

# Public Document Pack



Contact Officer:  
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To: Councillor Ray Hughes (Chairman)

Councillors: Mike Allport, Haydn Bateman, Sean Bibby, Chris Dolphin, Andy Dunbobbin, David Evans, Veronica Gay, Cindy Hinds, Dave Hughes, Joe Johnson, Colin Legg, Vicky Perfect, Paul Shotton and Owen Thomas

14 November 2017

Dear Councillor

You are invited to attend a meeting of the Environment Overview & Scrutiny Committee which will be held at 2.00 pm on Monday, 20th November, 2017 in the Delyn Committee Room, County Hall, Mold CH7 6NA to consider the following items

## A G E N D A

### 1 APOLOGIES

**Purpose:** To receive any apologies.

### 2 DECLARATIONS OF INTEREST (INCLUDING WHIPPING DECLARATIONS)

**Purpose:** To receive any Declarations and advise Members accordingly.

### 3 THE INTRODUCTION OF GARDEN WASTE CHARGES (Pages 3 - 8)

Report of Chief Officer (Streetscene and Transportation) - Cabinet Member for Streetscene and Countryside

**Purpose:** To seek a recommendation to Cabinet to approve the mechanism for introducing charges for the garden waste service.

4 **THE MANAGEMENT OF STANDARD AND BROOKHILL LANDFILL SITES**  
(Pages 9 - 20)

Report of Chief Officer (Streetscene and Transportation) - Cabinet Member for Streetscene and Countryside

**Purpose:** To inform Scrutiny of the outcome of the recent tender for the maintenance of the two landfill sites and provide details of the likely energy production levels from the two sites over the coming years.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Robert Robins', with a horizontal line extending to the right.

Robert Robins  
Democratic Services Manager



## ENVIRONMENT OVERVIEW AND SCRUTINY

|                        |  |
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| <b>Date of Meeting</b> | Monday, 20 <sup>th</sup> November 2017         |
| <b>Report Subject</b>  | The Introduction of Garden Waste Charges       |
| <b>Cabinet Member</b>  | Cabinet Member for Streetscene and Countryside |
| <b>Report Author</b>   | Chief Officer (Streetscene And Transportation) |
| <b>Type of Report</b>  | Operational                                    |

### EXECUTIVE SUMMARY

In 2011 Flintshire introduced its Managed Weekly Collection service (MWC) which changed waste collections in the County from a weekly, black sack service collected at the back door to weekly recycling and food collections with fortnightly collections of residual waste alternating with garden waste - with all of the various waste streams being collected at the kerbside.

This change significantly improved the Council's recycling performance and the Council have since met all of the statutory targets set by Welsh Government (WG), with the next significant targets being 64% in 2019/20 and 70% in 2025. The Council continues to perform well and the performance for 2016/17 was above 68%.

Whilst our recycling performance is good, the service we provide to residents is not fully in line with WG's Blueprint for waste collections in Wales, as the Blueprint recommends that Local Authorities charge residents for the provision of the garden waste collection service and that this funding is then utilised to support the overall recycling service. Given the current period of austerity and the ongoing financial challenges being faced by the Council, it is now necessary to introduce such a charge which will be similar to that which has been introduced by a number of Councils in North Wales and an ever growing number of Councils across England and Wales.

This report sets out how the proposal will be implemented and provides an estimate for the associated financial benefit to the Council from the proposal.

### RECOMMENDATIONS

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| 1. | That the Environment Overview and Scrutiny Committee review and comment on the arrangements for the smooth introduction of the charging policy for Garden Waste service which is part of Stage One of the budget proposals for 2018/19. |
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## REPORT DETAILS

| 1.00 | EXPLAINING THE BACKGROUND TO THE PROPOSALS  |
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| 1.01 | There is no statutory duty on the Council to collect garden waste however garden waste collections contribute significantly to the overall recycling performance through both the brown bin collection service and the garden waste collected at our Household Recycling Centres (HRC's).   |
| 1.02 | The Council first introduced garden waste collections in 2003. At the time the service was offered mainly to urban properties with gardens, which accounts for around 80% of the number of overall properties in Flintshire. In 2011 on the introduction of the current Managed Weekly Collection service it was offered to all properties - both rural and urban.  |
| 1.03 | The current service is provided from the 1st March to the 31st November, as this is when the demand for the service is at its highest and most residents do not require the service over the winter period. The service provides residents with a 140L wheel bin (brown) free of charge which is collected alternately with black bin (residual collections) on a fortnightly basis. The garden waste collected is then taken to the Council's own 'open windrow' composting facility in Greenfield and turned into soil conditioner which is then made available to residents, free of charge at the Council's HRC sites.  |
| 1.04 | In 2011 WG issued its Waste Collections Blueprint which stated the preferred delivery method for waste collections in Wales, in order to deliver high and sustainable levels of recycling. Flintshire's existing waste and recycling collection service in the main aligns with the collections Blueprint, however a significant departure from the process involves the garden waste collection service.   |
| 1.05 | <p>WG recommend that this discretionary service is offered as a chargeable service, which should help reduce landfill and generate revenue for the provision of other statutory services, such as dry recycling and food collections. It is worth noting that WG provide significant funding for the recycling services through the Single Environment Grant each year, although the amount received is falling as the grant has been significantly reduced over the past 3-4 years. The funding provided by WG does not match the cost of operating the full recycling service and the year on year reduction in the Single Environment Grant is encouraging councils to follow their Blueprint.</p> <p>A link to the blueprint is attached to this report however the advice on Garden Waste Collections is clear :</p> <p>Councils should:</p> <p><i>Apply charges for green waste collections (as allowed under the Controlled Waste Regulations 1994), and collect it only once a fortnight.</i></p> |
| 1.06 | In April 2015 the Council's Cabinet approved the introduction of a charge for the 2 <sup>nd</sup> or 3 <sup>rd</sup> brown bin used by residents as previously these bins were  |

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|      | also collected free of charge. Around 2,200 residents have subscribed to this service which now generates a revenue of around £50,000 to the Council.  |
| 1.07 | Given the increasing financial pressures on the Council from both reducing budgets and the reduction in WG grant funding, it is now necessary to introduce a charge for the garden waste service in Flintshire. Whilst the decision to introduce a charge for this service is a difficult one, it should be remembered that garden waste can still be taken to the Councils HRC sites - without charge and the decision to provide and operate a more extensive HRC service than was advised by WG, will result in 5 modern and well operated HRC sites being available to residents, at strategic locations across the County.  |
| 1.08 | <b>How much will the service cost?</b><br>In line with the Corporate charging and Income Policy it is important that all discretionary services achieve full cost recovery and the proposed charges are intended and designed to represent that position.  |
| 1.09 | The proposed charging arrangement will be as follows:<br><br>Charge for First bin (140 litre) - £30 per year<br><br>Charge for second and third bin - £30 per bin per year<br><br>The service provided will operate from 1 <sup>st</sup> March – 30 <sup>th</sup> November and collections will be fortnightly from kerbside or property curtilage.  |
| 1.10 | Introducing a charge for all garden waste collections has been implemented by approximately 42% of all Local Authorities across both England and Wales and in Authorities in North Wales, such as Denbighshire, Gwynedd and Conwy who all now charge for their garden waste collection service.<br><br>Local charges are as follows:<br><br>Denbighshire - £34 per annum (240 litre bin) & £22 per annum (180 litre)<br>Conwy - £1.50 per black sack (max 6 collected per week)<br>Wirral - £40 per annum (240 litre bin)<br>Gwynedd - £33 per annum (240 litre bin)   |
| 1.11 | Experience in other counties has shown that whilst significant income is generated, there is a direct impact on recycling performance. Initial take up of the service is normally around 40% of residents, with around 60% of the original tonnage collected. All of the counties report an increase in green waste tonnages received through their HRC's of around 15% and the capacity to receive the additional garden waste material at the Councils HRC sites will be increased to accommodate the additional material. There is little or no evidence of an increase in fly tipping of garden waste in these areas however the overall reduction in recycling performance is expected to be between 2% and 3%. |
| 1.12 | To ensure that garden waste does not divert to the residual waste stream a concentration on the enforcement of residual (black bin) side waste will be   |

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|      | necessary, particularly in the initial months after introducing garden waste charges. The process for enforcement against side waste has already been approved by Cabinet and will be rolled out across the County in January 2018.   |
| 1.13 | <b>How the system will operate?</b><br>The existing system for gathering payment for the second bin requires the resident to contact the Council to request the service, this contact is either by phone or by calling in at one of the Council's Connect Centres. They are asked to provide an upfront payment (currently £24) and they are then issued with a sticker for their 1 <sup>st</sup> brown bin and one for each additional bin which they have paid for. The stickers are coloured and have a bar code to prevent them from being duplicated and this makes it easier for the collection crews to identify the additional bins at each property. |
| 1.14 | When the new charges for the full garden waste service are introduced the number of residents signing up to the service will significantly increase - up to an estimated 27,600. Whilst the current system of issuing stickers will remain in place the option of paying for this service online (through the Council website) will be introduced. The existing payment options will remain for those who do not have access to a computer.   |
| 1.15 | Notifications of the charge will be sent with the Council Tax information in March 2018 and residents will have until 1 <sup>st</sup> April to register for the new service. Once payment has been received stickers will be dispatched to the residents in order that the crews can recognise which properties are requiring the service. The service will be provided free of charge to all residents during March 2018.  |
| 1.16 | In the longer term and particularly if waste containers are replaced, it will be sensible to place a microchip in each wheel bin to evidence the time and date when it was emptied. Further enquiries on the possibility to retrofit the microchips within existing bins will be made as this will speed up the management and payment process and remove the need to issues stickers each year. If the business case can be established the system could be in place in readiness for the 2019-20 season.  |
| 1.17 | The service will be delivered utilising the existing workforce however the number of vehicles and operators required will reduce, depending on the demand for the service. The rounds will be optimised, based on the number of requests for the service and this will ensure the continued efficiency of the routes whilst maintaining the workloads for staff. The reduction in staff numbers will be accommodated from current vacancies within the service and there will be no redundancies as a result of the proposals.  |

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| <b>2.00</b> | <b>RESOURCE IMPLICATIONS</b>   |
| 2.01        | There will be a reduction in the number of front line operational staff required to operate the service which will be taken up from existing vacancies within the service. |

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|------|--|---------------|-------------------------|----------------------------------|--------------|
| 2.02 | The financial benefit to introducing a charge is significant and detailed below. |               |                         |                                  |              |
|      | <b>Households*</b>   | <b>Charge</b> | <b>Predicted Income</b> | <b>Other Operational Savings</b> | <b>Total</b> |
|      | 27600  | £30.00        | £828,000.00             | £130,000.00                      | £958,000.00  |
|      | * Assumes 40% households sign up to the service                                  |               |                         |                                  |              |

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| <b>3.00</b> | <b>CONSULTATIONS REQUIRED / CARRIED OUT</b>   |
| 3.01        | A Member workshop was held in October 2016 seeking views on the proposed changes to waste services and one of the recommendations was the possibility of charging for garden waste collections. The suggestion was further raised at budget workshops over the summer 2018, when the proposal received broad support.   |
| 3.02        | Extensive communications with residents is required - once the details of the proposals have been approved by Cabinet   |
| 3.03        | Once the service is established a further period of consultation on the future direction of the garden waste service can be undertaken. This will include gaining residents opinion and input into the following developments: <ul style="list-style-type: none"> <li>• The potential to extend the service over the full year.</li> <li>• The use of microchips within the bin to log and record collections.</li> <li>• Payment mechanisms (Standing order etc.)</li> </ul> |

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| <b>4.00</b> | <b>RISK MANAGEMENT</b>   |
| 4.01        | A delivery project team has been established to monitor and oversee the delivery of the new service. |

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| <b>5.00</b> | <b>APPENDICES</b> |
| 5.01        | None              |

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| <b>6.00</b> | <b>LIST OF ACCESSIBLE BACKGROUND DOCUMENTS</b>   |
| 6.01        | Link to WG Blue print<br><br><a href="http://www.wrapcymru.org.uk/sites/files/wrap/Municipal%20Sector%20Plan%20Wales%20-%20Collections%20Buleprint.pdf">http://www.wrapcymru.org.uk/sites/files/wrap/Municipal%20Sector%20Plan%20Wales%20-%20Collections%20Buleprint.pdf</a> |
| 6.02        | <b>Contact Officer:</b> Stephen O Jones<br><b>Telephone:</b> 01352 704700<br><b>E-mail:</b> <a href="mailto:stephen.o.jones@flintshire.gov.uk">stephen.o.jones@flintshire.gov.uk</a>   |

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| <b>7.00</b> | <b>GLOSSARY OF TERMS</b>   |
| 7.01        | WG – Welsh Government<br>MWC – Managed Weekly Collections<br>HRC - Household Recycling Centres |



## ENVIRONMENT OVERVIEW AND SCRUTINY COMMITTEE

|                        |   |
|------------------------|---|
| <b>Date of Meeting</b> | Monday, 20 <sup>th</sup> November 2017                  |
| <b>Report Subject</b>  | The Management of Standard and Brookhill Landfill Sites |
| <b>Cabinet Member</b>  | Cabinet Member for Streetscene and Countryside          |
| <b>Report Author</b>   | Chief Officer (Streetscene And Transportation)          |
| <b>Type of Report</b>  | Operational   |

### EXECUTIVE SUMMARY

The Council has two active landfill sites at Standard Industrial Estate and Brookhill in Buckley. Both of these sites were formerly operated by AD waste on behalf of the Council and operational responsibility passed to the Council in 2010 when the Council took in house all of the waste disposal activities formerly provided by the company.

The sites are currently managed by a small team who are based in Alltami within the Streetscene and Transportation portfolio. The team are supported by specialist contractors and consultants who deliver a range of activities at the sites. There is an active gas extraction system installed over both of the sites which feed electricity generation plants with the value of energy produced at the sites provided back to the service to help fund the ongoing management and maintenance liabilities of the 2 sites.

Due to concerns regarding the resilience within the service, and in an effort to protect income levels into the future, the Council's Cabinet approved a report in May 2015 to outsource the operational management of the sites to a single provider on a performance and shared risk based contract.

This type of contract is complex in nature has taken some time to prepare, with the added complication of the introduction of PV panels schemes (to increase electricity production) at the two landfill sites, the tender was advertised in May of this year. Despite initial market testing and interest from 8 companies, the landfill tender received only 2 tender returns, neither of which was acceptable to the Council.

This report explains why no viable tender was presented and also the next steps in the long term management of the 2 landfill sites.

## RECOMMENDATIONS

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| 1. | The Scrutiny recommends Cabinet approves the proposal to continue to manage the landfill sites within the Streetscene and Transportation portfolio. |
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## REPORT DETAILS

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| <b>1.00</b> | <b>EXPLAINING THE BACKGROUND</b>  |
| 1.01        | The Council has two active landfill sites at Standard Industrial Estate and Brookhill in Buckley. Both landfill sites are operationally closed, fully capped and the sites are now restored, primarily to grassland. A formal 'Closure Plan' is currently being prepared for submission to Natural Resources Wales (NRW) for both sites before the end of 2017.       |
| 1.02        | As owner of the 2 landfill sites the Council has liability for them and with all closed landfill sites this is for a minimum term of 60 years. Whilst both gas and leachate levels will reduce over time our responsibility is to ensure these are controlled at all times and that there is no risk to the local environment from the content of the landfill sites. |
| 1.03        | The sites are operated and managed in accordance with the permit issued and monitored by NRW. Each permit has a set of conditions to ensure that the sites are managed appropriately. Two key elements of managing any landfill site is the controlled management of the both gas and leachate that is generated from the decomposing waste within the site.          |
| 1.04        | An active gas extraction system is installed over both of the sites, each comprising of approximately 45 gas wells and leachate chambers connected via manifolds or directly onto the main gas collection ring main.  |
| 1.05        | The Brookhill landfill is also the site of a leachate treatment plant with a licensed discharge point to main sewer for the leachate material, once it has been through a treatment process. The plant treats leachate from both of the landfill sites.   |
| 1.06        | The Council currently employs 2 full time employees (FTE's) to manage the sites and associated infrastructure. It also engages a number of specialist third party contractors/consultants in managing and supporting the operation.   |
| 1.07        | <b><u>Gas Management and Electricity Generation</u></b><br><br>Both sites have established electricity generating systems, with direct feeds from the gas well collection ring mains and both sites have a direct electrical mains grid connection. The value of energy produced at the sites is falling as gas levels inevitably fall as the waste decomposes.       |
| 1.08        | Brookhill power plant was commissioned in August 2008 and produced power for just under 8 years. The set had been maintained under service  |

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|      | contracts but in November 2016 the engine suffered a major engine failure. One of the main reasons for this failure was that the engine was too large for the depleting levels of gas within the site. (1MW)   |
| 1.09 | Due to the impending landfill tender it was decided to replace this engine with a hired unit until the tender exercise was completed. The smaller hired 400kW unit is provided and maintained by a third party and was installed in early March 2017. Unlike the previous engine this unit is able to operate at its optimum running capacity and is currently running at full capacity with 98% availability which is evidence that it is far more efficient than the old larger unit. The engine is expected to generate an income of about £170,000 during 2017-18.   |
| 1.10 | Electricity has been generating at Standard landfill site since 1996 and is currently in its 21st year of energy production. The engine (which is an older version of the engine that was previously used on Brookhill) has been maintained by a third party contractor throughout its full operational life.  |
| 1.11 | The engine is operated mainly for environmental compliance and for just 2/3 hours per day or until the gas quantity falls below the required threshold to sustain the engine. The engine is expected to generate an income of just £20,000 this year and it will be necessary to completely switch off the unit in the coming years and replace it with either a small micro engine or a flare, to control the diminishing gas levels into the future.   |
| 1.12 | Measuring gas levels within the sites and predicting this into the future is a complicated process however gas predictions in the form of a "gas sim model" are industry practice and can be produced to show levels of gas using historical data. Appendix 1 shows the gas sim model for Brookhill landfill site. It can be seen from this that the gas levels were at their highest in 2006 and that gas levels have been dropping steadily ever since. The model has shown a 60% reduction in gas levels in the period between 2011 and 2017 and this compares directly to the lost income from electricity generation in the same period which is shown in Appendix 2. |
| 1.13 | Clearly diminishing gas levels directly affects the levels on income possible through electricity generation and sale. Appendix 2 shows the levels of income over the same period as the gas levels in Appendix 1 and it can be see that there is a direct correlation.  |
| 1.14 | <b><u>Leachate Management</u></b><br><br>Managing the leachate which is naturally produced by the 2 sites consist of monitoring leachate levels, maintaining and operating underground pumps, leachate transfer and leachate plant operation before the material is finally discharged to foul sewer. This is all necessary to ensure leachate is both contained within the site and does not interfere with gas capture.  |
| 1.15 | Once treated through the treatment plant in Brookhill, the volume of leachate is discharged to foul sewer. Welsh Water levy a charge for every cubic meter discharged and it is in our interests to reduce the levels of leachate as the site matures.   |

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| 1.16 | <b><u>Landfill Tender</u></b><br>Due to concerns regarding the resilience within the service and in an effort to protect income levels into the future, the Council's Cabinet approved a report in May 2015 to outsource the operational management of the sites to one provider on a performance and shared risk based contract.   |
| 1.17 | This type of contract is complex in nature and took time to prepare as it was a requirement for a single provider to manage all elements and to guarantee levels of income for a 7 year term, thus providing some financial certainty for the Council into the future.  |
| 1.18 | The added complication of the major engine failure at Brookhill and the introduction of PV panels schemes at the two landfill sites resulted in the tender being advertised in May of this year. Despite initial market testing and interest from 8 companies, the landfill tender received only 2 tender returns, neither of which was acceptable to the Council. One of the tenders was non-compliant and the second was considerably more expensive than the current arrangements. |
| 1.19 | A major factor in the lack of interest in the landfill tender opportunity is the depleting gas levels within the 2 sites. Tenderers were not prepared to take on the risk of guaranteeing levels of income at the ageing sites and whilst the 2 tender returns were prepared to operate the sites, they required the risk to remain with the Council.   |
| 1.20 | Due to the lack of external interest in managing our landfill sites it is now proposed that we continue to do this within the current team by building resilience within the existing structure (through training) and also engaging with external third party contractors and consultants on short to medium term contracts. The team can also take on the management of the PV panels and explore other opportunities for additional income that may exist.                         |
| 1.21 | The levels of income realised through gas capture and electricity generation will always be on a diminishing scale and in future this reduction will be built into the Council Medium Term Financial Plan. Appendix 3 provides estimated future levels of income and this will form the basis of future budgets income projections.   |

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| <b>2.00</b> | <b>RESOURCE IMPLICATIONS</b>   |
| 2.01        | The existing team of 2 FTE's will be supported by generic technical support from within the Streetscene and Transportation team. |

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| <b>3.00</b> | <b>CONSULTATIONS REQUIRED / CARRIED OUT</b>                         |
| 3.01        | Full engagement with businesses was undertaken prior to the tender. |

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| <b>4.00</b> | <b>RISK MANAGEMENT</b>  |
| 4.01        | There is always a risk both operationally and financially when managing closed landfill sites. The risk is mitigated by employing experienced Officers and appointing specialist contractors and consultants to manage the sites. Obviously as income projections are lowered the level of risk from financial failure is also reduced. |
| 4.02        | The Environmental risk from the sites remains however this is mitigated by the agreed closure plan and ongoing site monitoring work, which is undertaken by staff from the Streetscene and Transportation portfolio.  |

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| <b>5.00</b> | <b>APPENDICES</b>   |
| 5.01        | Appendix 1 - Gas sim model (Brookhill).<br><br>Appendix 2 – Recent income from electricity generation.<br><br>Appendix 3 - Future income projections. |

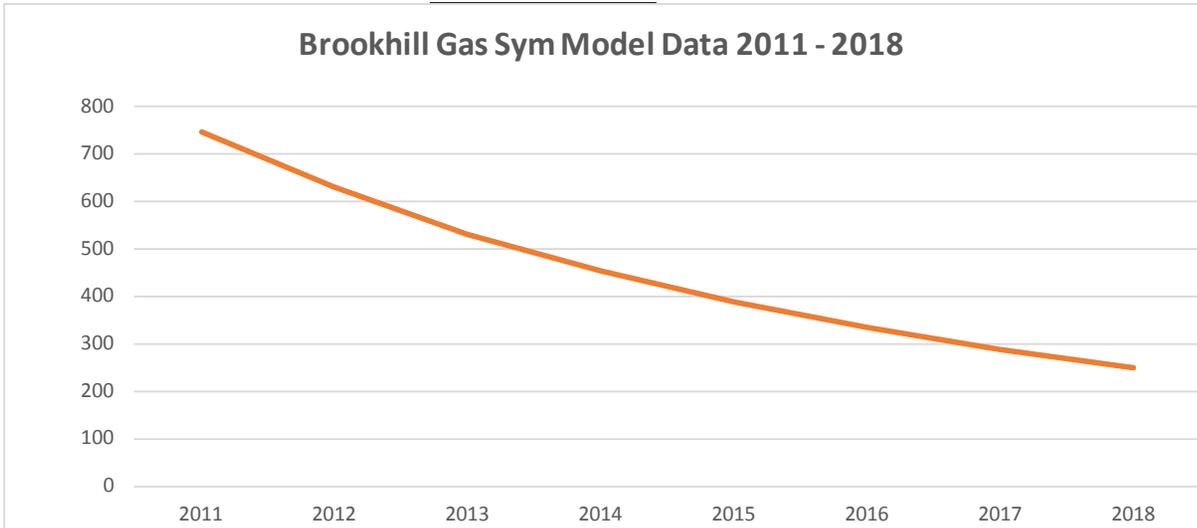
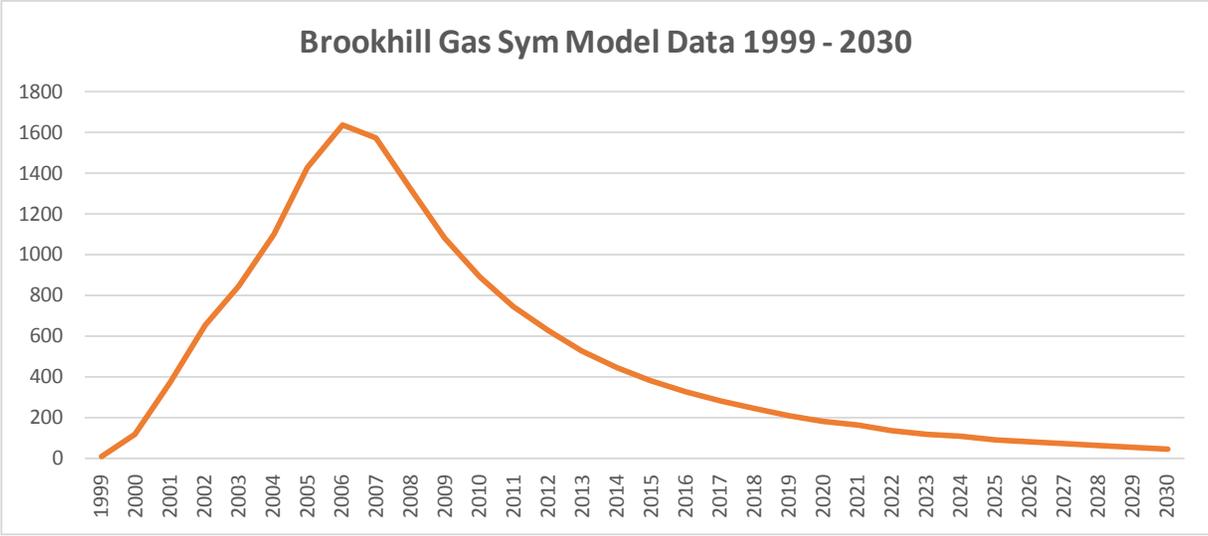
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| <b>6.00</b> | <b>LIST OF ACCESSIBLE BACKGROUND DOCUMENTS</b>   |
| 6.01        | <b>Contact Officer:</b> Stephen O Jones<br><b>Telephone:</b> 01352 704700<br><b>E-mail:</b> <a href="mailto:stephen.o.jones@flintshire.gov.uk">stephen.o.jones@flintshire.gov.uk</a> |

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| <b>7.00</b> | <b>GLOSSARY OF TERMS</b> |
| 7.01        | None.                    |

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# Appendix 1

M3/hour

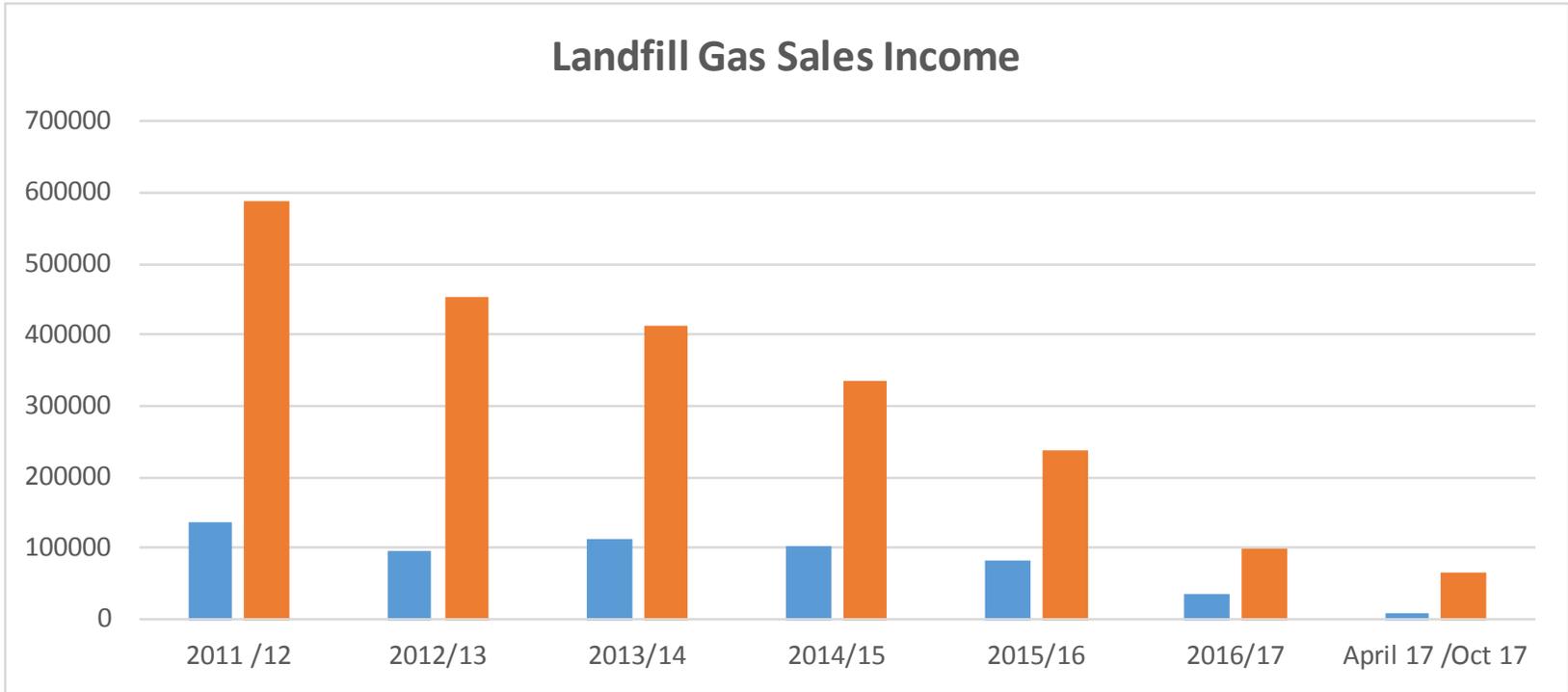


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# Appendix 2 – 2011 to Oct 2017

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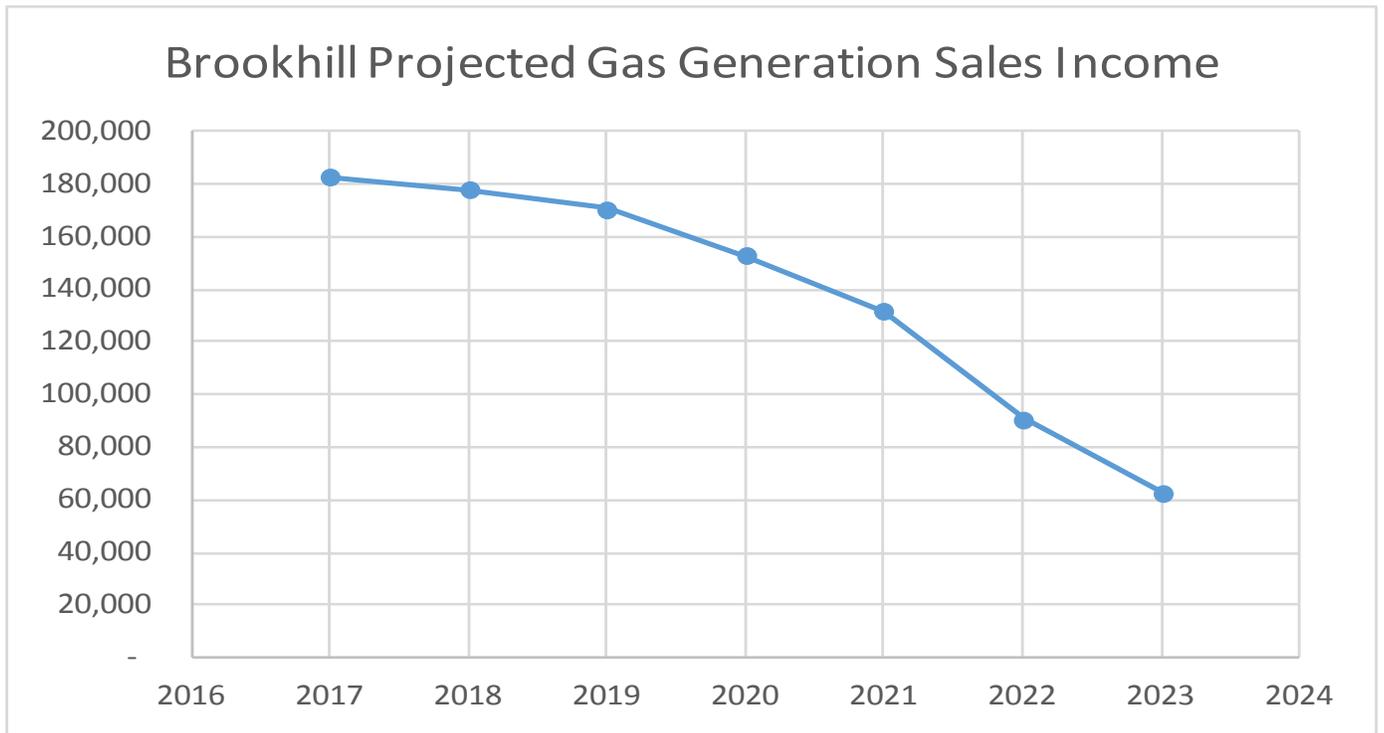


Brookhill Income levels

Standard Income levels

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## Appendix 3



| Brookhill Gas Generation |              |          |          |           | Income £     |
|--------------------------|--------------|----------|----------|-----------|--------------|
| Based On                 | 75% Run Time |          |          | 7p / Unit | Rounded Down |
| Year                     | kW / hr      | kWh/ day | kWh/year | £ /year   | £ /year      |
| 2017                     | 400          | 7200     | 2628000  | 183960    | 183,000      |
| 2018                     | 400          | 7000     | 2555000  | 178850    | 178,000      |
| 2019                     | 300          | 6700     | 2445500  | 171185    | 171,000      |
| 2020                     | 300          | 6000     | 2190000  | 153300    | 153,000      |
| 2021                     | 300          | 5200     | 1898000  | 132860    | 132,000      |
| 2022                     | 200          | 3600     | 1314000  | 91980     | 91,000       |
| 2023                     | 200          | 2500     | 912500   | 63875     | 63,000       |

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