Revised Local 2018-2033 Development Plan

OCTOBER 2019

Cyngor Sir Gâr Carmarthenshire Waste

Contraction of the local

6

Contents

			Page
1.0	Back	ground	1
2.0	Wast	e Management within Carmarthenshire – the local position	8
3.0		arthenshire County Council's role as Waste hing Authority	16
4.0	Key I	ssues addressed in the WPMR for SW Wales	20
	4.1	Landfill voidspace	20
	4.2	Meeting targets for recycling – and the associated need to find sites	20
	4.3	Residual waste needs	20
	4.4	Food waste	21
	4.5	The Circular Economy	22
	4.6	Incorporating waste facilities in new developments	23
	4.7	Involvement of the Waste Management Industry	23
5.0	Conc	lusions	24

APPENDIX 1 Waste Facilities in Carmarthenshire

APPENDIX 2 Waste applications and permissions since the adoption of the LDP

1.0 Background

1.1 This Topic Paper sets out current legislation/guidance (European, national, & regional) in respect of the management of wastes and explores how this influences Carmarthenshire at the local level in respect of preparation of the Revised Local Development Plan (LDP).

1.2 The system of waste management and waste planning is undergoing a rapid transition. The over reliance on landfill as the preferred method of dealing with waste is now viewed as unsustainable. Legislation introduced by the European Union (EU) sets targets for waste minimisation and recycling and will require new methods of managing waste, together with a significant increase in the number of facilities to enable these methods to be implemented and targets to be met. The EU legislation has already been transposed into national legislation in the UK and so in the likely event (at the time of writing) of the UK leaving the EU the requirements will already be enshrined in legislation in both the UK and Wales.

1.3 The Topic Paper is meant to provide evidence for the Deposit Local Development Plan, and in so doing will remain an evolving document, subject to update and revision as and when new data becomes available.

The Current Legislative Position

European Directives

1.4 As a Member of the European Union (EU), the UK has an obligation to implement the provisions of European Directives within its own legislatory framework. There are a number of directives relevant to waste planning, the most important of these being the *Waste Framework Directive* and the *Landfill Directive*.

The Waste Framework Directive

1.5 The Waste framework Directive is the principal piece of legislation controlling waste management throughout the EU. It seeks to end the over-reliance on the landfilling of waste through the introduction of the sustainable waste hierarchy principle which stipulates that Member States shall take appropriate measures to encourage: Firstly, the prevention or reduction of waste production; Secondly, the recovery of waste by means of recycling or reuse; Thirdly, the use of waste as a source of energy. The waste hierarchy principle views landfill as a last resort. The Directive also requires Member States to produce waste management plans, setting out their capacity to manage their own waste, using an adequate network of waste facilities.

1.6 A new Framework Directive for Waste Management in the EU was adopted in 2008. This revises EU legislation on waste and replaces the existing Waste Framework Directive, the Hazardous Waste Directive and the Waste Oil Directive. It applies a new waste hierarchy, expands the 'polluter pays' principle by emphasising producer responsibility and applies more stringent waste reduction and waste management targets for Member States.

The Landfill Directive

1.7 The Landfill Directive introduced licence applications and technical requirements for the design and operation of landfills. It also banned certain types of waste from landfill and introduced a staged reduction in the amount of biodegradable municipal waste sent to landfill, and applies penalties if the targets are not met. The changes introduced by this Directive have direct relevance for local planning authorities when preparing their local development plans. In particular, adequate provision should be made for facilities to accommodate waste prohibited from landfills and for pre-treatment facilities.

- 1.8 Other 'Daughter' Directives of the Waste Framework Directive include:
 - **Hazardous Waste Directive:** seeks to define hazardous waste and provides additional controls on its tracking, movement and management;
 - 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 ground water from the incineration and co-incineration of waste.
 - **Packaging and Packaging Waste Directive:** aims to provide a high level of environmental protection in respect of the management of this waste stream, and also establishes measures to reduce and reuse packaging;
 - End of Life Vehicles (ELV) Directive: aims to prevent waste from end-of-life vehicles and promote the collection, re-use and recycling of the their components to protect the environment;
 - 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.
 - Integrated Pollution, Prevention and Control Directive: seeks to prevent, reduce and eliminate pollution by prioritising efforts on the most significant industrial and agricultural activities. It also focuses on the prudent use of natural resources.
 - The European Direction [2006/21/EC] on the management of waste from the Extractive Industries (Mining Waste Directive): provides for measures, procedures and guidance to prevent or reduce as far as possible any adverse effects on the environment, and any resultant risks to human health, brought about as a result of the management of waste from the extractive industries.

National Context (UK)

1.9 There is a requirement for Member States of the EU to transpose the European Directives into their own legislatory frameworks. The most relevant of these to Wales are as follows:

- The Landfill (England and Wales) Regulations 2002 banned the practice of codisposing of hazardous and non-hazardous wastes in the same landfill;
- The Hazardous Waste (England and Wales) Regulations 2005 and the List of Wastes (Wales) Regulations 2005 increased the number of wastes classified as

'hazardous' to include items such as waste televisions, computer monitors, fluorescent tubes and pesticides;

- The Waste Management (England and Wales) Regulations 2006 'The Agricultural Waste Regulations' – 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;
- Pollution Prevention & Control (England and Wales) Regulations 2000 covers the disposal of waste by landfill, and waste treatment and storage facilities.

National Context (Wales)

1.10 National Planning Guidance in respect of Waste Management is set out in Planning Policy Wales Edition 10 (December 2018) and supplemented by Technical Advice Note (TAN) 21: Waste (February 2014) and relevant Circulars. These documents adhere to the principles set out in the Welsh Government's (WG) National Waste Strategy for Wales *Towards Zero Waste* published in June 2010, which in turn accords with the requirements of European legislation, most notably the Waste Framework Directive and the Landfill Directive.

Towards Zero Waste – The Overarching Waste Strategy Document for Wales, June 2010

1.11 This Strategy sets out a long term framework for waste management and resource efficiency, from now till 2050. There is a commitment to reduce Wales' ecological footprint within a generation and proposals on how to reduce our impact on climate change. The zero waste approach aims to produce no waste in the long term by designing products and services that reduce or reuse waste as far as possible and the development of a local and highly skilled economy for waste management and resource efficiency.

1.12 Implementation of the new strategy will be carried out through individual sector plans. Each plan will describe the role of the sector, the Assembly Government and others in delivering the outcomes, targets and policies in *Towards Zero Waste*.

Collections, Infrastructure and Markets Sector Plan (CIMSP)

1.13 The CIMSP supports *Towards Zero Waste*, by detailing outcomes, policies and delivery actions for organisations, companies and individuals involved with the collection and management of waste resources, and the use of waste derived products. It forms part of the suite of documents that overall comprise the waste management plan/strategy for Wales in accordance with the plan making requirements enshrined in Wales and EU legislation.

1.14 The CIMSP was published in 2012 and was based upon data which has since been updated for certain types of waste stream. Data sources varied depending upon the waste stream under consideration. Industrial, commercial and construction and demolition waste data was all collected using surveys whereas data on local authority collected waste is provided on a quarterly basis directly by local authorities using the Waste Data Flow database.

1.15 The CIMSP used Industrial and Commercial waste data based upon a survey carried out in 2007. Since the publication of the CIMSP a further survey has been undertaken, this provides data on commercial and industrial waste arisings and their management in 2012. Data on Local Authority Collected Waste was obtained from the Waste Data Flow which compiles data provided by Local Authorities directly. The period to which the CIMSP data refers is 2009; data is now available for 2017/18. Construction and demolition waste data was based upon a survey carried out in 2005/06. Since then a subsequent survey has been undertaken which looks at wastes arising and managed in 2012, however, the two surveys are not directly comparable due to changes in definition of some wastes.

Planning Policy Wales (PPW) Edition 10 (December 2018)

1.16 The latest edition of PPW places an emphasis on making best use of material resources and promoting the circular economy. A circular economy is one which aims to keep materials, products and components in use for as long as possible. The principles of the circular economy represent a move away from the current linear model of make, use, dispose, towards the reuse, repair and recycle of wastes which arise during development. This is discussed further in section 4.5 below.

Technical Advice Note (TAN) 21 Waste (February 2014)

1.17 Article 16 of the Waste Framework Directive requires member states to establish an integrated and adequate network for the disposal of wastes, and for the recovery of mixed municipal wastes. TAN 21 requires that progress towards this is monitored to identify whether sufficient landfill capacity is being maintained; sufficient treatment capacity is being maintained; whether the spatial pattern of provision is appropriate to fill identified needs, and also whether any further action is needed by local planning authorities to address unforeseen issues. The CIMSP provides the strategic starting point for the monitoring.

1.18 TAN 21 advises that the upper threshold of the capacity ranges identified in the CIMSP (or any subsequent update) is likely to represent the point at which the extent of provision in a region is considered to be sufficient for recovery capacity. In the SW Wales region the capacity threshold is identified as: 34-327 thousand tonnes per annum. The variation is due to the level of uncertainty regarding volumes of residual waste requiring management.

1.19 TAN 21 advises that the level at which non-hazardous landfill void is sufficient within a region is 7 years. The length of time landfill void lasts will vary considerably as it will depend on a number of different factors such as engineering requirements, daily cover, compaction and rates of settlement and rates of deposition. Planning restrictions can also limit how much of a void is ultimately used as the life of a landfill permission is often limited by the use of condition. TAN 21 doesn't prescribe a methodology for determining the life of a landfill though the CIMSP estimates landfill life based upon a number of different scenarios depending upon residual waste arisings and diversion rates. The CIMSP estimated that under a worst case scenario landfill void in SW Wales would run out in 2020/21, and under a best case scenario void would last indefinitely.

1.20 TAN 21 requires planning applications for disposal, recovery or recycling facilities to be accompanied by a Waste Planning Assessment. The assessment is intended to help inform decisions regarding applications for waste management in light of the requirements of TAN 21.

Regional Context

The South West Wales Region

1.21 The need for a regional waste planning process to assist local authorities in Wales to plan for future waste management facilities and to assist in preparing development plans is set out in TAN 21.

1.22 TAN 21 establishes a requirement for each of the three regions in Wales (North, South East and South West) to prepare a Waste Planning Monitoring Report (WPMR) on an annual basis. Central to the process of preparing the Report is the collection and analysis of information regarding the waste situation within each region. Carmarthenshire falls within the South West Wales region, along with the unitary authorities of Neath Port Talbot, Swansea, Ceredigion, Bridgend and Pembrokeshire.

1.23 Information on the waste situation within each region is required in order to monitor a region's waste arisings, recovery and disposal and in order to make forecasts of future arisings. The challenge of planning for waste management and resource recovery facilities must be undertaken with a sound information base. It is therefore important to have comprehensive, accurate, timely and consistent information.

1.24 Information on the region's waste management / resource recovery facilities is required in order to monitor implementation of *Towards Zero Waste* – both in terms of the facilities that are being planned for in local authority development plans and in terms of the facilities that are currently operating.

Waste Planning Monitoring Report (WPMR)

1.25 The principle role of the WPMR is to collate and present all available data to enable the effective monitoring of both the region's waste arisings and waste management facilities and to assess the region's performance against the targets set out in *Towards Zero Waste*.

1.26 The information and analysis presented in the reports are intended to provide a basis for local authorities and other organisations to take action on the waste arisings within each local authority area and by implication the region as a whole. The Reports also provide an information base to assist the waste management industry make key investment decisions.

1.27 The aims of WPMRs include the following:

- To collate and assess available data on all waste arisings in the region in order to monitor trends in past arisings and ultimately monitor performance against the targets set out in TZW;
- To collate and assess available data on landfill void with a view to predicting the remaining landfill capacity of the region;
- To collate and assess available data on the arisings and management of residual waste and comment on progress being made towards meeting targets regarding alternatives to landfill;
- To collate and assess information on the development of waste policies in Development Plans to monitor the implementation of the provisions of TAN 21 Waste;
- To collate information on current local authority waste management / resource recovery schemes and future procurement;
- To identify any data gaps that exist;
- To provide recommendations that can be carried forward and utilised in the production of future WPMRs.

1.28 Whilst this is only the fourth WPMR, the tables contained within this Report utilise figures going back several years in order to identify trends.

Local Policy Context

The Carmarthenshire Local Development Plan (2014-2021)

1.29 The planning policies in respect of waste management in Carmarthenshire are set out in the Carmarthenshire Local Development Plan (LDP). The LDP was adopted in December 2014, and the policies and proposals contained within this current Plan have contributed towards providing a useful base from which to develop the issues, policies and proposals as part of the preparatory work for the Revised Deposit LDP. The Plan contains three waste policies - one strategic policy and two topic specific policies. In summary:

Policy SP12-Waste Management – strategic policy, part criteria based/part site specific, based on the waste hierarchy and favouring the siting of certain types of waste facility on allocated B2 employment sites;

Policy WPP1-Nantycaws Waste Management Facility – topic specific policy favouring the continued use of a longstanding site for a range of waste management uses;

Policy WPP2-Waste Management Facilities Outside Development Limits – topic specific policy catering for potential facilities to be located in areas not covered by policies SP12 and WPP1

LDP Monitoring

1.30 The Authority published its third Annual Monitoring Report in October 2018. Following the removal of waste as a core indicator at the national level, the LDP has only one monitoring target for waste (concerning the production of an SPG on Nantycaws Waste Facility). The AMR stresses, however, that the need for this SPG has been superseded by evidence contained within the SW Wales Regional Waste Planning Monitoring Reports (WPMRs). Future monitoring at the LDP level will be in accordance with national policy namely PPW and TAN 21, together with future evidence and recommendations contained within subsequent WPMRs. Details of take up of land on B2 employment sites is monitored on a monthly basis and is set out in an annual Employment Land Review which is published every October alongside the AMR. Details of new applications/permissions for waste facilities (whether on B2 sites or not) are monitored as part of this ongoing process (see appendix 2, below).

LDP Review

1.31 On the 10th January 2018, the County Council resolved to prepare a revised LDP for Carmarthenshire. An invitation for candidate sites commenced in February 2018 and closed on 29th August 2018, and the consultation on the Draft Preferred Strategy closed on 8th February 2019.

The Revised Carmarthenshire Local Development Plan Pre-Deposit Preferred Strategy

1.32 The Draft Pre-Deposit Preferred Strategy was published for consultation in November 2018. It sets out one strategic policy in respect of waste; this will be supplemented by the detailed policies and proposals to be formulated as part of the Revised Deposit LDP (which is being prepared alongside this topic paper). This will allow for the further assimilation of up-to-date information and evidence as the plan making process progresses.

1.33 The following policy has been included in the Pre-Deposit Preferred Strategy:

Strategic Policy – SP19: Waste Management

Provision will be made to facilitate the sustainable management of waste through:

- a. The allocation of adequate appropriate land to provide for an integrated network of waste management facilities;
- b. Supporting proposals for waste management which involve the management of waste in accordance with the ranking set out within the waste hierarchy;
- c. Supporting proposals for new in-building waste management facilities at existing and allocated industrial sites which are suitable for waste management facilities;

- d. Acknowledging that certain types of waste facility may need to be located outside the development limits of settlement;
- e. Ensuring that provision is made for the sustainable management of waste in all new development, including securing opportunities to minimise the production of waste.

1.34 The policy acknowledges the in-principle suitability of B2 industrial sites to cater for the modern in-building waste management facilities which employ new technological advancements in processes which now often have the external appearance of any other industrial units, and have the potential to contribute to heat generation which could potentially feed into district heating networks. The policy also embraces the established waste hierarchy principle set out in *Towards Zero Waste*, as well as acknowledging the circular economy stance set out in PPW 10.

2.0 Waste Management within Carmarthenshire – the local position

Waste Streams

2.1 As Waste Planning Authority, Carmarthenshire County Council is responsible for matters relating to land use planning pertaining to the following types of controlled wastes:

- Local Authority Collected Waste (LACW);
- Industrial & Commercial Waste (I&C);
- Construction & Demolition Waste (C&D);
- Agricultural Waste; and
- Hazardous Waste.

2.2 The regulation and monitoring of waste management procedures and sites is shared between the Environment Agency and Carmarthenshire County Council as Waste Planning Authority. The Agency has responsibility for standards of operation at sites, and their potential to cause pollution of the environment. The Waste Planning Authority is responsible for regulating matters such as land use, loss of amenity, traffic movements, time limits for operations, final ground profiles, restoration, after-care and after-use of sites etc, through both its planning policy and development control functions.

2.3 PPW 10 stresses that effective engagement with local authority waste managers will be a necessary component waste planning. The information set out within paragraphs 2.22 - 2.41 below has been provided by the County's Waste Management Team.

2.4 The LDP will need to ensure that it makes provision for any new requirements, and for this a close dialogue will be maintained with the municipal waste officers during preparation of the Revised LDP. For example, the LDP will need to make adequate provision for facilities which encourage the movement of waste up the waste hierarchy and therefore should be sufficiently supportive of bring sites, civic amenity facilities, waste transfer stations and MRFs.

Local Authority Collected Waste (LACW)

2.5 LACW consists mainly of household waste and other wastes collected by the Waste Collection Authority (Carmarthenshire County Council) including municipal parks and gardens waste, beach cleansing waste, some commercial and industrial waste and waste resulting from fly-tipping. Household waste includes waste from household collections (including hazardous household waste and garden waste), waste from civic amenity sites and from bring and kerbside recycling schemes, street sweepings, bulky waste collection and litter collection.

2.6 As Municipal Waste Authority, Carmarthenshire County Council is responsible for managing safely all LACW within the County and also for meeting the targets for waste reduction and recycling set out in *Towards Zero Waste*.

2.7 LACW within Carmarthenshire is covered in greater detail in section 2.22, below.

Industrial and Commercial (I & C) waste

2.8 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 LACW and Industrial Waste.

2.9 Most industry in Carmarthenshire is located in the south east of the County with the major waste producer being Corus in Llanelli. However, there is limited data covering this waste stream, with no continued annual data source. The last Study into I&C waste was carried out on behalf of the Environment Agency Wales (EAW) in 2012.

2.10 The 2012 Study covered data by region rather than down to a local authority level. The report highlighted that South West Wales had the highest preparation for re-use, recycling & composting rate for this type of waste (67%) of the three regions. In terms of meeting national targets, this indicates that in terms of the reuse and recycling of I&C waste, the SW Wales region was already meeting the 2015/16 target (set out in *Towards Zero Waste*) in 2012.

2.11 However, landfill remained the second highest management route (accounting for 21% of the waste) and consequently the 2019/20 target of 10% maximum being landfilled was still some way from being achieved. In the absence of more up to date data it will not be possible to ascertain whether the two separate 2019/20 targets of landfill reduction, and increased recycling, set out above will be met.

Construction and Demolition Waste (C&D)

2.12 C&D Waste is waste arising from the construction, repair, maintenance and demolition of buildings and structures, including roads. It consists mostly of brick, concrete, hardcore, subsoil and topsoil, but it can also contain quantities of timber, metal and plastics.

2.13 There are no reliable figures for Carmarthenshire and it is difficult to estimate tonnages. Carmarthenshire has a large urban area around Llanelli and the Amman valley where many construction projects do take place. As part of the Council's own operations, mobile crushers and screens are used frequently in the Glanaman depot in order to reuse

kerbstone material on footpaths and other activities that do not require high specification road material. Small quantities of C & D waste is taken from householders at all of the Council's Household Waste Recycling centres, whilst large quantities of household and trade C & D are accepted at several transfer stations.

2.14 As with the case of I&C waste, detailed above, data on C&D waste is not kept annually. Studies have been undertaken on an intermittent basis, the most recent being the survey of C&D waste generated in Wales for the 2012 calendar year undertaken by Natural Resources Wales (NRW) on behalf of the Welsh Government (WG).

2.15 The 2012 Study covered data by region rather than down to a local authority level. The preparation for re-use, recycling and other material recovery rate for the C&D waste generated in the SW Wales region was 67% in 2012. This is comparable with the WG targets to increase preparation for re-use, recycling and other material recovery to a minimum of 70% by 2015/16 and 90% by 2019/20. So while the results indicated that the C&D sector was on course towards meeting these targets, the lack of data since 2012 prevents more recent comparisons.

Agricultural Waste

2.16 Agricultural Waste is waste produced at agricultural premises as a result of an agricultural activity. New agricultural waste regulations came into force in 2006. All agricultutral waste with the exception of manure and slurry (when used as a fertiliser) is covered by this regulation.

2.17 Carmarthenshire has a very large rural hinterland, however there is limited accurate data (locally or indeed nationally) for the quantities and types of agricultural waste produced, their disposal, re-use or recycling. This presents a barrier for identifying appropriate targets for the sector to meet *Towards Zero Waste* commitments and to develop actions for the sector. Consequently, it is not possible to give an estimate of the overall reuse, recycling, energy recovery or landfill rates.

2.18 Notwithstanding the lack of data on agricultural waste, it is worth noting that a new project is underway within Carmarthenshire that is aimed at reducing farm waste. Driving the project are Coleg Sir Gâr's Gelli Aur agricultural campus and Power & Water, a Swansea based company specialising in electrochemical-based water treatments. The project has received funding from the Welsh Government, and will apply innovative and proven concept technology to reduce air and water pollution to reduce the overall volume of slurry by up to 80%.

Hazardous Waste

2.19 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 1 below sets out the volumes of hazardous waste arisings in Carmarthenshire between 2011 and 2017.

	2011	2012	2013	2014	2015	2016	2017
Hazardous Waste (Tonnes)	10,785	11,316	13,111	11,194	11,422	12,716	14,908

Table 1. Hazardous waste arisings in Carmarthenshire

Source: WPMR for South West Wales 2019

2.20 The amount of hazardous waste produced in Carmarthenshire (as with the SW Wales region as a whole) has remained fairly consistent over recent years. In terms of managing this waste, a report produced as evidence for the CIMSP in 2009 found that Wales is well served by facilities for the collection and temporary storage of hazardous waste materials – 168 facilities, and that the Country is also well served with a range of chemical, physical and physic-chemical treatment plant with a combined capacity of around 1.8 million tonnes.

2.21 More recently, the WPMR for SW Wales (2019) reported that there has been a significant reduction in the movement of hazardous waste from SW Wales to England in the last 7 years, including year by year reductions in the amount of hazardous waste from Wales going to landfills in England (there are no Hazardous Waste Landfills in Wales).

Local Authority Collected Waste (LACW) arisings and management in Carmarthenshire – the current position

Table 2 sets out the total LACW arisings for Carmarthenshire 2010-2018, and shows what percentage of the these arisings were recycled and composted.

Table 2. Tota	LACW	arisings	in	Carm	narthensh	nire an	d	percentag	ges	recycle	ed	and
composted 20	<u> 10/11 – 2</u>	2017/18										

-	10/11	11/12	12/13	13/14	14/15	15/16	16/17	17/18
Total LACW	78,060	73,675	71,188	77,247	77,824	78,540	83,756	86,362
arisings								
(Tonnes)								
% LACW	43.4	49.3	53.8	55.7	59.6	63.5	66.2	63.6
Recycled &								
Composted								

Source: Stats Wales

2.22 The data shows that there has been a steady increase in recycling and composting rates over the years. There was a small drop in the overall recycling rate in the 2017/18 period, however, rounded up the 63.6% recycling rate meets the 64% target for 2019/20 (set out in *Towards Zero Waste*) - which Carmarthenshire actually exceeded in 2016/17.

2.23 CWM Environmental Ltd, a teckal company to the local authority is responsible for the recycling, treatment and disposal of municipal waste. The residual waste that is collected within Carmarthenshire is currently disposed of to energy from Waste facilities in Europe with a small proportion of waste going to landfill.

Kerbside Recycling and Residual Collection

2.24 The implementation of the October 2016 route rationalisation created the basis of the existing route formations and the purchase of a new fleet of 26t and 15t pod vehicles. Since the rationalisation, results were implemented and taking into consideration the changes to the number of households serviced, time taken to collect, weights and volume of loads etc. Over the last 12 months, an additional rationalisation review has occurred to look at further efficiencies and offering of a purposeful waste collection service. Over the last twelve months, each round has been analysed and additional changes will take place from 1st April 2019, which will incorporate changes for 12,889 households with either day/ week or food liner provision changes. In addition to this a further 2000 households are being added onto the full kerbside scheme, which due to issues in terms of complexes and flat settings with restrictive access and problematic bin chutes and compounds, such difficulties have been overcome and a full recycling service has been provided from 1st April to 100% of Carmarthenshire households.

2.25 During December 2018 to March 2019 all households in Carmarthenshire received a delivery of three rolls of blue recycling bags. This equated to 156 bags and an average of six bags per collection week, although the amount of recycling bags for collection is unlimited. This was in order to provide a more accessible service, with bags being delivered to households rather than residents having to collect. This enables the resident to recycle more and reduce the residual black bag waste. There are 10 official outlets that are in the main council offices with two of those being in Ceredigion with cross border working agreement for their staff to distribute and collate details for extra blue bag requirement. Another one outlet disseminates their stock to the various mobile library services that travel to rural villages across the County. Any household that requires an additional supply to their annual delivery can collect additional rolls from one of these outlets.

Household food waste collection

2.26 Residents are supplied with a free 5 litre brown kitchen caddie and 23 litre green kerbside bin for the weekly collection of food. Free replacement containers are supplied on request. In narrow access locations a 'survival' starch liner for the 23 litre green kerbside bin is supplied free of charge to allow for a co-mingled collection on a 3.5t cage vehicle. Liners for the households serviced by the 3.5t cage vehicle have also received a year supply along with their recycling bag deliveries.

Household garden waste collection

2.27 Carmarthenshire County Council operates a fortnightly, chargeable garden waste bin service. In our second year of operation, we had 3550 subscribers that purchased the hire of the 240 litre garden waste bin for the season. 2018 collection season operated from 19th March – 30th November 2018. 2019 collection service operates from 11th March – 29th November 2019. For 2019 season the fleet increased to three vehicles, these are15t open back vehicles. After evaluation of 2018 season in respect of customer base and collection location trigger points it was established that in order to grow the service and offer a high level of service to our residents we would need to introduce a third vehicle and undertake a rerouting exercise to establish and refine rounds. The rounds for 2019 have scope to incorporate further customer but also this will allow us to issue a targeted marketing strategy to customers within an area that will demonstrate and efficient and effective service that in turn has enhanced capacity for the service.

2.28 Households continue to be encouraged to home compost by purchasing a compost bin for £12 or alternatively take the garden waste to their local Household Waste Recycling Centre.

Household Offensive & Clinical Waste Collection

2.29 Carmarthenshire County Council provides a free of charge collection of offensive waste (Category E) to approximately 1,200 residents throughout the County. This collection is currently contracted to Natural UK and collected by the frequency required by the resident. The hygiene waste is treated at Natural UK's facility in Capel Hendre where 50% of the material is extracted for recycling and the remainder is sent as refuse derived fuel to energy from waste plants in Europe. Clinical waste collections (Categories A-D) are provided by the local NHS service, which is also contracted to Natural UK.

Household bulky waste collection

2.30 The household bulky waste collection staff collects up to three items of furniture or WEEE from resident's homes for a fee (currently £25). Residents can arrange a collection through contacting Carmarthenshire Direct, Contact Centre Team for their requirements or through the website.

2.31 As a first option Carmarthenshire Direct inform residents of charitable organisations that can provide a collection service free of charge or a reduced fee in order that items can be re-used in accordance with the waste hierarchy. Re use organisations are also listed on the bulky waste section of the waste/ recycling webpages.

2.32 The Bulky Waste Collection Teams also carry out a delivery additional request for brown kitchen caddies, green kerbside food bins and compost bins. These teams also provide a delivery service through the bulky waste appointment system arranged through the Contact Centre for our 10 official blue bag outlets. They also service the 15 small WEEE banks situated within the County at Recycling Bring Sites.

Trade waste collection

2.33 Carmarthenshire County Council has a formal agreement with CWM Environmental Ltd. A teckal company to the Authority. As a result trade waste collections from November 2018 have been serviced by CWM Environmental and administered by the Local Authority. From 1st April 2019 the administration and collection are to be combined and delivered by CWM Environmental. The local authority no longer provides a trade waste service in house but will assist any commercial premises on advice and support for commercial waste disposal in obtaining agreements as per Environmental Protection Act 1990 guidance.

Existing Waste Management Sites

2.34 Table 3 below sets out the existing waste management sites within Carmarthenshire used by the Local Authority for the management of municipal solid waste (MSW).

management of MSW	
Name / Location	Description
Whitland Household Waste Recycling Centre (HWRC)	A small, single level HWRC on the outskirts of the village of St Clears. Operated by Cwm Environmental Ltd
Nantycaws HWRC, Llandarrog Road, Nantycaws, Carmarthen SA32 8BG	A large duel level HWRC located a few miles outside of Carmarthen town and operated by Cwm Environmental Ltd
Nantycaws IVC and windrow composting plant Llandarrog Road, Nantycaws, Carmarthen SA32 8BG	Separately sited IVC and wind row composing unit adjacent to the HWRC.
Nantycaws non-hazardous landfill Llandarrog Road, Nantycaws, Carmarthen SA32 8BG	Operated by Cwm Environmental Ltd – landfill can take all non hazardous waste from the local authority and private contractors. Site is currently non-operational.
Nantycaws Materials Recycling Facility, Llandarrog Road, Nantycaws, Carmarthen SA32 8BG	Operated by Cwm Environmental Ltd
Wernddu HWRC Trapp Road, Wernddu, Ammanford SA18 9RY	A small, single level HWRC in an isolated location operated by Cwm Environmental Ltd
Wernddu Transfer Station Trapp Road, Wernddu, Ammanford SA18 9RY	A household, commercial & industrial waste transfer station on the outskirts of Ammanford and operated by Cwm Environmental Ltd. The site is used for the processing and storage of waste and recyclables collected within the Ammanford & Glanaman areas.
Trostre HWRC Trostre Industrial Estate, Llanelli SA14 9UU	A single level HWRC attached to the adjacent Transfer Station operated by Cwm Environmental Ltd
Trostre Transfer Station Trostre Industrial Estate, Llanelli, SA14 9UU	A Household,Commercial & Industrial waste transfer station on the outskirts of Llanelli and operated by Cwm Environmental Ltd. The site is used for the processing and storage of waste and recyclables collected within the Llanelli area.
Glanaman depot	A transport operating centre and council depot owned and operated by the Council located in Glanaman.
Cillefwr depot	A transport operating centre and council depot owned and operated by the Council located on the outskirts of Carmarthen.
Trostre Highways Depot (2 separate sites)	A transport operating centre and council depot owned and operated by the Council located at two locations on the outskirts of Llanelli.

 Table 3. Existing sites within Carmarthenshire used by the Local Authority for the management of MSW

2.35 Carmarthenshire partners with STEPs, on a project called Gwyni Wyrdd which has a repair and re-use workshop at Cross Hands. Suitable household appliances are repaired and re-sold to the public from items collected either by STEPs or via the household waste bulky service. Carmarthenshire has entered into a regional contracts for its textile and WEEE recycling.

Inert waste

2.36 There are several inert waste treatment facilities, but they are not very well used. The facility at Dafen, Llanelli can handle 20,000 tonnes and that at Capel Hendre 25,000 tonnes. Further facilities are planned.

Community Recycling Bring Sites

2.37 Carmarthenshire currently operates 150 community recycling bring sites across the county. Sites can vary in offering recycling streams, such as glass, paper, cans, WEEE, media and textiles. The sites are serviced by a regional contractor for textiles and media. The remaining streams are collected by our in-house collection teams i.e. dedicated collection vehicles 2 x 3 compartment vehicles, 1 x hooklift lorry and WEEE bring banks are collected by our Bulky Waste Collection Teams. Materials are delivered to the MRF, Trostre Transfer Station and glass to our own bulking-up site at Plot 15, Trostre Industrial Estate.

Education & Awareness

2.38 Within the Waste Section the Education and Awareness Team offer support and advice to the public with regard to the combined recycling and food waste scheme.

2.39 Social media is used alongside the Local Authority website to inform residents of changes to collection during Christmas and Bank Holiday collections, bad weather delays and to promote recycling events and press releases. Our website promotes all services offered by the Waste Collection Section and many services can be requested, reported or pre-paid on-line.

Biodegradable Municipal Waste

2.40 In terms of diverting biodegradable municipal waste (BMW) away from landfill, Carmarthenshire is already achieving targets well below the maximum permitted quota set out in the Landfill Allowance Scheme for Carmarthenshire – see Table 5 below.

Table 4. Landfill a tonnages of biodeg				•	ed with actual				
2013/14 2014/15 2015/16 2016/17 2017/18									

	2013/14	2014/15	2015/16	2016/17	2017/18
Landfill Allowance	24,228	23,151	22,074	20,997	19,920
Maximum (Tonnes)					
Actual BMW to	17,681	7,175	2,278	2,388	11,263
landfill	,	,	,	,	,
(Tonnes)					

Source: NRW, Report on the Landfill Allowances Scheme (LAS) Wales 2017/18 & Register of the Landfill Allowances Scheme (LAS in Wales, 2004 onwards.

Future Developments

2.41 The Authority has worked closely with WRAP Cymru on a number of projects over the last twelve/ eighteen months. WRAP Cymru officers have assisted with the route rationalisation exercise that is due to be implemented on 1st April 2019. This has resulted in all households in Carmarthenshire being included in the full kerbside scheme, allowing the authority to offer recycling to 100% of households within the county. In addition a further 12,889 households will have some changes to their collection in respect of day/ week changes, which has allowed the service to provide a more efficient and cost effective way of carrying out the domestic waste and recycling service.

3.0 Carmarthenshire County Council's role as Waste Planning Authority

3.1 TAN 21 places particular emphasis on the requirement for Development Plans to contain policies regarding suitable locations for waste management facilities. Authorities across the South West Wales region have developed a mixture of criteria based and site specific policies. In particular, and in line with the Policy Clarification Note issued by the WG on 28th May 2004, there is a common approach in relation to the permitting of certain types of waste management facility within sites listed for B2 employment use.

3.2 Formerly it was the Spatial Strategy in the Regional Waste Plans (RWPs) that specified the approximate locations or type of location of new facilities in each region. In addition, the RWPs also presented the apportionment of infrastructure to individual authorities. However whilst the RWPs have now been superseded and local planning authorities are not required to specifically quantify the amount of separate future provision likely to be needed for waste facilities, TAN 21 still requires that local development plans should indicate where suitable and appropriate sites exist for the provision of all types of waste management facilities.

Identifying land for waste management purposes

3.3 Formerly the RWPs made a distinction between those facilities considered to be 'inbuilding' and those considered to be 'open-air'. This useful guide is set out in the figure below:

In-Building	Open-Air
Transfer Station	Civic Amenity
In-Vessel Composting	Open-Windrow Composting
Pyrolysis	C&D Exemption
Dirty MRF	C&D Recycling
Gasification	Non-Hazardous Waste Landfill
Incinerator	Hazardous Waste Landfill
MBT	Inert Waste Landfill
Autoclave	

Figure 1. Typical 'In-Building' and 'Open-air' facilities

Source: RWP 1st Review, 2008

3.4 Potential land for in-building waste facilities is set out in Table 6 of the current Carmarthenshire LDP (reproduced in table 5 below). Sites which offer the potential to accommodate In-Building Waste Management Facilities are identified with a "1" next to the site name. A footnote to the table highlights that:

a notional total figure of 31.7 ha of land is potentially available on these sites. Added to this figure is the potential capacity available at Nantycaws Waste Management Site, as well as possible land that may become available on existing employment, waste and other non-allocated sites during the Plan period.

LDP Ref	Site Name	Location	Use Class	На
Growth Area	IS			
GA1/E1	Cillefwr Industrial Estate ¹	Carmarthen	B1,B2,B8	4.38
GA1/MU1	West Carmarthen	Carmarthen	B1,B2,B8	5.45
GA1/MU2	Pibwrlwyd	Carmarthen	B1,B2,B8	15.50
GA2/MU9	Delta Lakes	Llanelli	B1	9.78
GA2/E1	Dafen ¹	Llanelli	B1,B2,B8	22.80
GA3/E1	Cross Hands Business Park	Ammanford/ Cross Hands	B1,B2,B8	0.79
GA3/E2	Meadows Road, Cross Hands	Ammanford/ Cross Hands	B1,B2,B8	1.16
GA3/E3	Parc Menter, Cross Hands	Ammanford/ Cross Hands	B1,B2,B8	1.04
GA3/E7	Cross Hands East	Ammanford/ Cross Hands	B1,B8	9.22
GA3/E8	Cross Hands West Food Park	Ammanford/ Cross Hands	B1,B2,B8	8.91
GA3/E10	Capel Hendre Industrial Estate, Capel Hendre	Ammanford/ Cross Hands	B1,B2,B8	4.05
GA3/E11	Parc Hendre, Capel Hendre ^{1,}	Ammanford/ Cross Hands	B1,B2,B8	11.73
GA3/E12	Heol Ddu, Tycroes ²	Ammanford/ Cross Hands	B1,B8	0.34
Total				95.15

Table 5 Employment Land Allocations

LDP Ref	Site Name	Location	Use Class	На					
Tier 2-4 Settlements									
T2/1/E1	Dyfatty	Burry Port	B1,B2,B8	3.28					
T2/2/E1	Beechwood Industrial Estate	Rhosmaen/ Llandeilo	B1,B2,B8	2.33					
T2/4/E1	Sunny Bank	Newcastle Emlyn	B1	1					
T2/5/E1	Land adjacent Station Yard	St Clears	B1,B8	0.33					
T2/5/E2	Land adjacent A40	St Clears	B1,B8	1.23					
T2/5/MU1	Old Butter Factory	St Clears	B1,B8	0.36					
T2/6/E1	West Street	Whitland	B1,B8	0.27					
T2/6/E2	Whitland Industrial Estate	Whitland	B1,B8	1.07					
T2/6/E3	Whitland Creamery	Whitland	B1,B8	1.7					
T3/8/E1	Land east of Station Road	Glanamman/ Garnant	B1	0.7					
T3/11/E1	Old Foundry	Llanybydder	B1,B8	0.51					
SC34/E1	Pantyrhodyn Industrial Estate	Cilyrychen	B1,B2,B8	1.5					
SC34/E2	Cilyrychen Industrial Estate (north)	Cilyrychen	B1,B2,B8	1.7					
Total	· · · /	•		15.98					
Total (all site	s)	Total (all sites)							

3.5 As part of the preparation for the Revised Deposit LDP, various sources of evidence were used to carry out an up to date assessment of suitable land with the potential to accommodate waste management operations. The evidence included the following:

- LDP Annual Monitoring Reports;
- LDP Annual Employment Land Reviews;
- Larger than Local Employment Land Review
- Site Visits

3.6 The LDP annual monitoring reports identify take up (planning permission granted and [where applicable] commencement of operations) on allocated employment land within the Plan over a 12 month period from April 1 to March 31 the following year. A greater level of detail is provided by the annual employment land review which is published alongside the AMR and which in addition also identifies take up (and changes of use) on existing employment sites, as well as take up employment related operations on other sites. Where planning applications and permissions relating to waste management are identified, these are noted and recorded (see appendix 2, below).

3.7 More recently a Larger than Local Employment Land Study was commissioned jointly by Carmarthenshire and Pembrokeshire County Councils (and the National Parks covered by those authorities) as part of the evidence for their Revised LDPs. This study focussed on the linkages between the authorities, establishing ways of working together, as well as carrying out an audit of potential sites for allocation in the respective LDPs based on economic forecasts, and calculations of floorspace and site area requirements.

3.8 The evidence referred to above was utilised in the interpretation of the required amount of employment land to be allocated in the Revised LDP. From the sites identified, those B2 sites with the potential to accommodate in-building waste management facilities were considered. In terms of allocated B2 employment land, the Revised Deposit LDP contains a provision of c.20-30ha (excluding existing B2 sites). Out of this substantial choice of land, a notional total figure of over 30 ha has been identified as potentially suitable for waste management purposes. Additional potential land capacity exists at the Nantycaws Waste Management Site and this been identified on the Revised Deposit LDP Proposals Map. Further potential might exist at other waste sites within the County listed in appendix 1 (in terms of potential expansion or change of use) dependent upon individual circumstances.

3.9 The current importance of Nantycaws as a site for multiple waste management operations is reflected in the current Carmarthenshire LDP which contains a specific policy safeguarding this waste management site.

Nantycaws – the current position

3.10 Current operations at the site include:

- Windrow Composting,
- In Vessel Composting (IVC),
- Civic Amenity Site,
- Landfill Site (Non Hazardous),
- Landfill Gas Burner (electricity produced sold to the grid),
- Materials Reclamation Facility (MRF)

3.11 In terms of Biodegradable Municipal Waste (BMW), the IVC plant requires 60% green waste and 40% food waste. Future options are to either to remain with this or go with an alternative, Anaerobic Digestion (AD) facility – which does not require green waste. Planning permission for an AD facility at the site was granted in 2015.

3.12 It must be noted that whilst the LDP can identify, through the land use planning system, the locations that it feels would be appropriate for waste facilities, it would be the municipal waste authority or the waste management industry that would ultimately come forward with proposals on these sites. The process is therefore largely market led. In addition to the sites that will be allocated in the Revised LDP, the waste industry might in the future come forward with alternative suggestions on sites that have not been allocated. In these instances, the suitability of such sites will be assessed on their individual merits and in relation to all relevant policies contained within the Revised LDP.

4.0 Key Issues addressed in the WPMR for SW Wales

4.1 Landfill voidspace

4.1.1 The Welsh Government has a long term aim of eliminating landfilling as far as possible. *Towards Zero Waste* sets limits on the total amount of residual municipal waste and industrial and commercial waste sent to landfill. However, it is recognised that disposal to landfill will continue in the short to medium term (to 2024/25). This is partly due to the way in which waste is collected, the infrastructure capacities already in place to deal with waste and the existence of legacy wastes and incineration residues, where no safe alternative to ultimate landfill disposal currently exists.

4.1.2 Carmarthenshire is one of six local authorities located within the South West Wales region. The Waste Planning Monitoring Report (WPMR) produced for the region each year identifies the amount of landfill capacity (voidspace) remaining within the region as a whole. The level (set out within TAN 21) at which the void in each region is considered sufficient and should be maintained is 5/7 years. Whilst the latest WPMR (for the 2018/19 period) identifies sufficient capacity, if the situation changes in subsequent years then potential locations for a new landfill site will need to be considered that would serve the requirements of the region. TAN 21 notes that the areas of search maps (prepared to support the regional waste plan first reviews in 2008) for open-air facilities will provide a useful starting point for site searches, however other detailed information and local knowledge will be invaluable.

4.2 Meeting targets for recycling – and the associated need to find sites

4.2.1 The WPMR for the SW Wales region monitors the recycling rates of all constituent authorities within its region and reports on whether the targets set out in *Towards Zero Waste* are being met. Progress has been very promising on a year on year basis, with the combined recycling rates for the region for the 2016/17 period (64.3%) already meeting the *Towards Zero Waste* 2019/20 target of 64%. Associated with the success in meeting the targets is the need to ensure that new facilities are in place that can cater for the changing nature of waste management.

4.2.2 In accordance with the waste hierarchy, the Collections, Infrastructure and Markets Sector Plan (CIMSP) indicates a move towards the reduction of disposal and recovery options for treating waste in favour of high volume source segregated collection followed by reprocessing as well as preparation for re-use and prevention.

4.2.3 It will be important therefore that planning authorities monitor progress towards the provision of an integrated and adequate network of waste disposal installations and of installations for the recovery of mixed municipal waste and similar wastes from commercial and industrial sectors as well as private households. LDPs have a crucial role to play in facilitating the delivery of such a network of new facilities.

4.3 Residual waste needs

4.3.1 Although it is difficult to predict with complete certainty the future needs for residual mixed waste treatment, recovery and for the disposal of waste due to the variety of factors

that affect future tonnages and actual existing capacity, the CIMSP sets out the continued need for increased recovery of residual wastes which are incapable of being recycled. Therefore, across Wales a need exists to develop more residual waste treatment and recovery facilities and to ensure that sufficient disposal capacity is maintained at a level appropriate to support the overall aims of Towards Zero Waste and Collections, Infrastructure and Markets Sector Plan.

4.3.2 TAN 21 notes that whilst the Waste Framework Directive requires that waste disposal and recovery of mixed municipal waste should be undertaken at one of the nearest appropriate installations to the source of the waste arising, this does not carry with it the expectation that all areas should be self sufficient in terms of the network. Waste arising in one area may be better treated or disposed of in a neighbouring local authority area or region and the envisaged 'network' of infrastructure is likely to be spread over a wider area than a single local authority administrative boundary. However, in line with sustainability principles, there is an expectation that all areas should be prepared to accommodate infrastructure to support the development of an integrated and adequate network.

4.3.3 The current WPMRs for the 3 regions have reported differing results in respect of the management of residual waste. South East Wales for example has a large Energy from Waste (EfW) facility that handles the residual waste from several authorities within that region. In contrast, South West Wales continues to rely on landfill to deal with its residual waste, but also some authorities (including Carmarthenshire) have been exporting some of their residual waste to EfW facilities in Europe.

4.3.4 The markets are clearly dictating where the local authorities in SW Wales are currently disposing of their residual waste. The WPMR has reported that this situation is impacting upon the actual need for a new residual waste facility within SW Wales that could cater for the region's waste. An example was given of a planning application for a gasification facility being refused partly due to the lack of evidence provided to show where the waste material was going to be sourced (as it was not clear that there would be sufficient quantities from within the region to make it viable).

4.3.5 The latest WPMR for SW Wales highlights a current feasibility study by consultants on behalf of Swansea Council into the potential for an EfW facility to serve the region. The results of this study will be important as it might point to the way forward for the management of residual waste within the region and will have to be acknowledged in the LDPs of the authorities concerned.

4.4 Food waste

4.4.1 There is no consistent annual reporting of food waste arisings in the UK or Wales. However, WRAP has published data on household food waste (HHFW) regularly since 2007. Studies published in 2013 and 2017 estimated annual food waste arisings within UK households, hospitality and food service, food manufacture, retail and wholesale sectors at around 10 million tonnes.

4.4.2 The following figure shows the amounts of household food waste (HHFW) in Wales for 2009 and 2015. Data for HHFW collected by local authorities (residual and collections targeting food waste) expressed on per person basis.

HHFW (kg / person yr)					Char	nge
		2009	2014	2015	Kg / person / yr	%
	Wales	75.4	n/a	66.2	-9.2	-12.2%

Source: WRAP, Household Food Waste in the UK, 2015 (January 2017)

4.4.3 The WRAP report highlighted that Wales produced lower levels of food waste in 2015 than the UK estimate for the same waste streams - 73.1kg / person / year. The Report goes on to say that potential reasons for this include Wales having lower income levels than the rest of the UK (which might provide a greater motivation for action); and/or having more widespread and better used separate food waste collections (which could have helped raise awareness of the amounts wasted). The Report adds that further research is needed to better understand this, and identify any lessons that could help reduce further HHFW across the UK.

4.4.4 The latest WPMR for SW Wales reports that there is greater certainty with regards the management of food waste within the south west region, than is the case with residual waste (highlighted above). In the region, five out of the six local authorities have contracts with Agrivert to send their food waste to the company's Anaerobic Digestion Facility near Bridgend. The remaining authority (Carmarthenshire) has its own In Vessel Composting facility at the Nantycaws Waste Management site which deals with the food waste from this county, where it converted it into a saleable compost.

4.4.5 Notwithstanding the lack of up to date data on the amounts of food waste produced annually, the WPMR reports that there is unlikely to be any need for further capacity for facilities to handle food waste within the region. However, the situation will be updated annually and any changes will be reported in subsequent WPMRs.

4.5 The Circular economy

4.5.1 A key element within PPW Ed10 is the move towards embracing a more circular economy in Wales. A circular economy is one which aims to keep materials, products and components in use for as long as possible. There are environmental, social and economic benefits of taking such an approach, most notably the increased value and productivity of materials, financial savings for the construction sector and the prevention of waste.

4.5.2 Development proposals will be encouraged that incorporate design features and materials which enable flexibility and adaptability throughout the design life of a building and which will enable re-use of the materials upon deconstruction.

4.5.3 Where appropriate, the use of locally sourced, alternative or recycled materials will be encouraged, including the reuse and recycling of secondary aggregates, construction, demolition and excavation waste, incinerator bottom ash and other appropriate recycled materials.

4.5.4 Construction sites inevitably require a degree of cut and fill engineering operations. Developers will be required to submit a natural materials management plan and as part of site treatment, the cut and fill balance of materials excavated should be assessed so as to avoid the creation of waste which cannot be effectively re-used due to lack of suitable storage facilities.

4.5.5 To this end, a policy promoting circular economy principles has been included within the Revised Deposit LDP. In the policy, development proposals will be required to demonstrate, via the submission of a natural materials management plan, how the generation of waste has been minimised and any waste generated managed in order to keep resources in use for as long as possible.

4.6 Incorporating waste facilities in new developments

4.6.1 TAN 21 requires that adequate facilities and space for the collection, composting and recycling of waste materials should be incorporated into the design of any development. Local development plan strategies and policies proposing development should encourage the provision of adequate and effective waste receptacles for recycling and indicate that they expect developers to take advantage of any opportunities to reduce waste as part of the design and construction of new buildings.

4.6.2 To this end, a policy covering sustainable waste management and new development has been included within the Revised Deposit LDP. In the policy, development proposals must ensure that provision is made for the sustainable management of waste in all new development, including storage, recycling and by securing opportunities to minimise the production of waste.

4.7 Involvement of the Waste Management Industry

4.7.1 It must be emphasised that LDPs cannot deliver the required network of waste facilities, but can provide a planning framework which enables adequate and sufficient land provision to be made to facilitate the establishment of the required network. The waste management industry is largely market led and it will be private companies (as well as local authority teckal companies) that ultimately establish and run waste operations.

4.7.2 With this in mind, effective engagement with the waste management industry and local authority waste managers should be a necessary component of waste planning. Similarly, it is the responsibility of individual waste management companies and industry bodies to proactively engage with LPA's during the LDP preparation process in order to communicate their needs and interests. This would assist individual LPA's in identifying appropriate sites while taking account of local circumstances.

4.7.3 The private sector also plays an important part in contributing towards moving waste further up the waste hierarchy through its activities in waste reduction, reuse and recycling. Whilst the packaging waste regulations and WEEE regulations should see a reduction in the amounts of waste produced in the future.

4.7.4 In terms of recycling, all Council household waste recycling sites in Carmarthenshire are run by CWM Environmental Ltd – a teckal company to the Authority. In addition, appendix 1 sets out a list of permitted sites within the County many of which are operated by private companies and which provide a valuable service in recycling various types of waste.

5.0 Conclusions

5.1 This Paper has highlighted the national, regional and local policy aspects surrounding planning for waste management within the County, and has provided background evidence and information that will be utilised in the preparation of the Revised Local Development Plan for Carmarthenshire. The Paper has shown that the field of waste management is rapidly changing and that the planning system has an important role to play in facilitating the transition from the over reliance on landfill and towards more sustainable waste practices in accordance with the waste hierarchy.

5.2 A key piece of evidence is the annual Waste Planning Monitoring Report (WPMR) for the South West Wales Region. The WPMR provides up to date information on the performance of the region in respect of the recycling of waste, as well as setting out the current position in terms of the management of residual waste and the situation regarding the amount of remaining landfill void. All this evidence needs to be taken into account by individual authorities both in the preparation of their LDPs as well as in cross border working arrangements.

5.3 Whilst the latest WPMR points to continued positive recycling rates within the region, as well as cross border working in respect of certain waste streams (e.g. food waste), the future position in respect of the management of residual waste, and remaining landfill void, is less clear. What is also concerning is the lack of continuous data on certain waste streams such as Construction & Demolition (C&D), Industrial & Commercial (I&C) and agricultural wastes.

5.4 This Paper is an evolving piece of evidence and will be updated throughout the preparation process of the Revised LDP, utilising the most up to date information provided by the LDP annual monitoring reports, employment land reviews, WPMRs and any other relevant information.

APPENDIX 1 – Waste Facilities in Carmarthenshire

Site Operator	Site Name/Address	Type of Facility	Site GridReference	Site PostCode
Recycling Equipment	Linton Yard	HCI Waste Transfer	SS 54996 98484	SA14 9SU
UK Ltd	A management of the Materia	Station	CNI 00040 40074	
Ammanford Recycling Ltd	Ammanford Metal Recycling, Shands Rd, Ammanford	ELV Facility	SN 62340 12974	SA18 3SU
JH Davies	Neville's Dock, Seaside, Llanelli	Metal Recycling Site	SS 50335 98852	SA15 2NW
Dyfed Recycling Services	Pencoed Yard, Bellevue Rd, Bynea, Llanelli	HCI Waste Transfer Station	SN 52853 01353	SA14 9LN
Browns Waste Management and Recycling Ltd	Bynea, Llanelli	HCI Waste Transfer Station	SS 54934 98581	SA14 9SU
G. D. Environmental Services Limited	Taybrite Works, Heol Y Bwlch, Bynea	HCI Waste Transfer Station	SS 55100 98600	SA14 9ST
Pendragon Waste & Skip Hire	Pendragon Waste & Skip Hire, Thornhill Rd, Cwmgwili, SA14 6PT	HCI Waste Transfer Station	SN 57576 11300	SA14 6PT
CWM Environmental Ltd	Trostre Road Industrial Estate	Household Waste Amenity Site	252,371,199,453	SA14 9UU
CWM Environmental Ltd	Nantycaws Waste Management Site, Llanddarog Rd, Nantycaws, Carmarthen	HCI Waste Transfer Station	SN 47387 17556	SA32 8BG
CWM Environmental Ltd	Nantycaws Waste Management Site, Llanddarog Rd, Nantycaws, Carmarthen	Physical Treatment Facility	SN 47308 17601	SA32 8BG
CWM Environmental Ltd	Nantycaws Landfill, Llanddarog Rd, Nantycaws, Carmarthen	Non Hazardous LF	SN 47860 17580	SA32 8BG
Rock & Fountain Quarry	Conwyl Elfed, Carmarthen	HCI Waste Transfer Station	SN 39039 25798	SA33 6AR
T Richard Jones Betws Ltd	Foundry Road, Ammanford	Biodegradeable Waste Transfer Station	SN 63272 12187	SA18 2LS
Carmarthen Recycling & Environmental Services Ltd	Transfer Station, Johnstown, Carmarthen	HCI Waste TS + asbestos	SN 38980 18935	SA31 3RB
Natural UK Ltd Healthcare Management Facility	Unit 3, Capel Hendre Industrial Estate, Capel Hendre, Ammanford	Clinical Waste Transfer Station	SN 59321 11008	SA18 3SJ
Browns Recycling Group Ltd	Former Morlais Colliery, Pontardulais Rd, Llangennech, Llanelli	Physical Treatment Facility	SN 57429 02522	SA14 8YF

Carmarthenshire County Council	Cwmamman Depot, Glanamman, Ammanford	HCI Waste Transfer Station	SN 67644 13719	SA18 1LQ
Carmarthenshire County Council	Cillefwr Depot, Johnstown, Carmarthen	HCI Waste Transfer Station	SN 39659 19097	SA31 3QZ
Carmarthenshire County Council	Troste Depot, Trostre Industrial Park, Llanelli	Hazardous Waste Transfer Station	SS 52270 99331	SA14 9RA
CWM Environmental Ltd	Wernddu Civic Amenity and Transfer Station, Wernddu Road, Ammanford	Household Waste Amenity Site	SN 64731 15307	SA18 2UR
CWM Environmental Ltd	Whitland Recycling Centre & Civic Amenity Site	Household Waste Amenity Site	SN 19250 16750	SA34 0AE
Gwendraeth Valley Recycling Ltd	Carway Fawr Site Office, Former Cynheidre Colliery, Five Roads, Llanelli	HCI Waste TS + treatment + asbestos	SN 49590 07986	SA15 5YN
Mekatek Limited	Amex Park, Johnstown, Carmarthen	Biological Treatment Facility	SN 40060 19310	SA31 3NF
Mark Tucker	Talfarn Farm	Deposit of waste to land as a recovery operation	SN 25054 13857	SA33 4HJ

Source: Natural Resources Wales

APPENDIX 2:

Waste Applications & Permissions since the adoption of the LDP

Application	Location	Proposal	Decision		
CARMARTHENSHIRE					
S/29559	New Lodge Farm, Pontardulais Road, Cwmgwili, Llanelli SA14 6PW	Demolition of existing structures on site, restoration and re-profiling the site and the construction of a 2 - 3 MWE Photovoltaic solar array and an energy recovery centre (comprising an advanced conversion technology (ACT) 8 - 12 MWE pyrolysis plant and an anaerobic digestion 2 - 3 MWE facility with an integrated education centre) together with access improvements, landscaping and associated works	Refused 4 th February 2016		
W/31601	Cerrigyrwyn Quarry, Llangynog, Carmarthenshire SA33 5HU	Construction of an inert waste recycling facility and associated works	Full Granted 12/10/16		
E/32491	The Old Albion Yard, Station Road, Llangadog, SA19 9LT.	Cert of Lawfulness - Existing Storage of Skips, hardcore and wood. Recycling of wood and hardcore	CLEUD - Approval 8/9/15		
S/33036	Skip Solutions, Heol Y Bwlch, Bynea, Llanelli, SA14 8SU.	Change of use from B2 to waste transfer station (sui generis).	Full Granted 2/2/16		
S/34071	Former Morlais Colliery, Pontardulais Road, Llangennech,Llanelli, SA14 8YN	Inert waste processing centre.	Full Granted 12/9/17		
W/32963	Land part of MEKATEK, Amex Park, Old Llansteffan Road, Johnstown, Carmarthen, Carmarthenshire SA31 3NF	Formation of HGV hardstanding and lorry park.	Full Granted 11/1/16		
W/35655	Land off Alltycnap Road, Johnstown, Carmarthen SA31 3QY	Construction of a tyre recycling warehouse with associated offices, operational yard, storage compounds and ancillary infrastructure.	Full Granted 4/1/18		
W/36430	Factory Yard, Cwmann, Lampeter, Carms, SA48 8ES	Application for a Lawful Development Certificate for a proposed use or development certificate for a proposed use or development retention of existing building and associated yard for the incineration of animal and clinical waste, but with proposed internal reconfiguration and sub- division of floorspace to provide plant and equipment to process the animal waste as animal foods and tallow (thus continuing to fall under Use Class B2).	CLOPUD - Approval 25/1/18		

S/38134	Glyngerwen Quarry, Felinfoel, Llanelli, SA14 8BX	Variation of condition 6 on S/29950 (Types of Waste that can be accepted on site).	Application valid from 6/12/18. Pending decision.
E/38116	Land adjacent to Ty Newydd, Thornhill Road, Cwmgwili, Llanelli, SA14 6PT.	The proposed development is for a hardstanding pad with an enclosed drainage system which will be utilised as an inert waste transfer station	Application valid from 5/12/18. Pending decision.
E/37516	Unit E1 Capel Hendre Industrial Estate, Ammanford SA18 3SJ UNIT	Building to be used for storage of waste paper.	Application valid from 12/07/18. Pending decision.
W/31966	Nantycaws landfill Site, Llanddarog Road, Nantycaws, Carmarthen SA32 8BG	Provision of an anaerobic digestion plant.	Full Granted 3/8/15
E/32296	Nantycaws landfill Site, Llanddarog Road, Nantycaws, Carmarthen SA32 8BG	Alteration to existing slurry tankby installing a 20KW AD Plant.	Full Granted 8/9/15
W/32504	Coomb Farm, Llangynog, Carmarthen, SA33 5HP	Planning application for 0.5MW Anaerobic Digestion Plant, Coomb Farm, LLangynog, Carmarthen, SA33 5HP	Full Granted 8/9/15