified for the storage of construction refuse;
- (b) location of areas for construction site offices and staff facilities;
- (c) details of site security fencing and hoardings;
- (d) details of on-site car parking facilities for site workers during the course of construction;
- (e) details of the timing and routing of construction traffic to and from the construction site and associated directional signage;
- (f) measures to obviate queuing of construction traffic on the adjoining road network;
- (g) measures to prevent the spillage or deposit of clay, rubble or other debris;
- (h) alternative arrangements to be put in place for pedestrians and vehicles in the case of the closure of any public right of way during the course of site development works;
- (i) details of appropriate mitigation measures for noise, dust and vibration, and monitoring of such levels;
- (j) containment of all construction-related fuel and oil within specially constructed bunds to ensure that fuel spillages are fully contained (such bunds shall be roofed to exclude rainwater);
- (k) disposal of construction/demolition waste and details of how it is proposed to manage excavated soil, including compliance with 2006 Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects, Department of the Environment, Heritage and Local Government;
- (l) a water and sediment management plan, providing for means to ensure that surface water runoff is controlled such that no silt or other pollutants enter local water courses or drains;

**WM 6 Waste Management**

To continue to meet the duties under the Waste Management (certification of historic unlicensed waste disposal and recovery activity) Regulations 2008, including those in relation to the identification and registration of closed landfills.

**WM7 Recycling Infrastructure**

To provide for the provision of recycling infrastructure throughout the county where it is considered necessary and support the provision of additional recycling infrastructure throughout the county.

**WM 8 Sustainable Waste Management Practices**

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.

**WM 9 Separate Collection of Waste**

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.

## 7.7 Electricity

A strong electricity infrastructure and transmission grid is essential for the county in order to attract and retain high-tech industrial investment, to ensure competitive energy supplies, to achieve balanced development, to reduce dependency on fossil fuels, and to achieve climate change targets. Moreover, to attract renewable energy development, it is important for County Galway that the existing grid infrastructure is reinforced where necessary and expanded to areas not adequately serviced. The transmission system within the country plays a vital role in the supply of electricity, providing the means to transport power from generators to demand centres using a system comprising of 400 kV, 220 kV and 110 kV networks (and through ESB networks 38kV medium and low voltage networks to customers). The transmission system generally comprises of overhead lines, except in limited circumstances, for example, in the city centres, where some limited underground cables are used.

The provision safe, secure and reliable transmission of electricity is the responsibility of Eirgrid. It is the policy objective of the Council to work in conjunction with Eirgrid to protect existing electricity infrastructure, and to facilitate the timely delivery of new electricity infrastructure. Eirgrid published Ireland's Grid Development Strategy - Your Grid, Your Tomorrow, which was its second review of Grid 25. This Strategy recognises that the development of the transmission grid is of critical importance to support the economy and society, as well as to realise the transformation of Ireland's energy system to meet climate change and energy obligations.

Eirgrid's *Implementation Plan 2017-2022* is a practical strategic overview of how the stages of Ireland's Grid Development Strategy are intended to be implemented and identify the parts of the transmission system that are likely to need development over the five year period (2017-2022) and the planning and development of the grid that will be undertaken in implementing the Strategy. The Implementation Plan has also had regard to the *Transmission Development Plan 2016*, which is a plan for the development of the Irish transmission network and interconnection over a ten year period.

Where strategic route corridors are identified, the Council will safeguard such corridors from encroachment by inappropriate development and ensure their scope for development is maintained.

### Policy Objectives Electricity and Gas

#### EG 1 Enhancement of Electricity Infrastructure

Support and promote the sustainable improvement and expansion of the electricity transmission and distribution network that supply the County, while taking into consideration landscape, residential, amenity and environmental considerations.

#### EG 2 Delivery of Electricity and Gas Infrastructure

Support the provision and extension of electricity and gas transmission networks within the county which are critical to the economic development of the County subject to environmental quality, landscape, wildlife, habitats or residential amenity.

#### EG 3 Power Capacity

To support 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.

**EG 4 EirGrid’s Grid 25 Investment Programme**

Support the implementation of EirGrid’s Grid 25 Investment Programme, while taking into account landscape, residential, amenity and environmental considerations.

**EG 5 Smart Grids and Smart Cities Action Plan**

Support the roll-out of the Smart Grids and Smart Cities Action Plan enabling new connections, grid balancing, energy management and micro grid development.

## **7.8 Information and Communication Technology**

The Council actively supports the provision of Information and Communications Technology (ICT) within the county and consider that development and enhancements in this area to be crucial in both the economic and social development of the County. The Council further recognises that the provision of ICT can contribute to the counties transition to a low carbon county by reducing the need to travel through working from home which results in a higher quality of life with reduced commuting and consequently reduced greenhouse gas emissions. This plan supports the provisions contained within the Galway County Digital Strategy 2020 – 2023 which provides a wider strategy with respect to the development of information and communication technologies within the county.

The Council therefore will support the provision of ICT infrastructure such as broadband, telecommunication infrastructure, mobile phone coverage and future technologies which may arise which will assist in the economic development of the county and assist in smarter working conditions and the wider aim of facilitating the counties transition to a low carbon county.

### **7.8.1 Broadband**

The delivery of high speed broadband is the responsibility of the Department of Communications, Energy and Natural Resources who published ‘*A National Broadband Plan for Ireland - Delivering a Connected Society*’ in 2012. The National Broadband Plan (NBP) is a government policy that aims to ensure that every home, school and business in Ireland – regardless of how remote or rural – has access to high-speed broadband. This is being achieved through a combination of commercial investment across the country and state intervention. State intervention will bring service to areas where commercial operators acting alone are unlikely to invest, these are primarily rural areas. In November 2019 the NBP Contract was awarded to NBI (National Broadband Ireland) this contract is projected to deliver High Speed broadband to over 38,000 premises in county Galway over the next seven years. Galway County Council’s role in this plan is as the facilitator of the National Broadband Plan rollout and will work with NBI & commercial companies to facilitate the rollout of broadband in County Galway.

This plan recognises that widespread investment in high speed digital and internet services can realise benefits in relation to foreign direct investment by boosting the attractiveness of regional locations outside of the urban centres. Hence as part of this strategic Broadband Plan, there is a commitment to hasten the pace of advancement in terms of the roll out of quality, reliable and fast broadband connections throughout the country. It is also government policy that state entities shall avail of all opportunities to facilitate the deployment of infrastructure to the telecommunications market.

## 7.8.2 Telecommunications

The provision of telecommunications information is considered to be important in terms of the economic development of the County. To ensure appropriate telecommunications infrastructure are provided within the county 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 Standards chapter of this plan.

### Policy Objectives Information and Communications Technology

#### ICT 1 ICT infrastructure

Support the delivery of high capacity Information Communications Technology Infrastructure, broadband connectivity and digital broadcasting, throughout the County in line with the Galway County Digital Strategy 2020 - 2023, in order to ensure economic competitiveness for the enterprise and commercial sectors and in enabling more flexible work practices i.e. remote working, smart hubs etc.

#### ICT 2 National Broadband Plan

Support and facilitate delivery of the National Broadband Plan.

#### ICT 3 Telecommunications Antennae and Support Structures

To ensure the orderly development of telecommunications throughout the County in accordance with the requirements of the *Telecommunications Antennae and Support Structures, Guidelines for Planning Authorities, DECLG, 1996*, except where they conflict with Circular Letter PI07/12 which shall take precedence, and any subsequent revisions or expanded guidelines in this area.

#### ICT 4 Co-location of antennae

To require co-location of antennae support structures and sites where feasible. Operators shall be required to submit documentary evidence as to the non-feasibility of this option in proposals for new structures.

#### ICT 5 Siting and Design of Telecommunications Infrastructure

To require best practice in both siting and design in relation to the erection of communication antennae and support infrastructure, in the interests of visual amenity and the protection of sensitive landscapes.

#### ICT 6 Visual Impact and Antennae Support Structures

To operate a presumption against the location of antennae support structures where they would have a serious negative impact on the visual amenity of sensitive sites and locations.

#### ICT 7 Open Access Ducting

To require open access ducting for new developments is made available to all service providers on a non-exclusive lease basis at an economic cost.

#### ICT 8 Underground Cabling

To co-operate with the relevant agencies to facilitate the undergrounding of all electricity, telephone and television cables in urban areas wherever possible, in the interests of visual amenity.

Where undergrounding of cables is being pursued, proposals should demonstrate that environmental impacts including the following are minimised:

- Habitat loss as a result of removal of field boundaries and hedgerows (right of way preparation) followed by topsoil stripping (to ensure machinery does not destroy soil structure and drainage properties);
- Short to medium term impacts on the landscape where, for example, hedgerows are encountered;
- Impacts on underground archaeology;
- Impacts on soil structure and drainage; and
- Impacts on surface waters as a result of sedimentation.

**ICT 9 Digital Hubs**

To support the enhancement and delivery of digital hubs and remote working spaces.

## 7.9 Environmental Protection

### 7.9.1 Air Quality

Air quality is extremely important in ensuring the health of the general population. Poor air quality can result in significant environmental problems. The most sensitive areas in relation to air quality are built up areas and major transport development. The Environmental Protection Agency is the statutory body responsible for monitoring air quality in Ireland. The Council acknowledges the need to ensure the highest standards of air quality within the County and will collaborate with the Environmental Protection Agency as appropriate to ensure high standards of air quality are maintained and poor standards are addressed as appropriate. The Council shall require proposals for new homes to include radon prevention measures in accordance the Building Regulations (including any updated/superseding regulations that may be published within the lifetime of this Development Plan).

#### Policy Objectives Air Quality

**AQ 1 Ambient Air Quality**

To 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 (CAFÉ) Directive (2008/50/EC) and ensure that all air emissions associated with new developments are within Environmental Quality Standards as set out in the Air Quality Standards Regulations 2011 (SI No. 180 of 2011) (or any updated/superseding documents).

**AQ 2 Assessment of Air Quality**

To require developments which would have the potential to have adverse impacts on air quality to carry out assessments of the impact of the development on air quality.

**AQ 3 Air Quality Mitigation Measures**

To require the use of appropriate mitigation measures such as dust dampeners to minimise the potential impacts of developments on air quality.

**AQ 4 Air Purification**

The Council shall encourage landscaping and deciduous tree planting in an environmentally sensitive manner within towns and villages as a means of air purification, the filtering of suspended particles and the improvement of their micro-climate.

**AQ 5 Radon**

The Council shall have regard, to the specific guidance on radon prevention measures for new homes as contained within the existing Building Regulations (including any updated/superseding Regulations that may be published within the lifetime of this Development Plan).

**7.9.2 Noise Pollution**

Noise can have a significant impact on the quality of life of individuals, or communities, or wildlife and the wider environment. Noise control is governed by the Environmental Protection Agency Act 1992 and the Environmental Protection Agency Act (Noise) Regulations 1994. The Environmental Protection Agency Act 1992, identifies **noise** as a form of **environmental** pollution and contains provisions for dealing with **noise** “which is a **nuisance, or would endanger human health or damage property or harm the environment.**”

Galway County Council being the designated Action Planning Authority under Article 7 of the Environmental Noise Regulations, has completed the Noise Action Plan 2019-2023. This plan relates to environmental noise from major roads which experience a volume of traffic greater than 3 million vehicle passages per year. The action planning area covers sections of the M6, M17 and M18 Motorways N 18 National Primary Roads, N59, N65, N67, N83, N84 National Secondary Roads and R336, R339, R354 R381, R446, R458 and R939 Regional Roads and adjoining lands. The plan excludes noise from domestic activities, noise created by neighbours and noise at workplaces.

**Policy Objectives Noise Pollution**

**NP 1 Galway County Council Noise Action Plan 2019-2023**

To implement the Galway County Council Noise Action Plan 2019-2023 (and any subsequent Plan) in order to avoid, prevent and reduce the harmful effects, including annoyance, due to environmental noise exposure.

**NP 2 Developments within Noise Maps (Noise Action Plan 2019-2023)**

To require that where new developments are proposed within the noise limits of the noise maps for the designated sections of roads in the County, appropriate mitigation measures are undertaken so as to prevent harmful effects from environmental noise.

**NP3 Noise Impact Assessments**

To require an assessment of impact of the development on noise levels, having regard to the provisions of the Environmental Protection Agency Acts 1992 and 2003 and the EPA Noise Regulations 1994 when assessing planning application.

**NP 4 Noise Pollution and Regulation**

Restrict development proposals causing noise pollution in excess of best practice standards and Regulate and control activities likely to give rise to excessive noise, other than those activities which

are regulated by the EPA

**NP 5 Noise Mitigation Measures**

Require activities likely to give rise to excessive noise to install noise mitigation measures and monitors. The provision of a noise audit may be required where appropriate

**7.9.3 Light Pollution**

The control of light pollution is extremely important from a number of different perspectives including residential amenity, nature conservation, traffic safety, visual amenity including dark skies and addressing climate change in the form of energy efficiency. The necessity for artificial lighting is acknowledged from a safety and security perspective.

**Policy Objectives Light Pollution**

**LP 1 Lighting Schemes**

To require that all developments shall ensure lighting schemes are designed so that excessive light spillage is minimised to ensure light pollution in the surrounding environment including residential amenity, wildlife and near public roads is limited. Such lighting schemes shall be submitted and agreed with the Planning Authority.

**LP 2 Lighting and Climate Action**

To require the use of low energy LED (or equivalent) lighting in support of Climate Action.

**LP 3 Dark Skies**

To encourage the maintenance of dark skies in rural areas and to limit light pollution in urban and rural areas.

**7.9.4 Soil Quality**

There are significant differences in the types of soils at various locations across the county from peatlands to pasture lands. The Council recognises the key role that soils plays in many ways including food production, surface water, flooding management and also in supporting a range of ecosystem habitats and supporting biodiversity. The Council are acutely aware of the threats to our soil quality with regard to land use changes, intensification of agriculture, erosion and overgrazing, afforestation, industry and urbanisation. It is important that development proposals ensure minimal impacts on soil quality and the wider environment.

**Policy Objectives Soil Quality**

**SQ 1 Soil Impact Assessments**

Ensure good soil quality throughout the county by requiring developments of a certain nature (as specified in the relevant environmental legislation) to carry out assessments of the impact of the development on soil quality.

**SQ 2 Soil Protection Measures**

To ensure that adequate soil protection measures are undertaken where appropriate.

### **SQ 3 Soil Protection, Contamination and Remediation**

Adequate and appropriate investigations shall be carried out into the nature and extent of any soil and groundwater contamination and the risks associated with site development work, where brownfield development is proposed.

All undeveloped, contaminated sites shall be remediated to internationally accepted standards prior to redevelopment. All applications shall be accompanied by a report from a qualified, expert consultant remediation incorporating international best practice and expertise on innovative ecological restoration techniques including specialist planting and green initiatives that create aesthetically improved sites, healthy environments and contribute to the provision of new green open spaces as integral parts of newly created areas.

Treatment/management of any contaminated material shall comply as appropriate with the Waste Management Act 1996 (waste licence, waste facility permit), as amended, and under the EPA Act 1992 (Industrial Emissions licensing, in particular the First Schedule, Class 11 Waste), as amended. These measures will ensure that contaminated material will be managed in a manner that removes any risk to human health and ensures that the end use will be compatible with any risk.

#### **7.9.5 Major Accidents and Seveso Sites**

The European Communities (Control of Major Accident Hazards Involving Dangerous Substances) Regulations 2006 transposes the SEVESO 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 are two SEVESO sites in County Galway which includes the Chemoran facility at Deerpark Industrial Estate in Oranmore and the Tynagh Energy Ltd. All development proposals involving existing or proposed facilities classified under the Seveso II Directive will be referred to the Health and Safety Authority whose technical advice shall be taken into account in addition to any normal planning considerations.

<b>Seveso</b>	<b>Upper Tier</b>	<b>Chemoran: Manufacture and Storage of Chemicals</b>
<b>Seveso</b>	<b>Lower Tier</b>	<b>Tynagh Energy Ltd.</b>

**Table 7.11: List of the Seveso Sites in County Galway**

#### **Policy Objectives Major Accidents and Seveso Sites**

**MAS 1                    Separation Distances from SEVESO Sites**

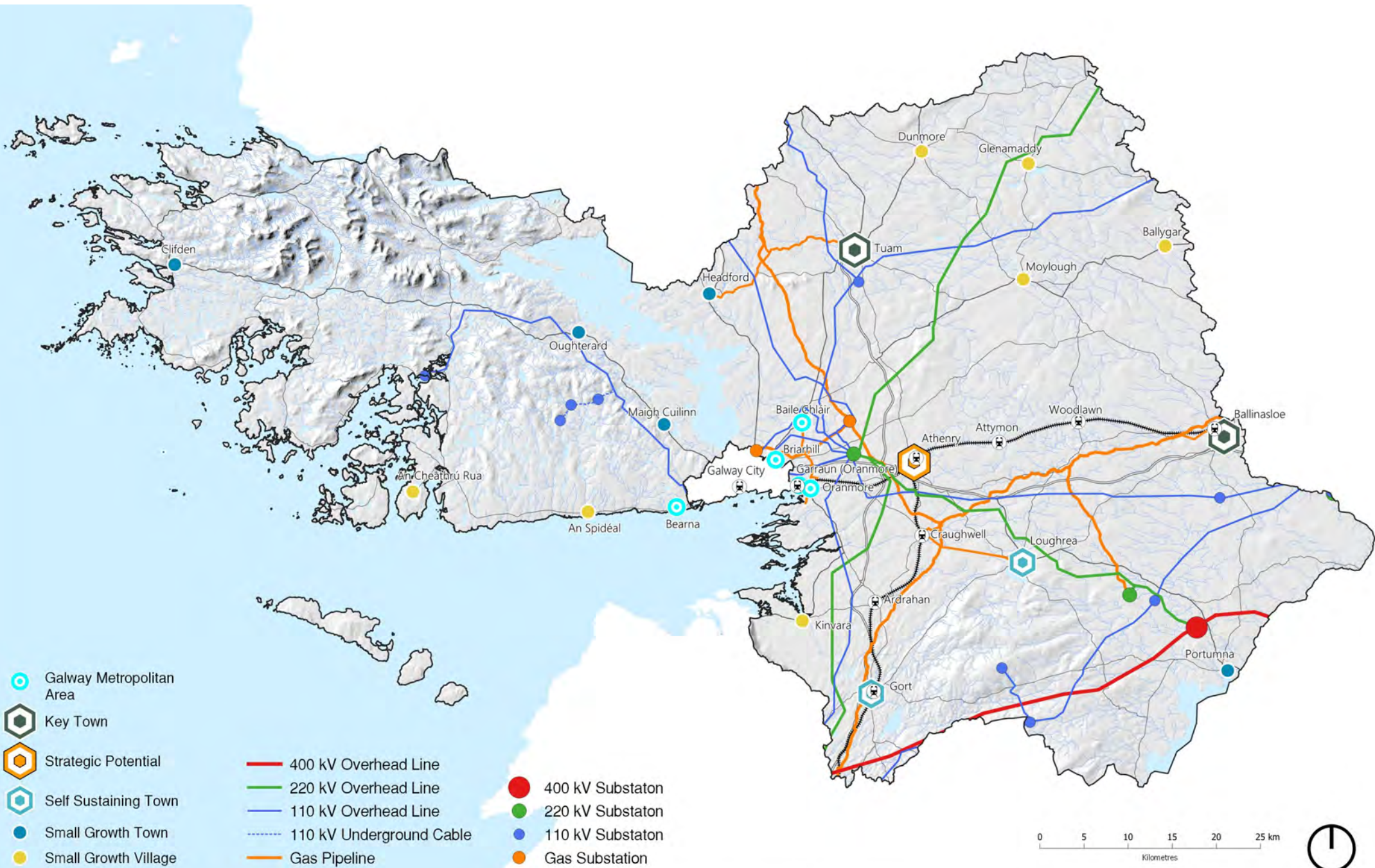
To ensure that appropriate distances are maintained between any proposed development and any existing Seveso II establishment, in the interest of the health and safety of the occupiers of the proposed development.

**MAS 2                    Soil Protection Measures**





To require that, the siting of new establishments, or modification of existing establishments classified under the Seveso II Directive, and new development in the vicinity of existing establishments shall take into account the need to prevent major accidents involving hazardous substances and safeguard both the public and the environment.

**MAS 3                    SEVESO III Sites**

Take into account 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.



-  Galway Metropolitan Area
-  Key Town
-  Strategic Potential
-  Self Sustaining Town
-  Small Growth Town
-  Small Growth Village

-  400 kV Overhead Line
-  220 kV Overhead Line
-  110 kV Overhead Line
-  110 kV Underground Cable
-  Gas Pipeline
-  400 kV Substaton
-  220 kV Substaton
-  110 kV Substaton
-  Gas Substaton

