



CYNGOR SIR
YNYS MÔN
ISLE OF ANGLESEY
COUNTY COUNCIL



Background

This is one of a range of topic papers prepared to offer more detailed information and explain the approach of the Plan to different topics and issues affecting the Joint Local Development Plan Area. This paper will look specifically at **Waste**. It will explain the background which will help to identify the issues, objectives and options for the Deposit Plan.

The Deposit Plan is the second statutory stage in the preparation of the Joint Local Development Plan (JLDP). The JLDP shapes the future growth of communities in the Joint Local Development Plan Area and will set out the policies and land allocations against which planning applications will be assessed.

The Deposit Plan will be submitted to the Welsh Government, which will appoint an independent inspector to assess the soundness of the Plan in the Examination in Public. If the inspector considers the Plan to be sound it will be recommended for adoption. When adopted the JLDP will supersede the Gwynedd Unitary Development Plan (2009) for the Gwynedd Local Planning Authority Area and the Gwynedd Structure Plan (1993) and Ynys Môn Local Plan (1996) for the Ynys Môn Local Planning Authority.

This topic paper can be read in isolation or in conjunction with the other Topic Papers and Background Papers that have been prepared to give a full picture the Joint Local Development Plan Area.

You may refer to the Topic Paper as a basis for making comments about the Deposit Plan. It must be noted that only comments on the Deposit Plan will be considered by the Inspector at the Examination in Public rather than specific comment made on the Topic Papers.

If you have any questions or would like to discuss any of the Topic Papers or Background Papers with a member of the Joint Planning Policy Unit you can [contact us](#):

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1.0 PURPOSE OF THE TOPIC PAPER

- 1.1 The purpose of this paper is to provide information on the topic of waste. It will explain the background which will help to identify the issues, objectives, options and the preferred strategy for the Deposit version of the Joint Local Development Plan. It will outline the national planning policy context and identify the main trends in waste planning and management within the study area. It will take account of the Councils existing waste policies and policies of the neighbouring Local Planning Authorities.
- 1.2 Waste is a cross cutting issue because it is produced by all types of land use, during construction, operation and demolition. The need to change the way in which waste is dealt with is recognised in policy at all levels. It is necessary to ensure that any proposed policies comply with the principles of **Planning Policy Wales (PPW) (Edition 7, 2014)**, namely the current land use planning policy document for Wales. **PPW** provides the policy framework for local planning authorities in order to ensure that the development plans are prepared effectively. This National Planning Policy is supported by a series of Technical Advice Notes (TANs). The relevant Technical Advice Note that relates to waste is **TAN 21 Waste (2014)**.

2.0 NATIONAL AND REGIONAL POLICY CONTEXT

European Policy

- 2.1 The planning system has a role in supporting the implementation of the revised **EU Waste Framework Directive (rWFD) (Directive 2008/98/EC)**. The revised directive establishes the legislative framework for the handling of waste in the European Union. The rWFD marks a shift in thinking about waste from an unwanted burden to a valued resource. The EU Waste Framework Directive requires member states to establish an integrated and adequate network for the disposal of wastes and the recovery of mixed wastes. The European Waste Directive requires waste management plans to be produced. These plans should provide analysis of the current waste management situation. They must enable existing infrastructure to be mapped and consideration given to the types, location and capacity of future waste infrastructure needed to meet the approved obligations, including self-sufficiency and proximity. They should be sufficiently precise in terms of geographical coverage and requires suitable sites to be marked on a map or determined by location criteria. The rWFD is being implemented in England and Wales through Part 5 and Part 6 of the **Waste (England and Wales) (Regulations 2011)**, as amended by the **Waste (England and Wales) (Amendment) Regulations 2012 SI 2012 No.1889**.
- 2.2 Other key waste-related European Directives are also directly applicable to the Local Development Plan include:-
1. **Landfill Directive (EU Waste to Landfill Directive 99/31/EC)**
 2. **Hazardous Waste Directive**
 3. **Packaging and Packaging Waste Directive**
 4. **Waste Incineration Directive**
 5. **End of Life Vehicles (ELF) Directive.**
 6. **Waste Electrical and Electronic Equipment (WEEE) Directive**

- 2.3 The **Landfill Directive** introduced license applications and technical requirements for the design and operation of landfills. It also banned certain types of waste from landfill and introduced statutory requirements for the progressive reduction of biodegradable municipal waste sent to landfill and applies penalties if the targets are not met.
- 2.4 The **Hazardous Waste Directive** seeks to define hazardous waste and provides additional controls on its tracking, movement and management.
- 2.5 The **Packaging and Packaging Waste Directive** sets specific targets for recovery and recycling of this waste stream, together with measures to encourage reduce and reuse packaging.
- 2.6 The **Waste Incineration Directive** seeks to minimise the impact of negative environmental effects on the environment and human health resulting from emissions to air, soil, surface and groundwater from the incineration and co-incineration of waste.
- 2.7 The **Waste Electrical and Electronic Equipment (WEEE) Directive** seeks to prevent waste from this waste stream and to promote collection, reuse and recycling. It also aims to improve the environmental performance of all operators involved in the life cycle of WEEE.

National Policy

- 2.8 In 2003 the UK Government enacted the **Waste and Emissions Trading Act (WET Act)**, which is now viewed as one of the key drivers for change in waste management in Wales. **The Landfill Allowance Scheme (LAS)** implemented under the WET Act has cascaded targets down to the individual local authorities through the allocation of landfill allowances on the tonnages of Biodegradable Municipal Waste (BMW) that can be disposed to landfill in any given year up to 2020. Penalties for sending more tonnes to landfill than the level of allowance held will result in fines of £200 per tonne of BMW, plus potentially any infraction fines from Europe in the event that Wales as a whole does not meet the set target.
- 2.9 The Minister for the Environment, Sustainability & Housing has approved the allocation to Welsh Local Authorities of new Landfill Allowances post 2009-10, which limit the amount of biodegradable municipal waste (BMW) they send to landfill. The Landfill Allowance Scheme LAS targets for Gwynedd and the Isle of Anglesey are as follows (expressed as tonnes of BMW).

Table 1. Landfill Allowance Scheme (LAS) Targets Gwynedd and Isle of Anglesey 2010-11 to 2019-2020

Year	Gwynedd	Isle of Anglesey
2010-11	28,909	15,938
2011-12	25,238	13,914
2012-13	21,567	11,890
2013-14	20,649	11,384
2014-15	19,731	10,879
2015-16	18,814	10,373
2016-17	17,896	9,867

2017-18	16,978	9,361
2018-19	16,060	8,855
2019-20 onwards	15,143	8,349

Source: Minister of Environment, Sustainability and Housing Letter dated 10 March 2010.

- 2.10 After 2019-20, it is assumed that the annual landfill allowance will remain static. This may not be the case in reality, depending on future UK and European waste policy.
- 2.11 The current level of landfill tax is £80 per tonne (2013/2014). Increasing the Landfill tax is a key economic policy instrument to encourage the diversion of waste away from landfill. It aims to encourage waste producers to produce less waste, recover more value from waste, for example through recycling or composting and to use more environmentally friendly methods of waste disposal.

Circular Letter 04-04 Policy Clarification Note Unitary Development Plan – Waste Policies Hazardous Waste Planning Applications

- 2.12 This letter confirms that general industrial estates (B2 uses) are considered suitable locations for most types of waste management (disposal and treatment) apart from landfill and windrow composting. This letter also provides guidance regarding dealing with hazardous waste applications. The new **TAN21 (2014)** refers to the advances in technology and new legislation, policies and practice resulting in many modern in-building waste management facilities appearing externally similar to any other industrial building and internally contain industrial processes or energy generation that may be no different to other modern industrial activities in terms of their operation or impact.

Towards Zero Waste’ One Wales: One Planet – The Overarching Waste Strategy for Wales (2010)

- 2.13 In terms of overall policy and objectives **Towards Zero Waste (2010)** replaces the previous Waste Strategy for Wales (Wise about Waste 2002), although a number of the actions and targets in Wise About Waste are still in existence and still form part of the overall waste management plan for Wales until superseded by the sector plans.
- 2.14 This Strategy sets out a long term framework for resource efficiency and waste management in Wales up to 2050 taking into account social, economic and environmental outcomes. The document sets out an aspiration to reduce the use of landfill dramatically over the next decade through a significant increase in waste prevention, reuse, recycling, and other recovery such as composting and energy from waste. The targets set within the Strategy are to achieve a recycling rate of 70% for Municipal Solid Waste (MSW) by 2025 and zero waste by 2050. The Strategy recognises that the achievement of these challenging targets will require cooperation from individuals, the private sector and the public sector. The document refers to the preparation of a series of sector plans by Welsh Government to guide the delivery of the sustainable development outcomes, targets and policies referred to in the Strategy.

Collections, Infrastructure and Market Sector Plan (2012)

- 2.15 The first Sector Plan (Collections, Infrastructure and Market Sector CIMS Plan 2012) covers the management of all waste in Wales and suggests where improved

recycling is needed. It is particularly relevant for the land use planning process. This Sector Plan seeks to create a sustainable approach to resource management by:

- Ensuring that a high volume of clean, recycling is separated at source, is collected and delivered to reprocessors (based in Wales as far as possible):
- That markets are developed for the recycled for the recycled material (within Wales as far as possible).

2.16 The Sector Plan updates the picture of infrastructure requirements in relation to technology choices and the best environmental option for specific waste materials. The waste assessments in the CIMS Plan establish the need for residual residential waste treatment and disposal, as well as identifying where improvements in recycling collection is needed and where opportunities to develop infrastructure exist. It also aims to facilitate infrastructure developments by demonstrating the need for such developments. The general approach of the above plan is a move away from land-take calculations to an approach where the need for waste management facilities is expressed by future capacity in tonnes.

2.17 The Welsh Government sets out the following statutory minimum levels for the recycling, re-use and composting of municipal waste by local authorities.

Table 2. Minimum Targets for the recycling, re-use and composting of municipal waste by local authorities in Wales

	2015/2016	2019/2020	2024/2025
Municipal waste	58%	64%	70%

Table 3. Targets and priorities for reuse, recycling and landfill reduction

	2015/2016	2019/2020	2024/2025
Commercial waste recycled	57%	67%	70%
Industrial waste recycled	63%	67%	70%

Municipal Waste Sector Plan (2011)

2.18 The Municipal Sector Plan only covers waste collected by Welsh Local Authorities or that is collected by private or third (voluntary) sector waste management companies for Local Authorities. Waste not collected in this way will be covered in other sector plans.

2.19 Part 1 of the Municipal Sector Plan takes forward four key areas:

- waste prevention;

- preparing for reuse;
- recycling collection service delivery improvements; and
- sustainable treatment and disposal.

2.20 There is a separate Action Plan for each area in this document. Part 2 of the Municipal Sector Plan will address managing Household Hazardous Wastes (HHW).

Construction and Demolition Sector Plan (2012)

2.21 The plan is aimed at the construction and demolition industry and sets out how it can play its part in the delivery of Wales's recycling targets. The construction industry currently accounts for 14 percent of Wales's ecological footprint for waste and the construction and demolition sector plan provides advice and guidance to the sector to help it operate more sustainably.

2.22 It covers waste materials that are generated by a C&D business, including:

- all types of construction development;
- each phase within those developments; and waste generated by renovation and maintenance of existing buildings

2.23 As well as setting waste prevention and recycling targets, the plan makes recommendations on how to manage waste to achieve more environmentally friendly and affordable outcomes for the construction industry – including builders, trades people and suppliers.

Industrial and Commercial Sector Plan (2013)

2.24 This plan covers all waste produced from commercial and industrial sectors. Its aims are to prevent and reduce waste and increase recycling from businesses and organisations in these sectors. It will do this as part of business sustainability criteria and influencing behaviour change through the supply chain and end users. The aims shall be addressed throughout the lifecycle of a product and packaging, from design of products /packaging to its use and end of life.

People, Places, Futures: The Wales Spatial Plan (2008 update)

2.25 **The Wales Spatial Plan (amended version, 2008)** provides a framework, which notes the national agenda for ensuring that local strategies include principles that will ensure that the communities of Wales are sustainable during the next 20 years. It provides an overarching policy context for spatial planning and development in Wales by setting out cross cutting national priorities. First published in 2004 and updated in 2008, it sets out to ensure that proposals throughout Wales are integrated and sustainable.

2.26 There are five specific principles that the Spatial Plan promote, namely:-

- Building Sustainable Communities
- Promoting a Sustainable Economy
- Valuing our environment
- Achieving sustainable accessibility
- Respecting distinctiveness

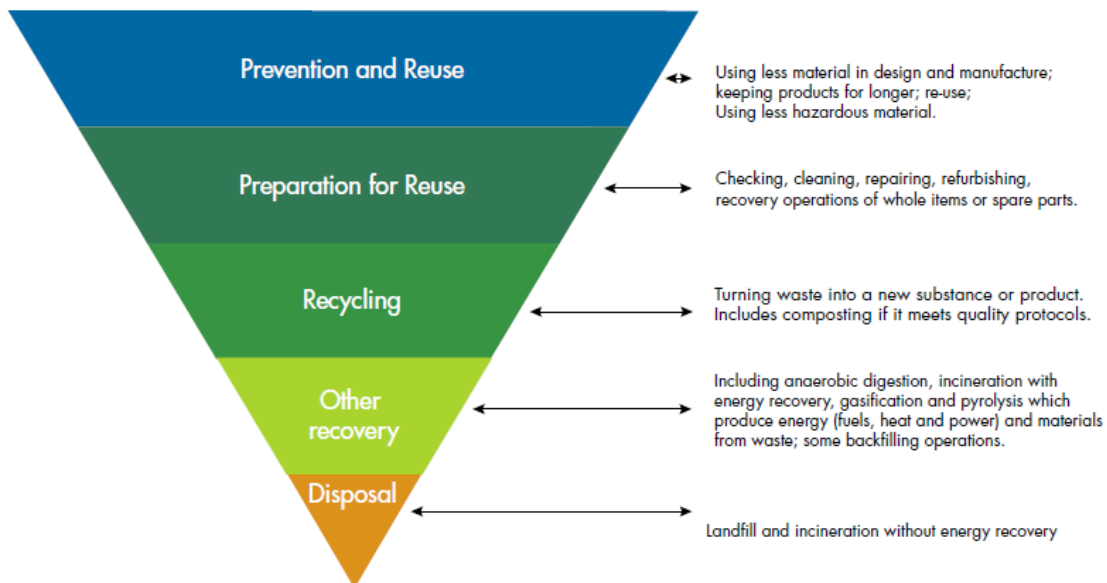
Planning Policy Wales (PPW) (Edition 7, 2014)

- 2.27 National planning Policy for waste in Wales is contained in section 12.5 of **PPW (2014)**. It sets out the broad principles governing the planning process as this relates to reducing and managing waste sustainably. It reiterates that local planning authorities are required to establish an integrated network of waste disposal facilities. Local Authorities are also required (in conjunction with Natural Resources Wales to ensure that waste is recovered or disposed of without harming the environment, without endangering human health without risk to water, air soil, plants or animals, without causing a nuisance through smells or odours and without adversely the countryside or places of special interest, including areas of acknowledged nature and cultural importance.
- 2.28 PPW paragraph 12.6.1 states” Development plan policies should demonstrate how national waste policy and in particular the CIM Sector Plan, along with any updated position adopted in the waste planning monitoring reports and any other form of waste management priorities relevant to its local area and have been taken into account.” Policies proposing any major new development should incorporate adequate and effective waste management facilities.
- 2.29 Development plan strategies and policies, including any specific allocations, should seek to secure opportunities to reduce or recycle waste as part of the design, construction and operation of new buildings. Further advice on sustainable design can be found in TAN 12 Design and TAN21 Waste (2014).

Planning Policy Wales Technical Advice Note (TAN21) (2014)

- 2.31 Technical Advice Note 21: Waste provides advice on the role of land use planning in the management and control of waste
- 2.32 The main changes introduced in the new TAN include:
- Acknowledging that waste policy targets and drivers have evolved and consequently the Regional Waste Plans which are based upon land take are now outdated and should be revoked.
 - Introducing a requirement for data collection, monitoring and annual reports. These can be used as evidence to support development plans and planning decisions
 - Introducing a requirement to keep a minimum amount of landfill capacity in each region (North South West & South East Wales) relative to a trigger point. Hitting the trigger will result in a site search and selection process to identify suitable locations for landfill.
 - Updating policy direction to enable waste facilities to move up the waste hierarchy through the introduction of a Waste Planning Assessment. (WPA).
- 2.33 The waste hierarchy is a central pillar to inform decisions on waste management options. Welsh Government has produced guidance for waste producers on how to apply the waste hierarchy (Welsh Government 2012). When taking planning decisions, it is expected that the waste hierarchy be applied as a priority order, unless, for specific waste streams departing from this hierarchy is justified by life cycle thinking on the overall impacts of the generation and management of such waste. The Waste Hierarchy is set out in the following figure.

Figure 1. Waste Hierarchy



Source: TAN 21 2014

- 2.34 The Welsh Government is committed to a “zero-waste economy” in which material resources are re-used, recycled or recovered wherever possible, and only disposed of as the option of very last resort. The Welsh Government’s ambitions for waste highlight the importance of putting in place the right waste management infrastructure at the right time and in the right location. The planning system is pivotal to the adequate and timely provision of these new waste management facilities that are needed to help drive the management of waste up the waste hierarchy.
- 2.35 As well as the waste Hierarchy, a number of other planning principles are referred to in TAN 21, including the concept of **An Integrated and Adequate Network, Nearest Appropriate Installation** and supporting the drive for **Self Sufficiency** when making decisions.
- 2.36 **Integrated and Adequate Network Principle** In order to achieve sustainable waste management, an integrated and adequate network of waste disposal installations for the recovery of mixed municipal waste collected from private households including where such collection also covers such waste from other users must be established
- 2.37 **Nearest Appropriate Installation Principle** This states that waste should be disposed of or recovered at one of the nearest appropriate installations whilst ensuring a high level of protection for the environment and human health.
- 2.38 **Self Sufficiency Principle** Moving towards the aim of self sufficiency in waste recovery and disposal through the provision of an integrated and adequate network is a key principle. The TAN makes it clear that it is not expected that Wales must have the full range of waste facilities for dealing with all waste types. It follows from this that there is no need for each Plan Area to be self sufficient in waste recovery and disposal. If waste that cannot be prevented is treated as a valuable resource as

suggested by Welsh Government, it makes sound economic sense waste for high quality recycling facilities and local reuse to be encouraged within the Plan Area.

Radioactive Waste

- 2.39 Whereas radioactive waste is strictly controlled by legislation and various national regulators, there is no national planning policy or guidance specifically concerning radioactive waste management. The national policy for handling such waste is to deal with them as far up the waste hierarchy as possible. However, the Government's Nuclear Decommissioning Authority (NDA) Strategy needs to be taken into account when preparing Local Development Plans.
- 2.40 It is an objective of the overarching Strategy to ensure that wastes are managed in a manner that protects people and the environment, now and in the future, and in ways that comply with Government policies and provide value for money
- 2.41 Strategic decisions about waste management are informed by the following key principles:
- risk reduction is a priority
 - centralised and multi-site approaches should be considered where it may be advantageous
 - waste should be minimised.
 - The waste hierarchy should be used as a framework for waste management decision making and enables an effective balance of priorities including value for money, affordability, technical maturity and the protection of health, safety, security and the environment.
- 2.42 The NDA intends to take a multi-site and UK-wide view, to include its own sites and the operations of other waste producers, including EDF Energy and MoD. The NDA recognise that in future the radioactive waste management landscape will change, particularly because of the UK's new reactor programme. The NDA has a series of Underpinning Strategies to deal with different categories of nuclear waste:
- **Higher Activity Waste:** Some higher activity wastes will remain radioactive and thus potentially harmful for hundreds of thousand years. To treat and package HAW and place it in safe, secure and suitable storage facilities until it can be disposed of, or be held in long-term storage.
 - **Low Activity Waste:** For Solid Low Level Waste - To provide capability and capacity for managing solid low level radioactive waste to support our decommissioning and operations and make facilities available to other low level waste producers.
 - **Non-Radioactive and Hazardous Waste:** To reduce waste generation and optimise management practices for non-radioactive and hazardous wastes at NDA sites.
- 2.43 Radioactive waste generated from the existing and proposed new nuclear power station at Wylfa is strictly regulated and must be dealt with in accordance with the Radioactive Substances Act 1993 (RSA93). In April 2010, RSA93 was incorporated into schedule 23 of the Environmental Permitting (England and Wales) Regulations 2010. Radioactive waste is also associated with the use of radioactive materials in industry, medicine and research.

- 2.44 The Department for Environment, Food and Rural Affairs (Defra) published environmental permitting guidance regarding radioactive substance regulation for the regulator (Natural Resources Wales).
- 2.45 The Department of Energy and Climate Change DECC consulted in December 2013 on its revised siting process for a Geological Disposal Facility. The Government's policy for the long-term management of Higher Activity Radioactive Waste is geological disposal. However no sites have been identified to date. In April 2014, the Welsh Government issued a call for evidence asking for views on whether existing policy on higher activity radioactive waste disposal (HAW) should be reviewed. Welsh Government prepared a consultation document to look at options on proposals for a new Welsh Government policy in October 2014. The closing date for comments is 22 October 2015.

Regional Policy

North Wales Regional Waste Plan 1st Review (2009)

- 2.46 The North Wales Regional Waste Plan 1st Review was endorsed by the North Wales Local Authorities in April 2009 and agreed by the Welsh Assembly Government in September 2009. It was intended that the RWP 1st Review would become a strategic framework for the preparation of Local Development Plans and a material consideration in the development control process. However, waste policy targets and drivers have evolved significantly since this plan was prepared and consequently the Regional Waste Plans, which were based upon land take, are now outdated. Whilst the requirement for Councils to prepare Regional Waste Plans ended with the publication of the revised TAN 21 in 2014, these documents contain useful background information including Areas of Search Mapping to help identify potential strategic sites at the regional level.

3.0 LOCAL PLANNING CONTEXT

Gwynedd – Unitary Development Plan (UDP)(2009)

- 3.1 The Policies contained in the UDP include:-

Policy C21 – provision of waste management and recycling facilities. Land allocated on proposals Map at Llwyn Isaf, and Clynog Fawr as a landfill/landrise facility to dispose of residential municipal waste. Thirteen sites have been listed for safeguarding and or for the provision of waste infrastructure in the UDP.

Policy C22 – Waste Management Facilities (Criteria to be met before approving such proposals for waste management facilities).

Policy C23 – New Development and Waste Management Facilities (Policy to promote provision of on site recycling and composting facilities for larger scale employment, commercial and residential development proposals)

Policy C24 – Landfill/land raise and hazardous waste collection/disposal sites ((Criteria to be met before approving such proposals)

Policy C25 – The use of inert waste to improve agricultural land ((Criteria to be met before approving such proposals)

- 3.2 Whilst the above policies provide the land use planning guidance in respect of waste development within the Gwynedd Local Planning Authority Area, it is important to emphasise that these policies should not be read in isolation to other relevant policies within the UDP.

Ynys Môn

- 3.3 The current development plan for the Isle of Anglesey is the Gwynedd Structure Plan (adopted 1993) and the Ynys Môn Local Plan (adopted 1996). The Ynys Môn Unitary Development Plan was formally stopped at a late stage in the preparation process (December 2005). Material weight can therefore be afforded to this Document.

- 3.4 The existing local waste planning policy framework for Ynys Môn is in the form of the waste policies contained within the Gwynedd Structure Plan. The policies in the Gwynedd Structure Plan 1993 include:

Policy D18 Council support for waste disposal undertakings to use waste disposal as a means of reclaiming derelict land or mineral working sites.

- 3.5 The policies in the Ynys Môn Local Plan (adopted 1996) include:

Policy 29 – Proposals for waste disposal facilities will be permitted when listed criteria are satisfied.

- 3.6 The policies in the Ynys Môn Unitary Development Plan include:

Waste Policy WP1 – Proposals for waste management facilities will be permitted where listed criteria are met.

Waste Policy WP2 – Inert landfill sites will be permitted where listed criteria are met.

Waste Policy WP3 – Waste treatment facilities will be permitted where listed criteria are met.

Waste Policy WP4 – Facilities for incineration of waste will be permitted where listed criteria are met.

Waste Policy WP5 – Land allocated for central materials facility (MRF) as proposed AD1 in Gwalchmai

Waste Policy WP6 - Proposals for composting of waste (green and mixed) will be permitted where listed criteria are met.

Waste Policy WP7 – Civic Amenity sites will be permitted in Llangefni (proposal MD1), Holyhead (MD2), Amlwch (MD3) and Penhesgyn (MD4).

Waste Policy WP8 – New landfilling or land raising sites or extensions to existing sites will be permitted where listed criteria are met.

Waste Policy WP9 – Proposals for the treatment and disposal of special waste will take account of cumulative capacity available in the region, transport capacity and other relevant criteria set out on policies WP3, WP4 and WP7.

Waste Policy WP10 – Proposals for the treatment of waste water (sewage) will be permitted where listed criteria are met.

- 3.7 Whilst the above policies provide the existing local land use planning guidance regarding the provision of waste management facilities on Anglesey, it is important to emphasise that these policies should not be read in isolation to other local planning policies which may also be relevant to the proposal.

4.0 WASTE POLICIES OF NEARBY LOCAL PLANNING AUTHORITIES

Ceredigion

- 4.1 There are no active landfill sites and little prospect of any new landfill facilities within the Ceredigion because of the small volumes of waste generated. Currently all Ceredigion's municipal waste is sent to Powys for final disposal. There are waste policies in the adopted LDP (April 2013), These policies seek to ensure that sufficient land is made available for resource recovery and waste management facilities in appropriate locations to enable all National and European waste obligations to be satisfied and to encourage all development to reduce and manage waste in a way that is sustainable, protects resources, enhances the environment and protects human health

Conwy

- 4.2 The Conwy Local Development Plan was adopted in October 2013 LDP identifies Llanddulas and Gofer, Rhuddlan Road, Abergele for a range of waste management facilities. In addition to these allocations, Conwy proposes criteria based policies against which waste management facilities could be considered.
- 4.3 Conwy along with the other Local Authorities in North Wales apart from Wrexham is part of the North Wales Treatment partnership that is in the process of procuring regional treatment facilities to deal with North Wales' residual municipal waste.

Denbighshire

- 4.4 The Denbighshire Local Development Plan was adopted in June 2013. Denbighshire Council does not intend to allocate sites for landfill or landraise because of the lack of suitable sites. Seven sites have been identified for waste management facilities in the County. In addition to allocated sites, waste facilities, excluding landfill and open windrow composting, will generally be acceptable on existing industrial estates.

Snowdonia National Park

- 4.5 Snowdonia National Park adopted its Local Development Plan in 2011. The National Park has not identified any waste sites of strategic importance. The Snowdonia National Park is a waste planning authority but does not have responsibility for waste management. The National Park covers part of Gwynedd.

Powys

- 4.6 The Powys LDP is at Deposit Draft stage (2014). It contains one waste policy which refers to the following types of waste facilities, In-building waste facilities, household waste and recycling centres and exemption sites for inert waste.

- 4.7 This policy sets out to enable an integrated and adequate network of waste management facilities in sustainable locations to complement the Powys Waste Strategy and to meet the needs identified in the Regional Waste Plans in accordance with the waste hierarchy with the long term aim of zero waste.
- 4.8 Powys County Council is collaborating with Ceredigion County Council in the Central Waste Partnership rather than the other North Wales Authorities to secure shared solutions for dealing with residual municipal waste. Should this lead to the need of a facility in the region, the remaining landfill void at Bryn Posteg (Llanidloes), and an allocated site on the Glanyrafon Industrial Estate in Aberystwyth would provide sufficient capacity to accept waste for the Central Waste Partnership which cannot be reused, recycled or recovered.

5.0 THE CURRENT SITUATION

The North Wales Residual Waste Treatment Project

- 5.1 Despite the increased levels of recycling and composting that have been achieved in recent years there is still a large amount of waste that goes into landfill each year. Through awareness campaigns and incentives placed on local authorities and the business sector, higher rates of recycling and composting are likely to be achieved. However there will still be a proportion of the waste that cannot be recycled or composted and must be treated in another way to derive benefit and avoid disposal to landfill. This waste is termed **residual waste** and may be treated to extract further benefit through the capture of additional recyclate and energy.
- 5.2 The existing waste management infrastructure in North Wales is insufficient to deal with the current and predicted waste arisings, particularly infrastructure to deal with residual waste. New facilities are needed to deal with residual waste in order to reduce the amount of waste going to landfill and to comply with European legislation.
- 5.3 The North Wales Authorities (Isle of Anglesey, Gwynedd, Conwy, Denbighshire and Flintshire Councils. formed a partnership during 2008 to
- help the partner authorities deliver the Welsh Government's National Strategy
 - to find a more sustainable solution to dealing with residual waste and reduce landfill
 - to deliver a more cost-effective solution for dealing with residual waste
- 5.4 A planning application has been submitted to Flintshire County Council to build a 200,000 tonne Heat and Power energy recovery facility on the Deeside Industrial Park near Connah's Quay. This facility will provide a limited amount of capacity for accepting commercial and industrial waste, above and beyond the contracted local authority household waste from the region. If the application is granted during the first half of 2015, work could start by the end of the year enabling the plant to start operating in 2018.

Existing Waste Management Facilities

- 5.5 This section of the background paper examines the current level of provision of waste management facilities (including a brief summary of the waste management

initiatives and facilities in operation), and the forecasted future level of waste arisings.

5.6 A number of waste management facilities and schemes already exist within the Counties. They include:

- Household Waste Recycling Centres
- Recycling bank sites
- Bulking stations
- Composting facilities
- ELV/ Scrap yard /metal re-processing
- Waste Transfer Sites
- Kerbside Recycling/ Domestic refuse collection
- Trade/commercial waste refuse collection service.
- Inert Landfill Sites

6.0 WASTE IN GWYNEDD

Gwynedd – Waste Collection

Household refuse collection	Gwynedd are working to a programme that will see 90% of the County's households on a 3 Weekly Collection system from November 2009 onwards. The standard receptacle for residual waste is a 240 litre green wheeled bin (around 65% of households) or black bags where bins are not suitable.
Household dry recyclable collection	Kerbside collection available to over 90% of the County's households. Paper, card, glass, plastic bottles, and cans collected weekly from a 55 litre blue box and sorted at the kerbside.
Household garden waste collection	Collected on alternate weeks from a brown 240 litre wheeled bin.
Household food waste collection	Collected co-mingled with garden waste in 240 litre wheeled bin. Additionally 22 litre brown bin is available to properties with no garden waste.
Household clinical waste collection	A free service is provided weekly to residents by an in house team. Requests are made through the Local Health Authority.
Household bulky waste collection	Service provided to all residents by request on payment of £15 for collection of 5 items. Approx. 2,600 collections made in 2008-09.
Trade waste collection	Service provided to around 2,200 businesses through the County using either sacks or a range of wheeled bins. Recycling collections of glass is offered to clients and provision for paper/cardboard is being rolled out. A trial food waste service is also taking place within the Arfon area.

All household, commercial refuse and recycling collection services are undertaken by Gwynedd Council in-house workforce.

Gwynedd Waste Disposal

6.1 Gwynedd's ownership of sites to dispose /treat waste means that no contracts are in place for this purpose.

Facilities	Residual waste is disposed of at Ffridd Rasmus, Harlech which is owned and operated by the Council. However landfill activities at the site ceased in January 2014. This site accepts municipal waste plus up to around 5,000 tonnes per annum of commercial and building and demolition waste and food and garden waste for composting in an in-vessel facility. Gwynedd Council intend to commission a provider to treat/dispose of residual waste for the period until the North Wales Regional Waste Treatment Project is operational. The Llwyn Isaf landfill has closed.
Recycling	Dry recyclates are currently bulked at the Council- owned Caerylchi Material Recycling Facility (MRF) located on an industrial estate near Caernarfon. The site is operated in partnership with Antur Waunfawr a local organisation providing work opportunities for people with learning difficulties. The MRF sorts and bales, where appropriate the materials collected on the kerbside recycling service and recyclates deposited at household waste recycling centres. The sorted and baled materials are sent to merchants or processors for treatment.
Composting	<p>Co-collected food and garden waste is composted at one or two in-vessel composting (IVC) facilities. One IVC is located at Fridd Rasmus, Harlech and is owned and operated by Gwynedd Council. It has an annual capacity of approximately 5,000 tonnes and treats source segregated food and garden waste. The IVC has received Animal By Products (ABPR) compliance from Animal Health and has obtained PAS certification for end product compost. Again Council ownership and operation removes the need for a contract for this facility.</p> <p>The second IVC is located at Penhesgyn on Anglesey and has been procured in partnership between Conwy, Gwynedd and Isle of Anglesey Councils. The facility has the capacity to treat up to approx.20, 000 tonnes of food and garden waste from the three partner authorities. The three authorities have entered into a formal partnership agreement which covers ownership of the facility, management arrangements and payment structures.</p> <p>Green waste from Council parks, household waste recycling centres, etc is sent for composting at one of four open windrow composting sites. These windrow facilities are located on Anglesey and close to Bangor, Pwllheli and Bala. The sites are farm based facilities with the exception of the Bangor Site which a community based operation by Canola Amgycheddol Moelyci. The contracts governing delivery of materials are short term and do not require the Council to meet any maximum or minimum tonnage obligations.</p>
Anaerobic Digestion	The newly commissioned facility at Llwyn Isaf is run by Biogen and will accept up to 12,000 tonnes of food waste a year to convert into digestate and bio-fertilizer to be used locally. It is anticipated that the end product will conform to PAS certification.

Gwynedd –Civic Amenity Sites

- 6.2 There are currently seven Household Waste Recycling Centres (HWRCs) available for the residents of Gwynedd.

Sites	All the sites with the exception of one are owned and operated by the Council. The Machynlleth site is located in Powys but an arrangement is in place whereby Powys Council allows the site to be used by Gwynedd Residents in return for an annual payment by Gwynedd Council. Another three sites are proposed, however due to planning problems it can not be known if or when these can be developed.
Performance	All the sites are monitored internally and are currently achieving recycling rates between 65% and 70%.

7.0 WASTE IN ANGLESEY

Anglesey – Waste Collection

- 7.1 All household, commercial refuse and recycling collection services is contracted to Verdant (part of Greenstar). The contract is for 14 years and started on 1 April 2007.

Household refuse collection	100% of households receive an alternate week collection (AWC) service. The standard receptacle for residual waste is a 240 litre wheeled bin.
Household dry recyclable collection	Kerbside collection available to 100% of the County's households. Paper, cardboard, glass, plastic bottles and cans (plus other materials such as batteries etc) collected weekly from either a 38 litre red or a 55 litre blue box and sorted at the kerbside.
Household garden waste collection	Collected on alternate weeks from a green 240 litre wheeled bin. Service offered to 100% of households
Household food waste collection	Weekly food waste collection service for households. The food waste is processed at Penhesgyn.
Household bulky waste collection	Free service provided to all residents for up to 4 items of bulky waste, and up to 2 collections per annum. Additional collections are by request and on payment per collection.
Trade waste collection	The Council do not collect any trade and commercial waste.

Anglesey - Waste Disposal

- 7.2 Anglesey has a waste Treatment /Final Disposal contract with Waste Recycling Group (WRG). Their landfill site is located outside the County at Llanddulas, Conwy.

Facilities	The disposal contract means that Anglesey must transfer waste from the transfer station at Penhesgyn to WRG's landfill at Llanddulas, Conwy
Recycling	Dry recyclates are currently bulked up at Gwalchmai, a village

	which houses a recycling site, a HWRC and a bulking station. The sorted materials are sent to merchants or processors for treatment.
Composting	All green waste from the Gwalchmai HWRC site, together with street sweepings, is processed by windrow at a local farm. Garden waste collected at the Penhesgyn HWRC site, and from the kerbside green garden waste collection (along with separately collected food waste) is processed at the In-Vessel Composting Plant operating at Penhesgyn since 2008.

Anglesey – Civic Amenity Sites

- 7.3 There are currently two Household Waste Recycling Centres (HWRC) available to the residents of Anglesey.

Sites	The two sites at Penhesgyn and Gwalchmai are owned and operated by the Council.
Performance	All the sites are monitored internally and are currently achieving recycling rates of about 75%.

8.0 WASTE ARISING AND MANAGEMENT BY WASTE STREAMS

Municipal Waste

- 8.1 Municipal Waste is household waste and any other waste collected by a waste collection authority. Comprehensive data is available regarding the type and quantities of municipal waste as a result of the recycling, composting and landfill reduction targets placed on local authorities.

Table 4. Combined municipal dry recycling and composting rate by local authority by quarter Jul-Sept 2010 – April-Jun2014

	Jul-Sep 2010	Oct-Dec 2010	Jan-Mar 2011	Apr-Jun 2011	Jul-Sep 2011	Oct-Dec 2011
Isle of Anglesey	58.8	50.7	53.6	61	58.6	54
Gwynedd	47.3	48.1	42.4	47.7	47.5	48
Wales	46.4	43	45.4	50.5	50.7	49.5

	Jan-Mar 2012	Apr-Jun 2012	Jul-Sep 2012	Oct-Dec 2012	Jan-Mar 2013	Apr-Jun 2013
Isle of Anglesey	53.8	53.1	58.6	51.0	49.5	59.1
Gwynedd	49.5	48.1	51.7	51.6	53.9	53.3
Wales	49.6	52.5	53.6	50.1	49.8	54.9

	Jul-Sep 2013	Oct-Dec 2013	Jan-Mar 2014	Apr-Jun 2014		
Isle of Anglesey	57.1	51.3	47.6	60.5		
Gwynedd	54.9	54.2	53.4	58.0		
Wales	56.5	52.9	52.7	58.0		

Source: StatsWales November 2014

Table 5. Municipal waste recycling/composting rates (a) Isle of Anglesey Gwynedd and Wales 2001-2014

	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Isle of Anglesey	2.6	11.6	15.5	17.2	21.8	27.0	37.5	45.9
Gwynedd	6.7	12.4	17.7	22.8	24.8	26.3	33.6	36.7
Wales	8.4	12.5	17.7	21.7	25.5	29.9	33.4	37.5

	2009-10	2010-11	2011-12	2012-13	2013-14			
Isle of Anglesey	51.2	55.8	57.1	55.2	54.4			
Gwynedd	43.0	45.9	48.1	51.2	54.0			
Wales	40.5	45.3	50.0	52.3	54.3			

Source: WasteDataFlow

(a) Household and non-household waste, excluding abandoned vehicles

8.2 There has generally been an upward trend in the percentage of local authority municipal waste reused, recycled or composted in all local authorities across Wales.

Table 6. Tonnes of waste disposed of by landfill local authority and source 2011-2012

	Bulky collections	Civic Amenity and bring sites	Other and non household	Other Household	Recyclate diverted from residual collection	Refuse collection	Municipal waste collected and disposed of by landfill/incineration (tonnes)
Isle of Anglesey	50	3,247	294	591	0	14,128	18,527
Gwynedd	187	4,739	10,102	2,876	0	21,673	39,620
Wales	5,102	109,628	85,203	66,875	-19,302	506,702	783,563

Source: WasteDataFlow

Table 7. Tonnes of waste recycled/composted by local authority and source 2011-2012

	Kerbside schemes	Civic amenity sites	Bring sites	Civic amenity and bring sites	Private and voluntary collections	Total household recycling	Other & non-household recycling	Non-household rubble component	Recyclate diverted from residual collection
Isle of Anglesey	15,236	4,100	685	-	2,971	22,990	0	1,930	0
Gwynedd	19,448	5,626	939	-	0	26,014	7,884	2,890	0
Wales	448,715	183,448	31,098	-	3,697	666,949	53,231	73,168	19,302

Source: WasteDataFlow

	Total municipal recycling/composting	Household recycling/composting rate (per cent)	Municipal recycling/composting rate (per cent)	Local Authority Municipal Waste reuse/recycling/composting rate (NSI) (per cent)
Isle of Anglesey	24,703	56.1	57.1	55.1
Gwynedd	36,746	46.9	48.1	46.3
Wales	783,598	49.2	50.0	48.5

Source:: WasteDataFlow

- 83 The results shown in Table 8 show that the Isle of Anglesey Council has a greater headroom to meet their future obligations as they used 70.4% of their 2012/2013 Allowance than Gwynedd who used 99.4% of their 2012/2013 Allowance

.Table 8. LAS Performance for 2013/14

Authority	LAS Allowance (tonnes) 2013/14	BMW Landfilled (tonnes)	% of LAS 2013 Allowance used
Isle of Anglesey	11,384	8,018	70.4%
Gwynedd	20,649	20522	99.4%
Wales	450,000	345,022	76.7

The numbers in Table have been rounded up to whole numbers, and therefore the above calculation will not show the exact figures in the table.

Source: Natural Resources Wales (2014) Report of the Landfill Allowance Scheme (LAS) Wales 2013/14

Industrial and Commercial (I & C) Waste

- 8.4 Industrial waste is waste from any factory or industrial process (excluding mines and quarries). Commercial waste is waste arising from premises used wholly or mainly for trade, business, sport, recreation or entertainment, excluding Municipal Solid Waste. There is limited up to date data available for I & C Waste in Gwynedd and Isle of Anglesey. However, information is available for the North Wales Region (Conwy, Denbighshire, Flintshire, Gwynedd, Isle of Anglesey, Powys [Montgomeryshire] & Wrexham). and the other two regions in Wales from the Survey of Industrial and Commercial Waste generated in Wales 2012 published by Natural Resources Wales.

Table 9: Waste type generated by region in Wales, in thousand tonnes (excluding non-wastes) 2012

Type	Waste Type	North	South East	South West	Total
I	Chemical wastes	35.65	70.77	44.28	150.70
I	Healthcare	5.37	3.56	1.46	10.39
I	Metallic wastes	56.35	162.61	47.83	266.80
I	Non-metallic wastes	103.96	124.49	53.99	282.44

I	Discarded equipment	0.74	1.68	0.32	2.74
I	Animal & vegetable wastes	137.03	141.12	33.99	312.14
I	Mixed (ordinary) wastes	33.63	50.35	26.87	110.86
I	Common sludges	81.15	27.14	14.65	122.94
I	Mineral wastes	26.75	660.67	54.50	741.90
Industrial Sub- Total		480.63	1242.39	277.88	2000.91
C	Chemical wastes	3.88	8.11	4.36	16.35
C	Healthcare	8.03	18.48	9.63	36.14
C	Metallic wastes	9.99	19.84	10.21	40.03
C	Non-metallic wastes	206.42	334.70	223.29	764.41
C	Discarded equipment	8.00	13.89	9.44	31.33
C	Animal & vegetable wastes	13.36	26.49	15.38	55.23
C	Mixed (ordinary) wastes	179.22	326.37	196.02	701.61
C	Common sludges	0.36	0.55	0.41	1.32
C	Mineral wastes	5.14	8.39	5.37	18.90
Commercial Sub- Total		434.40	756.81	474.11	1665.31
Total		915.03	1999.20	751.99	3666.22

Note: column and row totals may not exactly match owing to rounding of figures
Levels of precision vary within the table above

Construction and Demolition Waste (C&D)

Agricultural Waste

8.5 Agricultural waste is waste produced at agricultural premises as a result of an agricultural activity. The Waste Management (England and Wales) Regulations 2006 prohibits unregulated burying and burning of agricultural waste on farms. Farmers now have to dispose of such wastes at licensed sites or apply to the EA for a licence (or register a licensing exemption) to continue on-farm disposal. All agricultural waste with the exception of manure and slurry (when used as a fertilizer) is covered by this regulation.

Hazardous Waste

86 Hazardous Waste encompasses a wide range of waste materials that present different levels of risk to human health and the environment. In July 2004 the Landfill (England and Wales) Regulations banned the practice of co-disposing of hazardous and non-hazardous wastes in the same landfill and introduced a requirement to pre-treat hazardous waste prior to landfill. In 2005, the Hazardous Waste (England and Wales) Regulations and the List of Wastes (Wales) Regulations set out an increased number of wastes classified as 'hazardous' including computer monitors, televisions and some other waste electrical and electronic equipment, fluorescent tubes and pesticides.

Table 10. Hazardous waste managed by Local Authority in tonnes per annum

Authority	1999	2000	2001	2002	2003	2004	2005	2006
Isle of Anglesey	7770	8509	4331	9104	6898	6101	Not Available	6464
Gwynedd	2676	1970	1633	963	1368	2018	Not Available	3051
North Wales Total	53,718	77,780	109,983	63,789	70,802	75,863	Not Available	57,725

Source NWRWP 1st Review

Table 11. Wales: Hazardous waste managed by European Waste Catalogue (EWC) chapter and former planning sub-region 2012 (tonnes)

EWC Chapter	EWC Chapter Description	North Wales	South East Wales	South West Wales	Total
01	Mining and Minerals	12	-	0	12
02	Agricultural and Food Production	23	0	0	23
03	Wood and Paper Production	0	89	2	91
04	Leather and Textile Production	-	7	-	7
05	Petrol, Gas and Coal Refining/Treatment	1	33	16,434	16,468
06	Inorganic Chemical Processes	2,129	5,912	2,062	10,103
07	Organic Chemical Processes	1,798	6,566	535	8,899
08	MFSU Paints, Varnish, Adhesive and Inks	2,891	2,486	432	5,809
09	Photographic Industry	85	156	59	300
10	Thermal Process Waste (inorganic)	8,977	36,385	24,083	69,446
11	Metal Treatment and Coating Processes	3,413	3,643	646	7,701
12	Shaping/Treatment of Metals and Plastics	1,822	1,326	1,271	4,419
13	Oil and Oil/Water Mixtures	8,618	14,383	11,259	34,259
14	Solvents	323	625	114	1,062
15	Packaging, Cloths, Filter Materials	3,175	2,339	1,346	6,860
16	Not Otherwise Specified	13,629	15,470	15,061	44,160
17	C&D Waste and Asbestos	3,194	9,784	10,421	23,399
18	Healthcare	2,184	3,863	3,745	9,792

19	Waste/Water Treatment and Water Industry	7,309	8,059	2,757	18,125
20	Municipal and Similar Commercial Wastes	4,105	5,407	4,189	13,702
Total		63,688	116,533	94,416	274,636

multiple facilities and each separate movement is recorded. This double counting should be taken into account when using this data.

- 8.7 The nature of hazardous produced in North Wales varies considerably as can be seen in the above Table. These wastes can be dealt with in a variety of different ways using a range of different technologies. The majority of all industrial and commercial hazardous waste in Wales was reported (2012 NRA Survey) as being prepared for reuse or recycled, or sent for treatment. Due to the relatively low levels of arisings of such wastes in North Wales, it is unlikely that many new specialist facilities will be developed in North Wales.
- 8.8 Whilst local authorities are not required to allocate land specifically for hazardous waste within their LDPs, such applications may still be received. It is therefore important to provide guidance on suitable criteria local authorities may wish to use to assess planning applications.
- 8.9 Landfill sits at the very bottom of the waste hierarchy and if the Overarching Waste Strategy for Wales (2010) is to be successful, landfill will play a diminishing role in the management of waste. With the levels of residual waste requiring final disposal set to drop further in future it is considered unlikely that future landfill sites in the Plan Area would be viable. Engineering a new landfill cell is costly and economies of scale would come into play.
- 8.10 TAN 21 promotes the **Nearest Appropriate Installation Principle** for regional arrangements for dealing with waste and recognises that a strategic approach will enable economies of scale to reduce the need for every type of facility in each Local Authority. The TAN recognises that there is no need for the Plan Area to be totally self-sufficient and it is acceptable for Councils to use waste facilities outside its own area if necessary.

Landfill Capacity

- 8.11 The NRW have calculated that at the end of 2013 8.3 years of landfill life expectancy in North Wales. TAN 21 states that states that each regional group of local planning authorities should report if landfill capacity falls below a 7 and 5 year void in a region. The identification of a 7 year void represents the level at which sufficient capacity is likely to exist in a region to meet future disposal needs and as such this is the level at which void capacity should ideally be maintained. The 5 year level should be identified as a trigger for pursuing any action which may be necessary to facilitate future provision. Having regard to the 8.3 years of landfill expectancy and to the above 5 and 7 year triggers, and the proposals to reduce the amount of landfill there is no need for the North Wales Authorities search for potential landfill sites at the present time. TAN 21 provides general guidance regarding considerations to take into account when undertaking searches for new Landfill Sites.

Welsh Future Waste Arisings up to 2024-25

- 8.12 The Welsh Government (2014) in consultation with representatives of local authorities and the waste management industry, has looked at various scenarios for

how much waste could be produced from different sources in the future. These are explained in detail in Technical Annexes, Towards Zero Waste: One Planet Collections, Infrastructure and Market Sector Plan (2012) For the business as usual scenario (no additional prevention activity), the predicted trends (agreed by steering group of government waste management professionals and Local Authorities representatives) are:

- Local Authority municipal waste would remain at current levels (i.e. 0% growth to 2050).
- Commercial waste would rise at a rate of 1% of the tonnage produced in 2007 every year to 2050
- Industrial waste would decrease at a rate of 1.4% of the tonnage produced in 2007 every year to 2050.
- Construction and demolition waste ,excluding inert wastes such as soils and aggregates reused on site ,will decrease at a rate of 0.5 % (of the tonnage produced in 2005/6)every year to 2050 . Inert wastes used on site would remain at current levels.

8.13 The second scenario predicted future quantities of the major waste streams with additional prevention (ensuring that the prevention targets in Towards Zero Waste are met) that the targets

8.14 In terms of the future needs for collection and infrastructure for the management of the major waste streams the following are the key findings identified in the Collections, Infrastructure and Market Sector Plan

- The key to increasing the preparation for reuse/recycling composting rates is to ensure that adequate collection systems are in place for both household and business wastes
- In terms of industrial and commercial waste greatest effort needs to be applied to separate out reuseable and recyclable waste from the mixed residual waste stream
- There appears to be broadly enough spare capacity for the future treatment and storage of wastes prior to recycling. However, it is likely that the spatial distribution of capacity is uneven, and that coverage of specific waste types is variable. Further, there is likely to a need for new and more innovative facilities to manage recyclates, especially as new waste materials are targeted to achieve higher recycling rates.
- There is likely to be a need to increase the infrastructure to aid the preparation for reuse of waste from both households and businesses.
- There is a need to ensure the adequate provision of infrastructure in Wales to recover and dispose of residual waste

8.15 Whilst the Collections, Infrastructure and Market Sector Plan is confined to Wales only, it is important to note that waste facilities in Wales manage waste from other parts of the UK (especially from England) and vice versa. In some cases recyclates from Wales is processed abroad.

8.16 It must be noted that this section and the data referred to contain a number of estimates, caveats and assumptions. It represents the best data available to the Welsh Government at the present time. The above information represents a

snapshot in time...The Welsh Government will need to publish periodic updates of this information and analysis to reflect changes in circumstances.

9.0 MAIN ISSUES TO BE CONSIDERED IN THE PREPARATION OF THE DEPOSIT LDP

Meeting European and National Targets

- 9.1 The Joint LDP will need to facilitate the requirements of the Waste Framework Directive (establish an integrated and adequate network of waste facilities) and the Landfill Directive (which sets targets for diversion of biodegradable waste from landfill sites) which have been included in Towards Zero Waste (2010) and associate publications. The deposit LDP will need to show from a land use planning perspective how it will facilitate meeting the specific targets set out Towards Zero Waste and the series of Welsh Government sector plans.
- 9.2 As municipal waste authorities the two Councils have significantly increased their recycling and composting rates in recent years to meet national targets. However solutions will need to be found for dealing North Wales' residual waste to divert it from landfill. If the planning application submitted to Flintshire County Council by the North Wales Waste Partnership is refused or the project is delayed, this could have seriously affect the capability of the two Councils to meet its obligations under the LAS Scheme.

Identification of Sites to meet current and future requirements

- 9.3 The Deposit JLDP will identify sites for local and regional waste facilities. the Economic and Employment Land Review Study for the Anglesey and Gwynedd Local Planning Authority Area (2012) will provide evidence to assist with the process of identifying sites for waste treatment facilities. The JLDP Area has a large supply of existing and allocated B2 use employment land with potential to accommodate in building waste management facilities. TAN 21 refers to advances in technology and new legislation. policies and practices that mean that many modern in building facilities externally appear similar to any other industrial building and internally consist of industrial processes or energy generation that may be no different to other modern industrial activities in terms of their operation or impact
- 9.4 Whilst the LDP can identify through the land use planning system, to guide the location of appropriate waste facilities, it will be the municipal waste authorities and the waste management industries that will come forward with proposals. The process is therefore largely market led. In addition to the sites that will be safeguarded in the JLDP, the waste management industry might in the future suggest other sites that have not been identified specifically for waste facilities. In these instances, the appropriateness of such sites will need to be assessed on their individual merits against the proposed criteria based waste policies and all other relevant policies contained in the JLDP together with national guidance.

Formulation of LDP Policies

- 9.5 Through its role in safeguarding land for waste management facilities, the JLDP will contain policies that will both protect land currently used for waste management

purposes and provide new opportunities through the identification of sites in appropriate locations.

- 9.6 The existing development plan policies for Anglesey and Gwynedd planning Authorities have been reviewed as part of the preparatory work for the Deposit LDP. The proposed waste policies in the Deposit Plan have had regard to Planning Policy Wales (PPW) (Edition 7, 2014) and TAN 21 Waste (2014) and to the direction of national waste policies.

Cross-border working and Collaboration

- 9.7 The proposed JLDP takes into account that waste planning and management is a Regional issue and continued collaboration with other Councils and Welsh Government will be necessary to ensure that an integrated and adequate network of waste facilities can be provided to meet local and regional requirements. The North Wales Residual Waste Treatment Project that was set up to find a more sustainable solution to dealing with residual waste and diverting it from landfill is a good example of cross border working and collaboration.
- 9.8 The nature of dealing with waste the activity, waste planning policy requires a strategic, cross-boundary approach to ensure that waste is effectively managed and facilities are properly located. Integrated working between county and district planning authorities is critical to the preparation of Local Plans.

Data Collection and waste monitoring on a Local Authority and Regional basis

- 9.9 Monitoring will be required on annual basis to record changes in operational capacity of waste facilities including landfill capacity, record progress on the procurement programmes, new permissions so as to prompt any action through development plan monitoring and to inform planning decisions. Up to date /annual waste data, ideally at Local Authority level will be required to assist with the publication of Local and Regional Waste Monitoring reports.

APPENDIX 1.

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APPENDIX 2.

Glossary of Terms and Abbreviations

Aerobic Digestion	The decomposition of waste under microbial action in the presence of oxygen
Agricultural Waste	Waste produced at agricultural premises as a result of an agricultural activity. Manure is not classed as waste if it is being used as fertiliser on the farm on which it arises.
Anaerobic Digestion	A process where biodegradable material is encouraged to break down in the absence of oxygen in an enclosed vessel.
Civic Amenity Site	A facility provided by the Council where the public can bring household waste to be recycled or disposed of. Wastes handled can include bulky items such as furniture, white goods, garden waste and general household wastes as well as recyclables
Commercial Waste	Waste arising from premises which are used wholly or mainly for trade, business, sport recreation or entertainment, excluding industrial and waste from municipal facilities.
Composting	A resource recovery process where biodegradable waste (such as kitchen or garden waste) is converted, in the presence of oxygen from the air, into a stable granular material which applied to land, improves soil structure and enriches the nutrient content.
Construction and Demolition (C&D) Waste	Waste arising from the construction, repair, maintenance and demolition of buildings and structures. It mostly includes brick, concrete, hardcore, subsoil and topsoil, but it can also contain quantities of timber, metal, plastics and occasionally special (hazardous) waste materials.
Controlled Waste	Waste materials that appear on the hazardous waste list, household industrial and commercial waste or any such waste, Essentially waste that is subject to regulation by the Environment Agency through waste management licensing , including construction and demolition wastes and special wastes. The main exempted categories comprise mine, quarry and farm wastes. Radioactive and explosives are controlled by other legislation and procedures.
Disposal	According to the waste hierarchy the final disposal of waste through landfill. Landraise or incineration without energy recovery.
Digestate	The fraction remaining after the treatment of segregated

	organic wastes through anaerobic digestion. It is a mainly liquid material.
Energy from waste (EfW)	A generic term applied to processes which involve the treatment of waste material under controlled conditions to release energy which is recovered for a beneficial e.g. electricity generation. EfW covers a wide range of processes including combustion with direct or indirect use of the energy produced (incineration), manufacture of refuse-derived fuel, gasification, pyrolysis and anaerobic digestion
Green Waste	Waste derived from vegetation, normally orientating from kitchens and gardens
Hazardous Waste	Hazardous Waste is waste that may be hazardous to humans. For example, clinical waste that requires specific and separate provision for dealing with it.
Higher Activity Waste (HAW)	includes High Level Waste (HLW), Intermediate Level Waste (ILW) and some Low Level Waste (LLW) that is not suitable for disposal in the Low Level Waste Repository (LLWR).
Household Waste	Includes waste from household collection rounds from services such as street sweepings, bulky waste collection, hazardous household waste collection. Also includes waste from civic amenity and source segregated wastes collected for recycling or composting through bring or drop off schemes and kerbside
Industrial Waste	Waste from any factory and from any premises occupied by industry (except mines and quarries)
Inert Waste	Innocuous, undamaging, non-toxic. Waste that is not detrimental to health or the environment.
In Vessel Composting	Process where biowaste is placed in sealed containers and aerobically treated to ensure the breakdown of organic wastes over a set time and at a set temperature.
Kerbside Collection	Any regular collection of recyclables
Landfill	Licensed facilities where solid waste is permanently deposited.
Lower Activity Waste (LAW)	arises from a number of activities undertaken at NDA sites including: <ul style="list-style-type: none"> • fuel fabrication and uranium enrichment • nuclear power generation • spent fuel reprocessing • nuclear energy research and development and • decommissioning.

Municipal waste	Household waste and any other wastes collected by the Waste Collection Authority, such as municipal parks and gardens waste, beach cleansing waste, commercial or industrial waste for which the collection authority takes responsibility, and waste resulting from the clearance of fly-tipped materials
Proximity Principle	This Principle suggests that waste should generally be disposed of as near to its place of production as possible.
Recovery	Generating value from wastes from a wide variety of activities such as recycling, composting and energy recovery.
Recyclate/Recyclable	Post Use materials that can be recycled
Recycling	Involves the recovery processing of wastes, into either the same product or a different one. Many non-hazardous wastes such as paper, glass, cardboard, plastics and scrap metals can be recycled by specialist companies
Residual Waste	Waste remaining to be disposed of after reuse, recycling, composting, and recovery of materials and energy,
Technical Advice Note 21 (TAN21)	TAN21 (published 2014 by Welsh Government) provides guidance on how the land use planning system should contribute to sustainable waste management,
Transfer Station	A facility to which waste is delivered for separation or bulking up before being removed for recovery and /or disposal.
Treatment	A catch-all term for physical, thermal, chemical or biological processes, including sorting, that change the characteristics of the waste in order to reduce its volume and hazardous nature, facilitate its handling or enhance recovery.
Waste	Any substance or object that the holder discards or intends or is required to discard.
Waste Arisings	The amount of waste generated in a given locality over a period of time.
Waste Collection Authority	A local authority responsible for the collection of municipal waste in the area.
Waste Disposal Authority	A local authority responsible for the management of the waste collected and delivered by its constituent collection authorities. The processing and/or final disposal of the waste is usually contracted to the private sector waste management industry.
Waste Electrical &	Electrical or electronic equipment that is waste, including

Electronic Equipment (WEEE)	all its components, sub-assemblies and consumables that are part of the product at the time of discarding.
Waste Hierarchy	A theoretical framework which acts as a guide to the waste management options
Waste Management Licence	A waste management/ resource recovery facility licensed under the Environmental Protection Act.
Waste Management Licensing	The system of permits operated by the Environment Agency under the Environment Protection Act to ensure that activities authorised to recover or dispose of wastes are carried out in a way which protects the environment and human health.
Waste Stream	A way of classifying waste according to its source and nature.
Waste Transfer Station	A site where waste is delivered for sorting and compacting prior to transfer to another place for recycling, treatment or disposal.
Windrow Composting	The aerobic decomposition of appropriate shredded biodegradable waste using open linear heaps known as 'windrows'. The process involves mechanical turning of the waste until the desired temperature and residence times are achieved to enable effective degradation.
Zero waste	'Zero Waste is a goal that is ethical, economical, efficient and visionary, to guide people in changing their lifestyles and practices to emulate sustainable natural cycles, where all discarded materials are designed to become resources for others to use. Zero Waste means designing and managing products and processes to systematically avoid and eliminate the volume and toxicity of waste and materials, conserve and recover all resources, and not burn or bury them. Implementing Zero Waste will eliminate all discharges to land, water or air that are a threat to planetary, human, animal or plant health.' (Zero Waste International Alliance www.zwia.org).

APPENDIX 3

Private Sector Licensed Waste Facilities in Anglesey & Gwynedd

Name & Location	Type of Facility
Phoenix Metals and Distribution Gaerwen Industrial Estate Gaerwen LL60 6HR	Scrap Metal Merchants Skip Hire
Porthmadog Skip Hire Penamser Industrial Estate Penamser Road Porthmadog LL49 9NZ	Scrap Metal Merchants Waste Disposal Station
All port Metal Recycling Ltd Cae Pwsan Caernarfon LL54 5 NN	Scrap Metal Merchants Waste Disposal Station
G Lock Unit 14 Llandegai LL57 4YH	Scrap Metal Merchants
Bala Skip Hire H Rowlands & Son Penybont Yard Llangynog Road Bala LL23 7PH	Skip Hire
William Evans The Bungalow Cae Garw Bach Rhostrehwfa Llangefni LL77 7AX	Scrap Metal Merchants
Colin Davies [Green Skips Environmental Ltd (GSE) Plot 2 Gaerwen Industrial Estate LL60 6HR	Scrap Metal Merchants, Skip Hire
Cymru Lan 4 Gaerwen Industrial Estate LL60 6HR	Fallen Stock, Paper, cardboard Plastic waste, collection.
Gwynedd Skip and Plant Hire Lon Hen Felin, Caernarfon	Skip Hire

LL55 2BD	
A Hughes Grab Hire 5 Waen Wen Bangor Gwynedd LL57 4UF	Grab Lorry Service
Kevin Humphreys Skip Hire and Waste Management Llangefni/Bryngwran	Skip Hire and Trade Waste Collection
CMP Skip Hire, Rhuddlan Bach Quarry Brynteg Anglesey LL78 7JJ	Skip Hire and Licensed Tipping Facility
B & M Davies Bangor LL57 4DN	Skip Hire
Bangor & Anglesey Skips Bangor	Skip Hire
Anfrag Skip Hire Tan y Foel Deiniolen Caernarfon LL55 3EE	Skip Hire
Grays Waste Management Limited, Porthdafarch Road, Holyhead, LI65 2SA And Mona, Penrhyndeudraeth Works.	Skip Hire and Trade Waste Collection
Matthews Auto Salvage, Gaerwen LL60 6LF	Auto salvage