## **Public Document Pack**



Contact Officer: Sharon Thomas / 01352 702324 sharon.b.thomas@flintshire.gov.uk

To: Cllr Ray Hughes (Chairman)

Councillors: Haydn Bateman, Glenys Diskin, Chris Dolphin, Ian Dunbar, David Evans, Veronica Gay, Alison Halford, Cindy Hinds, Colin Legg, Brian Lloyd, Richard Lloyd, Ann Minshull, Sara Parker and Paul Shotton

27 October 2016

Dear Councillor

You are invited to attend a meeting of the Environment Overview & Scrutiny Committee which will be held at 10.00 am on Wednesday, 2nd November, 2016 in the Delyn Committee Room, County Hall, Mold CH7 6NA to consider the following items

\* REMINDER: Members have been invited to take part in a site visit to the Standard landfill solar and recycling facility in Buckley, following the meeting.

#### AGENDA

#### 1 APOLOGIES

Purpose: To receive any apologies.

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

Purpose: To receive any Declarations and advise Members accordingly.

#### 3 <u>MINUTES</u> (Pages 3 - 10)

**Purpose:** To confirm as a correct record the minutes of the meeting held on 14 September 2016.

#### 4 **RENEWABLE ENERGY ACTION PLAN UPDATE** (Pages 11 - 34)

Report of Chief Officer (Planning and Environment) enclosed. Portfolio of the Deputy Leader of the Council and Cabinet Member for Environment.

## **Purpose:** To receive a report outlining the developments to include the responses received following consultation.

#### 5 **QUARTER 1 IMPROVEMENT PLAN MONITORING REPORT 2016/17** (Pages 35 - 50)

Report of Chief Executive, Chief Officer (Streetscene and Transportation) and Chief Officer (Planning and Environment) enclosed. Portfolio of the Deputy Leader of the Council and Cabinet Member for Environment and Cabinet Member for Waste Strategy, Public Protection and Leisure.

**Purpose:** To enable Members to fulfil their scrutiny role in relation to performance monitoring.

#### 6 **FORWARD WORK PROGRAMME** (Pages 51 - 58)

Report of Environment Overview & Scrutiny Facilitator enclosed.

**Purpose:** The Committee is asked to consider, and amend where necessary, the Forward Work Programme for the Environment Overview & Scrutiny Committee.

Yours faithfully

Peter Evans Democracy & Governance Manager

#### ENVIRONMENT OVERVIEW & SCRUTINY COMMITTEE 14 SEPTEMBER 2016

Minutes of the meeting of the Environment Overview & Scrutiny Committee of Flintshire County Council held in the Delyn Committee Room, County Hall, Mold on Wednesday, 14 September 2016

#### **PRESENT:** Councillor Ray Hughes (Chairman)

Councillors: Haydn Bateman, Chris Dolphin, Ian Dunbar, Cindy Hinds, Brian Lloyd, Ann Minshull and Paul Shotton

**<u>SUBSTITUTES</u>**: Councillors: Dave Mackie (for Colin Legg), Hilary McGuill (for Nancy Matthews) and Mike Peers (for Veronica Gay)

**<u>APOLOGIES</u>**: Councillor Derek Butler, Cabinet Member for Economic Development; Councillor Kevin Jones, Cabinet Member for Waste Strategy, Public Protection & Leisure; and Councillor Richard Lloyd

ALSO PRESENT: Councillor Carolyn Thomas

**<u>CONTRIBUTORS</u>**: Councillor Bernie Attridge, Deputy Leader and Cabinet Member for Environment; Chief Officer (Streetscene & Transportation); and Highways Strategy Manager

Chief Officer (Planning & Environment) and the Access & Natural Environment Manager - for minute number 34

**IN ATTENDANCE:** Environment Overview & Scrutiny Facilitator and Committee Officer

#### 28. DECLARATIONS OF INTEREST (INCLUDING WHIPPING DECLARATIONS)

There were no declarations of interest.

#### 29. <u>MINUTES</u>

The minutes of the meeting held on 19 July 2016 were submitted.

Minute number 22: Council Fund Revenue Budget 2017/18 - Councillor Hilary McGuill asked if all Members could be issued with the schedule of gully cleaning, following Councillor Chris Dolphin's request for data for his ward. Due to the length of the schedule, the Chief Officer agreed to provide the Facilitator with a summary of areas broken down by month, for circulation to all Members.

#### RESOLVED:

That the minutes be approved as a correct record and signed by the Chairman.

#### 30. HIGHWAYS AND CAR PARK INSPECTION POLICY

The Chief Officer (Streetscene & Transportation) introduced the revised Highways and Car Park Inspection Policy following a review which incorporated the inspection regime for the Council's car parks and highway structures. The policy met legislative requirements in setting out what was inspected, frequency (based on risk) and intervention times for repairing defects. It was explained that walking inspections were carried out on footways whereas carriageways were generally inspected by the inspector travelling in a vehicle, accompanied by another officer driving. For bridges, the requirement was for an annual visual inspection together with a principal professional inspection every six years.

Councillor Paul Shotton thanked the Streetscene Area Supervisors for their work, in particular their prompt responses in dealing with issues raised. Responding to a query on filling potholes, the Chief Officer spoke about the use of various materials and the continued search for more creative options to identify a system which met all requirements.

The team was also praised by Councillor Ian Dunbar who welcomed the inclusion of car parking under the portfolio. He commented on the deterioration of car parks as a result of local businesses closing and raised safety concerns about a wall near Brookfield School in Connah's Quay. The Chief Officer would arrange for an inspection of the wall and gave explanation on the responsibilities of the Council as opposed to homeowners.

In response to queries from Councillor Hilary McGuill, the Chief Officer confirmed that Theatr Clwyd car park was subject to inspections. On the maintenance of cycle paths, a joint approach was taken with Countryside Services and there were no statutory requirements for surfacing, provided it was appropriate for cycle use. Councillor McGuill felt that the method for inspecting carriageways did not enable the inspector to identify road defects evident to a cyclist. Councillor Bernie Attridge noted concerns about potholes near the Tesco store in Mold which could not be safely avoided by cyclists. He reminded Members that an independent survey was undertaken each year and asked that any further issues be reported to the Streetscene Supervisors. The Chief Officer agreed to contact Denbighshire County Council to seek details of its system for logging issues reported by cyclists. On the inspection of carriageways, he said it was important to consider the safety of inspectors.

Following a query from Councillor Haydn Bateman, it was explained that the Council was not liable for third party claims arising from defects occurring between inspections, provided that the agreed frequency of inspections was documented and appropriate.

Councillor Mike Peers questioned the robustness of the policy in terms of defending potential claims and suggested that photographs could be taken during inspections. The Chief Officer spoke about the use of tablets to record inspection data and the move to newer systems which would speed up the process of work orders and record photographic evidence. He said that this could be demonstrated to the Committee.

Whilst noting the knowledge and understanding of issues by the Cabinet Member and officers, Councillor Chris Dolphin referred to problems in his ward. He questioned whether areas allocated to Supervisors were too challenging, particularly in rural locations where some of the footpaths appeared to be in a poor condition. He felt that walking inspections were necessary to properly identify issues with potholes. The Chief Officer urged Members to report issues with potholes on main roads. He said that a range of factors had determined the scope of areas, including the time needed for inspecting rural areas as opposed to densely populated locations. Councillor Attridge stated that there had been no cuts to the service budget and that the weedkilling schedule remained the same, with all work prioritised using the matrix system. He was disappointed that issues were being raised at this meeting when potholes being reported to the team were promptly repaired. The Chief Officer agreed to review the current provision and meet with Councillor Dolphin and the Co-ordinator to discuss the issues raised.

Councillor Brian Lloyd reported an ongoing problem with the deterioration of road surfacing at Ivy Crescent in his ward. The Chief Officer agreed to follow this up. He explained that patching work was often necessary as it was not feasible to repair every road surface, however principal roads with schools were amongst those given priority. Councillor Attridge commented on the potential to work with colleagues in Housing to access other sources of funding to resolve these issues.

Councillor Dave Mackie asked whether an Equalities Impact Assessment had been undertaken to help strengthen the Council's defence. The Chief Officer was aware that the original policy had been assessed but would check prior to the revised policy being considered by Cabinet.

#### RESOLVED:

That the Committee recommends Cabinet approval of the reviewed Highway and Car Park Inspection Policy which outlines the Council's approach to all safety inspections, intervention criteria and response times.

#### 31. THE FINAL STAGE OF THE REVIEW OF EXISTING SPEED LIMIT ORDERS ON THE COUNCIL'S HIGHWAY NETWORK AND PROPOSED PROCESS IMPROVEMENTS FOR ANY FUTURE CHANGES TO SPEED LIMIT ORDERS

The Highways Strategy Manager introduced a report on the proposed approach for the final stage of the review of speed limits on the Council's classified highway network, which would address the historic anomalies within the existing speed limit orders on all other routes on the highway network.

It was reported that 36 of the 37 recommendations from Phase 1 of the review had been successfully delivered, with one Order due to be in place by the end of the month. Explanation was given on the range of complications which had contributed to the time taken on the review and the aim to put all speed limit Orders, both past and present, within a single consolidated Order identifying all speed limits across the county. Members were shown examples of the mapping information which would be uploaded to the website. A five year programme would be developed to review all existing speed limits for the remainder of the highway network and to prioritise routes using the matrix system. Further

proposals were detailed in the report to help improve the process and save on time. The Chief Officer (Streetscene & Transportation) said that the proposed approach would help to address the frustrations raised by Members on previous occasions. He said that there was a high number of objectors in the county and that whilst the individuals had genuine concerns about flaws in the Orders, this impacted on the workload of the team.

Councillor Bernie Attridge spoke about the level of work undertaken and the need to allow time to review each speed limit Order.

In acknowledging the complexities of this work, Councillor Paul Shotton thanked the officers for the report and asked about funding for the mapping exercise for existing speed limits. It was explained that the internal technical team would undertake this work.

Councillor lan Dunbar questioned the rationale for applying different speed limits along a straight stretch of road. The Manager said that this was dependent on the nature of the carriageway along with the legislative criteria.

Councillor Hilary McGuill asked the review of high-risk routes involving varying speed limits where fatal accidents had occurred, for example on the Mold to Denbigh road. The Manager explained that each road would be risk assessed through the matrix, taking account of a number of factors such as the number of accidents, vulnerable users etc. In response to further questions, Town and Community Councils would be notified of the consolidated Order which would be subject to the statutory consultation process open to all UK residents. In respect of advisory speed limits outside schools, these were unlikely to be mapped but would be identified by colour. Councillor Attridge said that a bid for funding was being explored to increase the number of statutory speed limits outside schools in the county.

Following comments by Councillor Cindy Hinds, the Manager spoke about the Council's duty to consider any formal objections raised.

Councillor Mike Peers welcomed the work done by the Cabinet Member and raised a number of queries. In relation to inconsistent speed limits in Dobshill, the Manager advised that an advisory sign had been displayed as a temporary measure. He also confirmed that the Council worked in collaboration with the 'Go Safe' driving campaign and North Wales Police who were amongst the statutory consultees. He explained that the suggestion to display speed limit signs on speed cameras had been considered, however the criteria for use of repeat speed signs needed to be met. As an alternative, the suggestion to display a square sign would be passed to the 'Go Safe' team. Members were asked to forward any requests for reviewing speed limits to the Area Supervisor. Following comments about the need to consider local issues, explanation was given on the need to adhere to the strict guidelines of the Department for Transport with a reminder that maximum speed limits did not represent the intended speed limit. The Cabinet Member noted reports about the removal of covers from speed limit signs along the Dobshill to Hope road.

Councillor Chris Dolphin commented on the need for a 'Go Safe' presence on the A5026. The Manager asked that such requests be submitted by email for him to pursue. In response to other points raised, he clarified that individuals who regularly objected to proposals were entitled to remain anonymous.

Councillor Dave Mackie raised concerns that the report made no mention of an Equalities Impact Assessment having been undertaken.

The Chairman referred to the ongoing problem of speeding traffic along the road in Pontblyddyn and suggested that signs raising awareness of this accident blackspot could help to deter speeders. The Cabinet Member agreed to look into whether this was feasible and shared concerns about this particular area, despite the instalment of a speed camera and traffic calming measures.

#### RESOLVED:

- (a) That the Committee recommends Cabinet approve of the revised process to deliver the final phase of the review of speed limit orders on all of the Council's highway network; and
- (b) That the Committee recommends Cabinet approve the proposed changes to the process which will be adopted for any future revisions of highway speed limit orders.

#### 32. FORWARD WORK PROGRAMME

Views were sought on the current Forward Work Programme and the following changes were agreed:

- The special meeting on 11 October to be changed to an all Member workshop, as proposed by the Chairman.
- The meeting on 2 November to be held at County Hall followed by a site visit to Brookhill to view the solar panels and waste transfer station in operation. The Chief Officer added that local Members would be invited to the formal opening.
- Following the earlier item, the Facilitator to liaise with Councillor Nancy Matthews to ascertain whether her suggested item on 'speed limits on C roads' was still required or alternatively if she wished to discuss separately with the Chief Officer.

In relation to the waste item, Councillor Paul Shotton asked that his thanks be passed to Gabrielle and Emma from the Streetscene team for their excellent work at the recent recycling event at Morrison's in Connah's Quay.

Councillor Hilary McGuill asked if local Members could be provided with information about prosecutions for litter and dog fouling in their areas to help raise awareness. Councillor Bernie Attridge agreed to check the information given to Councillor David Evans following his request at the previous meeting. Councillor Mike Peers said that advertising details of the number of fines in public areas could help to deter others. The Facilitator advised that an item on Planning Enforcement would be scheduled at the end of the year.

#### Committee report format

The Facilitator sought feedback from the Committee on the report format which had been in use for a year. A suggestion was made by Councillor Dave Mackie that the template could indicate whether an Equalities Impact Assessment had been done.

#### RESOLVED:

- (a) That the Forward Work Programme be amended as necessary; and
- (b) That the Facilitator, in consultation with the Chair of the Committee, be authorised to vary the Forward Work Programme between meetings, as the need arises.

#### 33. LOCAL GOVERNMENT (ACCESS TO INFORMATION) ACT 1985 - TO CONSIDER THE EXCLUSION OF THE PRESS AND PUBLIC

That the press and public be excluded from the meeting as the following item was considered to be exempt by virtue of paragraph 15 of Part 4 of Schedule 12A of the Local Government Act 1972 (as amended).

#### 34. <u>RIGHTS OF WAY SERVICE REVIEW</u>

The Access & Natural Environment Manager presented an update on the ongoing Rights of Way Service review with recommendations to meet the required 30% reduction in core budget by maximising income and reducing expenditure, as part of the Authority's drive to address its financial position.

Information was shared on the approach taken to the review which involved exploring more creative ways of working, engaging with volunteer groups and benchmarking with other Authorities to develop a more robust charging mechanism. It was anticipated that the savings would be realised in 2017/18. The Chief Officer (Planning & Environment) explained that staff restructure was still under development.

Councillor Hilary McGuill spoke in support of Countryside Services and suggested working in partnership with various voluntary organisations as well as the Council-run initiative 'Walking for Health'. The Manager said that the aim was to explore different sector outdoor groups and that links with Sustrans provided a volunteer network to help maintain the cycle network. The team had also been able to access funding through Glyndŵr University. Councillor McGuill felt it was important that the savings from the re-tendering of the strimming contract should not compromise service delivery. The officers assured Members that the contractor was required to meet quality standards.

Councillor Mike Peers said it was important that a 30% efficiency should not reflect any reduction in service and questioned whether similar reductions in charges could be identified in other areas. Councillor Bernie Attridge said it was the intention to seek out other opportunities for value for money elsewhere and pointed out that Flintshire was amongst the lowest charging Authorities in Wales. The Chief Officer gave examples where charges were being reviewed and reminded Members that the Rights of Way service was new to this portfolio.

The Manager responded to comments raised by Councillor Ian Dunbar on continuing work with the Groundworks Green Team and other outdoor groups for the benefit of the service. On the unauthorised use of byways, controls were in place to ensure that use was appropriate and any reported problems could be followed up via multi-agency links.

The Chairman permitted Councillor Carolyn Thomas, who was present in the public gallery, to speak on the item. She referred to the proposed staff restructure and hoped that the excellent service and knowledge of footpath officers were not affected by the changes.

#### RESOLVED:

- (a) That the increase in proposed charges be supported;
- (b) That the reduction in proposed expenditure be agreed; and
- (c) That the work being progressed to define a new staffing structure be noted.

#### 35. MEMBERS OF THE PRESS AND PUBLIC IN ATTENDANCE

There were no members of the press or public in attendance.

(The meeting started at 2.00 pm and ended at 4.45 pm)

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Chairman

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## Agenda Item 4



#### **ENVIRONMENT OVERVIEW & SCRUTINY COMMITTEE**

Date of Meeting	Wednesday 2 <sup>nd</sup> November 2016
Report Subject	Renewable Energy Action Plan Update
Cabinet Member	Deputy Leader and Cabinet Member for the Environment
Report Author	Chief Officer for Planning and Environment
Type of Report	Strategic

#### EXECUTIVE SUMMARY

The Renewable Energy 10 Year Action Plan (see appendix 1) was developed to ensure that Flintshire County Council maximises the social, environmental and economic opportunities of low carbon and renewable energy generation including the provision of an income stream for the Council through UK Government incentives and reducing the Council's energy spend. A number of activities have been completed in the first year of the Action Plan and are contributing towards the achievement of actions identified in Years 1-2. The development and construction of 2 solar PV installations at Brookhill and Standard Landfill Sites has also contributed towards actions identified in Years 3-5 with a progress update given below.

RECO	MMENDATIONS
1	The Committee continue to support the actions set out in the Renewable Energy Action Plan and the progress made so far.

#### **REPORT DETAILS**

1.00	Renewable Energy Action Plan Update		
1.01	The Renewable Energy 10 year Action Plan aims to assess and develop		
	renewable energy systems on Flintshire County Council owned land and		
	assets to ensure that the social, economic and environmental benefits of		

	renewable and low carbon energy generation are maximised by the Council. Following Cabinet approval (17 <sup>th</sup> March 2015) this report provides an update on the activities completed under the actions listed below, during the first year of the plan. Each action is listed and commented on below.
1.02	<b>RE1:</b> Identify potential generation sites (eg landfill sites and other known brownfield sites). Tender and appraise submitted costs vs ROI. Report to Cabinet for approval rejection.
	<ul> <li>Headline list of potential brownfield sites developed by Valuation and Estates with a more detailed list of sites to follow</li> <li>Opportunity to work in collaboration with Planning Policy Officers, in identifying potential sites, as part of the Renewable Energy Assessment required for the Local Development Plan.</li> </ul>
1.03	<b>RE2:</b> Identify all FCC land holdings with potential to develop renewable energy systems.
	<ul><li>Activities completed:</li><li>As above</li></ul>
1.04	<ul> <li>RE3: Appraise opportunities to extend /install Photo Voltaic panels, (P.V.) on and or within Primary and Secondary Schools grounds.</li> <li>Activities completed: <ul> <li>Assessment carried out by the Design team to highlight spare capacity in Primary and Secondary School grounds whilst still meeting playing field space requirements.</li> <li>Next step is to select sites and develop designs and proposals and assess funding options in partnership with Officers in Education.</li> <li>This would also include the feasibility of onsite battery storage.</li> </ul> </li> </ul>
1.05	<ul> <li>RE4: Ondertake desktop assessments of generation /sustainable potential e.g. P.V., hydro, tidal and wind</li> <li>Activities completed <ul> <li>Initial assessments carried out for hydro generation at Wepre Brook in Wepre Park and Greenfield Valley Heritage Park.</li> <li>Wepre Brook initial assessment has enabled a feasibility study to be completed with the contractor now developing a detailed design. Electricity generated is to be used to power the visitor's centre and ranger's office.</li> <li>Initial assessment of Greenfield Valley indicated that any hydro projects would have a long payback period and have not been considered feasible. The Energy Unit has however installed new cabling (which had previously been stolen) to reconnect the generator to one of the waterwheels which can provide power to one of the museum buildings, and are working towards registering this for the Feed in Tariff.</li> </ul> </li> <li>Opportunity to work in collaboration with Planning Policy Officers, in identifying notential sites as part of the Renewable Energy</li> </ul>

	<ul> <li>Assessment required for the Local Development Plan.</li> <li>Major Domestic Solar PV investment through the Domestic Energy Efficiency Project in partnership with Community &amp; Enterprise, both within the Vibrant and Viable Places area and across the wider county housing stock in bungalows to maximise tenant benefit and create long term reinvestment fund. Blue sky modelling and investment profile being reviewed to assess further feasibility.</li> <li>Domestic-scale battery storage pilot on off-gas council housing sites in progress, including integration of solar photovoltaic, air source heat pumps and domestic scale battery storage. Funding has been obtained from EDF's Blue Lab Innovation Fund.</li> </ul>
1.06	<b>RE5:</b> Undertake desktop assessments of Flintshire C.C. land holdings to determine suitable areas of land to plant trees to enhance the environment and provide a future sustainable wood (biomass) supply.
	<ul> <li>Initial assessment carried out by Coed Cymru Officer and Tree</li> </ul>
	<ul> <li>Officer (see Appendix 2).</li> <li>In FCC owned woodlands there is 220 m<sup>3</sup> of timber available per annum without depleting the capital reserve of timber. These woodlands contain a significant proportion of medium/high quality timber which should be directed into the appropriate market niches as opposed to use as wood chip.</li> </ul>
	<ul> <li>There is the opportunity to establish short rotation coppice biomass (e.g. willow) on FCC owned agricultural estates. Sealand was highlighted as having the potential capacity to supply a strategic quantity of wood chip fuel with good highways links. 1300 tonnes of willow/poplar woodchip etc. could be produced annually.</li> </ul>
	<ul> <li>Other areas of biomass that could be developed further include; waste from tree surgeons etc, sawmills, timber from FCC recycling centres and private woodlands.</li> </ul>
	<ul> <li>This assessment also contributes towards actions RE10; Develop planting programme on all suitable identified land (accessing grants as available) and RE11: Develop woodland management strategy to create a mix of specimen and harvestable timber.</li> <li>Next step is to look in more detail at the opportunities on ECC</li> </ul>
	landholdings
1.07	<b>RE6:</b> Undertake public consultation exercise, consider and develop further actions from feedback for inclusion within a future updated version of this plan
	<ul> <li>Activities completed:</li> <li>9 people answered the online questionnaire; this sample size is too small to draw any meaningful conclusions.</li> <li>All were supportive of the plan and its aims.</li> <li>Consider future engagement options</li> </ul>
1.08	<b>RE7:</b> Develop plan to consider feasibility of creating wood chipping
	Activities completed:

	<ul> <li>Initial assessment of waste wood amounts collected at FCC recycling centres completed.</li> <li>Feasibility assessment of wood chipping facility to be developed.</li> </ul>
1.09	Progress has also been made towards achieving RE8; Progress additional identified sites, where funding and payback periods are confirmed; with regards to the solar PV installations at Brookhill and Standard Landfill Sites.
	Following Cabinet and Planning Committee approval; principal contractor Lark Energy Commercial Installations started construction work on 22 <sup>nd</sup> August with a grid connection deadline of 3 <sup>rd</sup> October. Both sites were successfully connected to the local electricity grid and witness tested by Scottish Power Energy Networks on 1st October. Lark Energy are now in the process of completing the Feed in Tariff application for both sites, to be submitted to Ofgem for accreditation, with minor installation snags to be completed onsite. The solar PV installations at both sites will complement the existing low carbon electricity generation from the landfill gas.
	At Standard the 650 kWp solar PV installation has been connected to the Mixed Recycling Facility (MRF) to provide electricity for the onsite plant. This will reduce the amount of electricity and associated cost that the MRF has to use from the grid. As Standard is an open site, accessible to the general public, an information board will be installed at the public entrance with details of the solar PV and landfill gas generation.
	At Brookhill the 370 kWp solar PV and landfill gas generation will be connected via a private cable to Alltami Depot to provide electricity which will reduce the amount of electricity drawn from the grid and the associated costs of this. This will also complement the proposed electric vehicles and associated charging infrastructure. The private cable connection is due to be completed by the end of March 2017.
	The solar PV is predicted to generate an income and electricity savings of $\pounds 2.8$ million over the 20 year lifetime of the installations.

2.00	RESOURCE IMPLICATIONS
2.01	There are no direct financial implications or other resource implications associated with this report.

3.00	CONSULTATIONS REQUIRED / CARRIED OUT
3.01	No consultations required as a direct implication of this report.
	Consultations carried out with relevant officers in Design, Valuation and Estates, Conservation, Countryside Services, Planning and Streetscene.

4.00	RISK MANAGEMENT
4.01	Anti-poverty Impact: None as a direct result of this report. Environment Impact: None as a direct result of this report. Equalities Impact: None as a direct result of this report.

5.00	APPENDICES
5.01	Appendix 1: Renewable Energy 10 Year Action Plan Appendix 2: RE 10&11 Flintshire CC Renewable Energy Plan

6.00	LIST OF ACCESS	IBLE BACKGROUND DOCUMENTS
6.01	N/A	
	Contact Officer: Telephone: E-mail:	Sadie Smith, Energy Conservation Engineer 01352 703767 sadie.smith@flintshire.gov.uk

7.00	GLOSSARY OF TERMS
7.01	<b>Generation:</b> Electricity or heat that is produced from a renewable energy resource such as from solar (in the context of this report).
	<b>Local Development Plan:</b> a framework of policies and proposals which seek to regulate and control the development and use of land, and to provide the basis for consistent and transparent decision making on individual planning applications.
	<b>Low Carbon Generation:</b> Energy (heat or electricity) which is produced from sources such as ground source heat pumps, energy from waste etc.
	Ofgem: the Office for Gas and Electricity Markets.
	<b>Renewable Energy</b> : Energy that is produced from resources that are naturally replenished and can be used without depletion of these natural energy sources. Types of renewable energy include; the sun, wind, hydro, tidal and biomass (wood chips, wood pellets etc).
	<b>Renewable Energy Assessment:</b> This assesses the renewable energy potential within an area. This is a specific requirement for the local development plan to identify how the provision of renewable and low carbon generation can be maximised.
	<b>Short Rotation Coppice:</b> This is an energy crop which consists of densely planted (15,000 stems per ha) high yielding varieties of willow and poplar.
	<b>Solar PV:</b> Solar panels which produce electricity from the Sun's energy. PV stands for photovoltaic which describes this process.

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## APPENDIX 1 Flintshire County Council

#### Renewable Energy 10 year Action Plan

#### Background

Renewable Energy is now an integral and growing part of both the County and Country's energy mix, with key National and E.U. targets promoting this uptake. The U.K has a target to reduce greenhouse gas emissions by 34% by the year 2020 against 1990 levels, with a legally binding target of achieving 15% of the U.K's energy demand from renewable energy systems over the same period.

In 2007 Flintshire committed to reducing its own emissions by 60% by 2021, a challenging but achievable target provided all elements of the Carbon Reduction Strategy are followed. Having invested in energy efficiency measure for some years now, the last part of the strategy (Renewable energy) needs to come to the fore.

Our achievements thus far are a reduction of close to 20% in emissions since 2007, Asset rationalisation and large scale renewable energy systems are now the two primary areas that stand to make the difference of either attaining or failing to achieve our 60% reduction goal.

Flintshire County Council is therefore committed to doing its fair share to reduce Carbon Emissions to help achieve National targets and help in reducing the risks of fossil fuel price volatility and therefore revenue cost and Carbon Tax implications to the Authority itself.

Such energy systems do not rely on finite resources such as fossil fuels, with their primary characteristic being that they don't contribute to Climate Change.

It is of course recognised that Carbon savings will also come from alternative sources, such as the continued improvement of building efficiency, decarbonising the national grid and in future lower carbon transportation.

From a financial perspective Energy costs have for many years risen significantly above annual inflation rates with current Government and Energy industry forecasts suggesting this trend will continue for the foreseeable future, giving additional revenue cost burdens to Local Authorities and businesses alike.

In order to ensure maximum financial and environmental benefit is obtained from the development of renewable energy schemes it is vital that Energy Efficiency is not forgotten. Every Kwh that is wasted is one that did not need to be generated or paid for in the first place. Flintshire County Council therefore remain committed to using energy as efficiently as it can, reducing its carbon footprint and promoting energy efficiency at every opportunity.

## Purpose of the renewable energy action plan

### To:

- To help develop the renewable energy industry locally to support the growth of sustainable jobs.
- Generate low carbon Electricity and or heat that can be used on site/sleeved, or private wired to FCC sites, and housing tenants.
- Develop green (low carbon) and sustainable methods of energy generation.
- Reduce reliance on imported energy sources.
- Reduce risks associated with rising energy prices.
- Consider in the medium to long term the opportunities to sell generated energy to third parties and the Fuel Poor at competitive rates.
- Investigate opportunities to create Energy from waste.
- Promote the sensitive development of renewable energy schemes across the County (principally but not exclusively brownfield sites).
- Set generation targets for various stages of the plan

## Key Challenges to the successful delivery of renewable Energy schemes.

The Key challenges that need to be addressed have been identified as:

- Improving awareness, information, and support at all levels
- Submitting successful planning applications for renewable energy systems
- Landscape and built environment constraints
- Financial issues
- Sufficient resources to achieve the objectives
- Lack of local expertise
- Electricity grid supply constraints
- Public acceptance of the Council's plans

All the above challenges will need to be addressed as this action plan is developed, with input required from the public and community groups to make this a Flintshire wide plan, that could be replicated in part by interested groups, communities and residents across the County.

## Partnering

In order to maximise the use of biomass, by combining resources or managing woodlands, it may be beneficial to consider loose partnering arrangements with Local Landowners, Registered Biomass suppliers, Local businesses, Renewable Page 18

energy installers and other presently undefined/identified partners that complement the objectives of this plan.

## Funding.

Presently there are a variety of options open to Flintshire County Council in terms of obtaining capital funding for renewable energy projects, these include:

- Green Investment Bank,
- Prudential borrowing,
- Joint Venture partners.
- Pension funds
- Crowd funding or public offerings

Therefore, as renewable energy schemes are identified and developed sufficiently to determine their viability, funding opportunities will also be investigated and the options appraised on their merits prior to being submitted to Cabinet for approval/rejection.

For such scheme's to justify submission to Cabinet, they will be required to show a positive net benefit on investment, irrespective of the funding mechanism. They will in effect be "spend to save" schemes'.

## **Action Plan**

## Introduction

1.1 What is renewable energy?

"Renewable Energy sources are those which are continuously and sustainably available in our environment"

Extract from "New and Renewable Energy – Prospects for the 21<sup>st</sup> Century" DTI

Renewable energy sources do not rely on finite resources, and produce significantly lower levels of environmental pollutants than conventional sources of energy: in particular, they generally release no net greenhouse gas emissions in operation.

#### Technologies

For the purpose of this action plan, the following technologies are included under the definition of renewable energy:

- Anaerobic digestion
- Biomass (wood pellet/wood chip from sustainable sources)

- Solar Thermal
- Solar Photo voltaic
- Wave Energy
- Tidal Energy, including flood alleviation schemes that mitigate against flooding and generate power

#### Energy from Waste

Energy from organic waste is regarded as renewable energy by Government Policy and is included as an option to help deliver the County's renewable energy target.

However this action plan does not include specific policies/actions on this energy resource as it is covered as part of the sustainable waste management strategy.

## Biomass

#### Background Information

This Plan aims to address the barriers to the development of renewable energy in the County (Flintshire), whilst promoting the sustainable and appropriate use of renewable resources".

Wood biomass is already an established renewable energy source in Britain (+3000ha established) with a potential for further technical development and a large capacity to expand its market share.

In addition, utilising wood as biomass has the flexibility to meet the needs of reasonably small scale units, community heating projects and large industrial schemes, whilst inflicting the minimum impact on the wider environment.

More detailed information on the planting, growing, harvesting and potential yields are detailed in appendix 1.(attached)

#### **1.2** Aim of this Action Plan

The Flintshire County Council Energy Action Plan aims to address the barriers to the development of renewable energy in the County, and will promote the sustainable and appropriate use of renewable resources.

The plan outlines actions that will help deliver a Flintshire renewable energy target, but also deals with many other issues such as renewable heat generation, economic opportunities from renewable energy as well as encouraging community energy initiatives.

The purpose of this action plan is therefore to seek to identify suitable sites within the Councils ownership, for development of as wide a range of renewable energy systems, and to develop them where a financial and or environmental/amenity benefit can be identified.

As identified in the background information (shown on page 1) this action plan is intended to address the issues around renewable energy generation, and therefore does not deal specifically with increasing the efficiency of fossil fuel use. However in order to maximise the benefit of renewable energy, this plan needs to be integrated with enhanced energy efficiency. It is therefore important that the development of renewable energy systems and energy efficiency principles, work hand in hand to form part of a future sustainable energy strategy.

#### 1.3Why do we need a Renewable Energy Action Plan

#### Environmental impact of energy

The majority of energy used in the U.K is generated from fossil fuels, though there has been an increase in "green" or renewable electricity generation in the past 5 years following the introduction of Feed In Tariff's and more recently the Renewable Heat Incentive. It is generally accepted that our reliance on fossil fuels is not sustainable in the long term, and therefore much greater use of renewable energy will be needed in future. Not only is there a significant risk of environmental degradation, but also because the U.K. is heavily and unsustainably reliant on imports it is susceptible to security of supply issues.

#### Climate Change

Probably the most important environmental impact of fossil fuel use is the emission of carbon dioxide into the atmosphere leading to the enhanced greenhouse effect and Climate change. This is regarded internationally as the single most serious environmental issue facing mankind.

The international community is endeavouring to gain agreement to reduce carbon emissions to levels that will prevent global temperature change exceeding +2 degrees centigrade. Reducing carbon emissions is therefore critical to addressing this issue and will require an international agreement to reduce the use of fossil fuels and set a track to a more sustainable future. This can be achieved through a combination of improved energy efficiency and the development of national and local renewable energy systems.

## The Councils Role

FCC is the local authority for the area, with a range of different legal duties upon it. These include economic development, proper stewardship of public monies and obtaining value for money. The Council is the community leader, as well as being a landowner, an employer, a regulatory body and a service provider. It is therefore important that it leads by example and ensures that it is maximising the value from its own assets, creating job opportunities for local people and reducing its own costs. All of these benefits can be achieved from this plan.

## Phase 1, -Renewable energy action plan

#### Years 1 and 2 Actions

Action	Description	Resource	
RE1	Identify potential generation sites (eg landfill sites and other known brownfield sites) Tender and appraise submitted costs vs ROI. Report to Cabinet for approval	Energy Unit, GIS team, Valuation and	
	Pade 21		

	rejection.	estates
RE2	Identify all FCC land holdings with potential to develop renewable energy systems.	Energy Unit, GIS team, Valuation and estates
RE3	Appraise opportunities to extend /install Photo Voltaic panels, (P.V.) on and or within Primary and Secondary Schools grounds.	Energy Unit, GIS team, Valuation and estates and Education dir.
RE4	Undertake desktop assessments of generation /sustainable potential e.g. P.V. , hydro, tidal and wind	Energy Unit, private sector and Drainage
RE5	Undertake desktop assessments of Flintshire C.C. land holdings to determine suitable areas of land to plant trees to enhance the Environment and provide a future sustainable wood (biomass) supply. (please refer to Appendix 1 for further information)	CoedCymru, Forestry Officer, Energy Unit, GIS team, Valuation and Estates
RE6	Undertake public consultation exercise, consider and develop further actions from feedback for inclusion within a future updated version of this plan	Energy Unit, Communications team
RE7	Develop plan to consider feasibility of creating wood chipping facility	Street scene

## Phase 2, Renewable Energy Action Plan

#### Years 3 to 5

RE8	Progress additional identified sites, where funding and payback periods are confirmed	Energy Unit
RE9	Set out the phase 2 Development Programme for additional sites as identified from desktop exercises and local knowledge.	Energy Unit
RE10	Develop planting programme on all suitable identified land (accessing grants as available)	CoedCymru/Fo restry

## Phase 3, Renewable Energy Action Plan

#### Years 6 to 10

RE11	Develop woodland management strategy to create a mix of specimen and harvestable timber.	CoedCymru, Forestry Officer
RE12	Become registered sustainable biomass supplier(Aspirational)	
RE13	Become Energy/ heat supplierAspirational	

## **Conclusion:**

The issue of climate change will not be solved by FCC alone. However, it can plan its part in the necessary work to combat climate change and stop global warming. Whilst these are lofty aspirations, much of the required work is more down to earth and local. It involves the better utilisation of the Council's assets, both land and buildings, and the generation of income to protect public services at the same time. Renewable energy is a useful way in which these aims can be realised.

This Ten Year Plan will enable the Council to deliver its part of this work.

## Appendix 1

#### Wood Biomass from Short Rotation Coppice (SRC)

Short rotation coppice (SRC) is an energy crop which consists of densely planted (15,000 stems per ha) high yielding varieties of willow or poplar. Crop yields vary between 7 and 12 dry tonnes per ha (21m3 to 36m3) and are dependent on soil fertility, moisture availability and aspect/shelter. Mineral soils are required for growing willow and poplar with loams, clay loams and heavy clays suitable and pH values between 5.5 - 7.5 with excessive slopes and uneven ground being unsuitable.

The establishment of SRC plantations has much in common with agriculture or horticulture crops as well as forestry practices, hence the acceptance by the farming community to consider propagating SRC. Trees are planted in windrows and are

reminiscent of fields of maize and are harvested by Terrain Chipping Harvesting Systems.

Sustainable managed SRC provides a source of renewable energy with virtually no net carbon emissions. Harvesting cycles are in the order of 2 to 5 years, following the establishment period of 2 years.

SRC can remain productive for a period of 30 years, after which old coppice stools are replaced with maiden trees. Due to the inherent silvics of salicaceae (willow and poplar), very little soil improvement is required. Nevertheless, applications of suitable fertilisers are applied, post harvesting, January-April.

Crops are harvested by purpose built harvesting machines or foragers (harvested, chipped and trailering). Chips are then bunkered within a wood chip store, turned and dried to approximately 30% moisture content and burned as and when required. Dried salicaeae wood chip has a density of 200 kg - 400 kg per m3 or a volume conversion of 2.5m3 - 5.0m3 per tonne. Thus, large commercial plantations of wood biomass should be established near or in close proximity of suitably engineered road systems.

Although commercial plantations of SRC can be perceived as being too uniform a monoculture, which can impact negatively on the vernacular landscape (reminiscent of maize), visual impacts are nominally offset by the environmental and ecological benefits of planting copious amounts of willow and poplar.

#### Flintshire Perspective

Production of biomass should be considered as a long term commitment with each project subject to a detailed plan and sufficient advice and support given.

Conversion of agricultural land from farming to biomass production will be subject to bureaucratic protocol with change of use and notification necessary. In addition, the officers considerations to maintain agricultural activities and therefore food production being paramount, only Grade 4 Agricultural Land has been considered in this briefing note.

Flintshire, although perceived as being largely industrial and urban by nature, has a significant and vibrant agricultural sector. Of its 43,610 ha of landmass, Flintshire has approximately 10,330 ha (23.7%) of its land classified as Grade 4 Agricultural Land.

Flintshire CC being a major land owner within the county has approximately 43 farm holdings evenly distributed throughout the county, with approximately 136.6 ha of agricultural land classified as Grade 4.

#### Conclusion

Taking into consideration land availability, both public and private, it appears that Flintshire has capacity to allocate a proportion of its agricultural land to the production of wood biomass, although excessive gradients will be a limiting factor.

Although financial appraisals regarding the profitability SRC are vague, enterprise margins of £116/ha/year are expected (2008) with estimated 11% to 19% IRR on heating generation ventures, taking into consideration RHI assistance (2009).

#### APPENDIX 2

#### Flintshire CC Renewable Energy Plan

#### RE11 & RE10 Response (July 2016)

#### John Purchase

#### 1. Introduction

1.1 The report provides an analysis of how much of Flintshire's energy needs could be met by the harvesting and processing of locally sourced biomass. The report attempts to quantify the amount of biomass which can be produced from its own woodlands and investigates the potential supply of woodchip that can be produced from its agricultural holdings. In addition to the above, the report provides information relating to a supplementary source of wood based material which can be utilised in the production of biomass.

Although every effort has been made to ensure that the information is accurate the author cannot accept liability for errors or omissions. The report includes confidential information pertaining to the county's woodland resource and asset structures.

With reference to the county perspective, Flintshire has approximately 3500ha of woodland. Approximately 2750ha of this is broadleaved (predominantly ash, sycamore and oak) and 750ha of softwood. This roughly translates to 9% of the county being covered by woodland which is substantially lower than the national average of 14.5% woodland cover. Nonetheless, there is a clear opportunity for a local wood fuel sector to develop in which to create a wood base service sector.

This report provides an understanding of the opportunities and barriers specific to Flintshire CC Renewable Energy Plan, using knowledge of Flintshire's existing woodland resource and structures.

#### 2. Background

2.1 The report has been undertaken at the request of Mr Will Pierce as a component of Flintshire CC Renewable Energy Plan (RE11, RE10). The aim of this report is consider the use of dry biomass as an alternative energy source to supplement and/or replace current oil and gas based heating systems. It is proposed that the new heating systems will consume woodchip fuel derived from Flintshire public and private woodlands, recycled timber, sort rotation coppice (SRC) and other suitable forms of biomass.

#### 3. About Biomass

3.1 Biomass is defined as organic matter derived from plants or animals. Biomass used for the generation of renewable energy is generally produced by farming techniques, land management activities and the forestry sector.

3.2 Dry Biomass is accepted as a carbon lean renewable energy because the majority of the carbon used for heating is re-absorbed by plants during growth  $(CO_2)$ . Therefore, biomass may be regarded as carbon neutral, heating systems using biomass are low in carbon emission, especially when compared to traditional heating systems which use vast quantities of carbon in the form of oil and gas (including electricity generated carbon based power stations).

3.3 Modern biomass heating systems are highly efficient, self-regulating and capable of maintaining a steady supply of heat over a number of days with minimal intervention. The benefits and principals of using sophisticated and efficient biomass heating systems are: capable of creating and consolidating a local based biomass market, potential to support rural employment, stimulate management of neglected woodlands thus improving the woodland habitat and biodiversity.

3.4 Although a number of products and by-products can be defined as biomass (straw, grain husks, bracken and animal waste), this report will focus on the two main types of biomass traditionally used in woodchip fuel heating systems: trees (including lop and top and cordwood) and willow and hybrid poplar cultivars utilised in short rotation coppice systems (SRC).

3.5 Whist the report will focus predominantly on the production forecast for woodchip fuel derived from Flintshire CC woodland resource and the production potential of SRC grown on Flintshire CC agricultural holdings, the supplementary inclusion of additional supplies of woodchip biomass from alternatives streams will be considered.

#### 4. Methodology

4.1 The purpose of the study is to quantify the supply of biomass that the authority has at its disposal in order investigate the opportunities of propagating willow and poplar in a SRC system utilising Flintshire CC agricultural land. In addition to the above, the report will consider the opportunities for supplementing the intrinsic supply of woodchip fuel with timber derived from private woodlands, arboricultural activities and other opportunistic woodchip biomass streams and clusters.

4.2 With reference to Flintshire CC woodland resource and information pertaining to standing timber and productivity, this data has been extrapolated from the current woodland inventory records. However, information pertaining to other woodlands outside the jurisdiction of Flintshire CC management has been estimated and may be subject to some discrepancy.

4.3 With regards to Flintshire's Agricultural Department and tenancy agreements, there appears to be a degree of uncertainty concerning policy direction, future provisions and tenancy agreements. Asset/Legal Officers were unable to provide information regarding the authority's rights to retain timber and the authority's capacity to alter land management practices (due to the land agent position being vacant).

#### 5. Woodland Resource

#### 5.1 Flintshire CC Woodland Resource

Flintshire County Council is actively managing its woodland resource in a sustainable way. The majority of the authority's woodlands are managed within Flintshire's Countryside Services, however a number of woodlands are overseen by the Agricultural Department. The majority of the woodlands are subject to a management programme and have been privy to the Forestry Commission Better Woodlands for Wales Grant Schemes. Presently the majority of Flintshire CC woodlands are out of scheme and need licencing.

5.1.2 Flintshire CC woodlands are subject to a number of designations, which include SAC, SAM, SSSI and Wildlife Status and are therefore managed within a sympathetic management regime. Additional management constraints include no specialist forestry machinery, access challenging, landscaping objectives, provision for educational and community involvement.

5.1.3 Flintshire CC has approximately 118 ha of woodland. The majority of the woodland component is managed by Countryside Services (95ha) and the remaining 23ha is managed within the Agicultural Department (2011 Census).

5.1.4 The woodland composition is predominantly broadleaved with a modest mixed conifer component. Stocking densities are moderately high with respectable yield classes (6 to 8 m3/ha/year broadleaved and 12 to 16m3/ha/year softwood). Access is challenging and species composition is predominantly ash, sycamore and oak for hardwood species and larch, Douglas Fir and pine for softwood.

5.1.5 With reference to the propagation of woodchip, Flintshire CC has the necessary capacity to supply 200m3 of timber per annum. FronDudur Woodland is the only woodland within the agricultural department which has the necessary structure to be managed specifically for timber which can be utilised in the propagation of woodchip fuel (10ha equating to 24m3 annual production of timber HW/SW).

5.1.6 The presence of a number of key conservation designations and social inclusion agreements, on a number of the woodlands, limits the ability of the authority to manage woodlands purely for timber production. Nevertheless, collectively the woodlands have the capacity to sustainably produce approximate 220m3 of timber per annum.

#### 5.2 Flintshire's Woodland Resource

5.2.1 With reference to a county perspective, Flintshire has approximately 3500ha of woodland. Approximately 2750ha of this is broadleaved (predominantly ash, sycamore, birch and oak) and 750ha of softwood. Flintshire has approximately 9% woodland cover substantially lower than the national average of 14.5%.

5.2.2 A significant proposition of Flintshire's commercial woodlands are managed within formal estates structures or within large farm units. These privately owned woodlands have the necessary capacity to supply the local authority with quantities of timber/woodchip fuel.

5.2.3 Generally timber destined for woodchip fuel is relatively poor in quality and commands a poor return from the timber market. Thus it would be necessary to

obtain timber from lower sectors of the timber market, competing with local sawmills, wood based panels, pulp, paper and fencing (the lower end of the timber market), avoiding the medium to high quality saw log sectors.

5.2.4 Other opportunities for acquiring timber/woodchip fuel are from small farm units or privately owned woodlands. However, the acquisition of timber/woodchip fuel from these woodlands will not be easy or cost effective when compared with purchasing timber from traditional estate woodlands. Nevertheless, acquiring timber/woodchip fuel from this sector may stimulate formal woodland management within neglected woodlands. It is estimated that 10% of Flintshire's woodland resource are contained within woodland units smaller than <5ha., consequently too isolated and difficult to justify consideration for commercial exploitation.

5.2.5 Taking all factors into consideration, Flintshire as a county has the theoretical capacity to produce in excess of 15,000m3 of timber per annum. Flintshire CC, could engage with woodland owners and purchased biomass directly from the local woodlands in the form of timber (in the round) or processed (Woodchip fuel). Although biomass systems claiming the Relative Heat Incentives (RHI) must use certified timber from registered producers.

#### 5.3 <u>Neighbouring Woodlands</u>

5.3.1 Other market opportunities to obtain woodchip fuel is by purchasing timber from within the AONB and/or the county of Wrexham.

5.3.2 The Clwydian Range has a woodland resource of approximately 934ha evenly distributed throughout its length. Although these woodlands are safeguarded against clearfelling and over exploitation, the overall desire of the AONB Management Plan is to improve and maintain woodlands in "favourable condition". However, access to many of these smaller woodlands is challenging, thus making timber harvesting and extracting unprofitable. Nevertheless, some woodlands do lend themselves to timber production and are capable of producing significant quantities of timber.

5.3.3 With reference to exploitation of the woodland resource in Wrexham, the county has in the order of 4,700ha of woodland (broadleaved and coniferous), proportionally the same as Flintshire, however significantly larger in quantity. A large proportion of Wrexham's woodland resource is easily accessible and open to market exploitation.

#### 6. <u>Short Rotation Coppice</u>

6.1 Short Rotation Coppice (SRC) is an energy crop which consists of densely planted (15,000 stems per ha) high yielding varieties of willow and poplar. Crop yields vary between 7 and 12 dry tonnes/ha/year (21m3 to 36m3/ha/year) and are dependent on soil fertility, moisture availability and aspect/shelter. Mineral soils are ideal for growing willow and poplar cultivars (loams, clay loams and heavy clays suitable), pH values between 5.5 to 7.5 with excessive slopes and uneven ground being unsuitable (above 15%).

6.2 The establishment of SRC plantations has much in common with agricultural and horticultural crops as well as forestry practices, hence the acceptance by the farming community to consider propagating SRC. Trees are planted in windrows and are reminiscent of fields of maize and are harvested by Terrain Chipping Harvesting Systems. Appropriate management of SRC systems provides a source of renewable energy with virtually no net carbon emissions. Harvesting cycles are in the order of 2 to 5 year cycles, following the establishment phase.

6.3 If managed sensibly, SRC can remain productive for a period of thirty years, after which old coppice stools are replaced with maiden trees. Due to the inherent silvics of salicaceae (willow and poplar) very little soil improvement is required. Nevertheless applications of suitable fertilisers are generally applied, post harvesting, January to April.

6.4 Crops are harvested by purpose built harvesting machines or foragers (harvested, chipped and trailered). Chips are then bunkered within a woodchip store, turned and dried to approximate 30% moisture content and burned as and when required. Dried salicaceae wood chip has a density of approximately 200kg to 400kg/m3 or a volume conversion of 2.5m3 to 5.0m3/tonne. Thus large commercial plantations of wood biomass should be established near or in close proximity of suitable engineered road systems with adequate capacity.

6.4 Although commercial plantations of SRC can be perceived as being too uniform a monoculture and may impact negatively on the vernacular landscapes, any visual impacts are normally offset by the environmental and ecological benefits of planting copious amounts of willow and poplar.

6.5 Diversification of farm enterprises has become increasingly important in recent years and the propagation of willow and poplar in SRC systems can offer farmers a means of diversifying their economic activities. Flintshire has a number of farms which have the potential to propagate energy crops in the form of woodchip biomass.

6.6 Although salicaceae as a species is very site accommodating, research on willow and poplar cultivars has focused on the best genetic material for lowland regions in which to maximise growth yields. There appears to be a lack of research into the best clones suitable for low-grade land and on land above 250m.

6.7 Consequently, should Flintshire CC propagate biomass from willow and poplar cultivars, sizable agricultural holdings from Sealand and/or Kinnerton should be considered (Sealand 130ha within 3 units and Kinnerton 223ha within 5 units). These agricultural units have the necessary attributes for propagating biomass on a scale which can be viable i.e. sufficient annual rain fall between 600 to 1000mm, sandy loams of clay soils, reasonably fertile, neutral pH levels, flat or slightly sloping grounds no greater that 7%, gateways wider than 4.5m supported by adequate extraction routes.

6.8 Other attributes associated with the farm units in Sealand are that planting schemes can easily fit into the local landscape, field units can accommodate the optimum row lengths and that the recommended 10% open space can provide room for some of Flintshire more endangered wildlife species. Sealand is ideally placed to take advantage of Flintshire's intrinsic road network, thus reducing travelling costs and ultimately increasing the NPV of the project. In addition to the production

capacity of Sealand farmland, the erection of a processing and storage facility adjacent to the biomass plantation would not look out of place within this military/industrialised area of Flintshire.

6.9 A processing and storage site established in Sealand would also enable the biomass programme to take advantage of neighbouring timber reserves, intercepting timber streams (neighbouring estates, NRW and FE England) and is close to Flintshire's largest woodland resource.

6.10 Other Flintshire CC holdings have been excluded on the evidence of being too small, fragmented, isolated, too difficult a terrain and inadequate soil moisture and nutrition levels.

#### 7.Other Sources of Biomass

#### 7.1 <u>Tree Surgery and Arboriculture</u>

7.1.1 Due to the nature and unpredictability of the work associated with tree surgery, it is difficult to quantify the total annual biomass which may be available to Flintshire CC. However, it is estimated that within NE Wales approximate 21 local trees surgeons actively work to maintain trees within the urban communities of Flintshire, Denbighshire and Wrexham.

7.1.2 Through informal consultation, tree surgeons annually collect and dispose of approximately 120m3 of timber and 200m3 of woodchip, these figures being slightly lower than the London average. Many tree surgeons state that approximately 30% of the annual timber felled remains on site in the form of firewood (owner's requirements) with 70% removed. Small trees and lop and top (<7cm) is chipped, removed from site and disposed of through composting, mulching and in exceptional circumstances biomassed (Clifford Jones Ruthin).

7.1.3 Nevertheless, wood chip derived from arboricultural activities has the necessary capacity to provide a strategic quantity of biomass to meet part of Flintshire's energy needs. However, the green vegetative waste within the woodchip would require removal, as too high a vegetative quantity would inhibit burning, reduce efficiency and generate larger volumes of ash. In addition, tree surgeons tend to fell large trees, which would necessitate access to large industrial size chippers.

7.1.4 In addition, other sources of woodchip which could contribute to this biomass component are those derived from highways maintenance programmes, developments and subsequent land clearances, site maintenance/landscaping programmes and powerline clearance. Many of the above on site activities are directly controlled by Flintshire CC managers with ground work undertaken by Flintshire CC direct labour or by private contractors.

7.1.5 The formation of a central processing plant would enable Flintshire CC to capitalise on this particular element. However, the current processing system employed at Greenfield is not adequately tuned to remove the bulk of available woodchip biomass. The system adopted at Greenfield is designed to produce compost and is therefore too bias a system to generate woodchip biomass.

#### 7.2 <u>Waste Wood or Co-product</u>

7.2.1 The acquisition of waste wood for biomass can be separated into two categories.

7.2.2 The first category deals with the recycled timber from Flintshire's recycling centres. Timber and wood products are deposited into silos and delivered to Shotton Paper for processing into biomass and subsequently electricity. Flintshire CC currently delivers 1100tonnes of timber to Shotton and a further 2100tonnes of timber waste to Thorncliffe for further processing/segregation. If Flintshire CC decides to utilise this product in its own woodchip and biomass system then it would need minimal coordination and small logistic changes.

7.2.3 The second category deals with the waste product created by the primary and secondary processing of timber within the timber industry.

7.2.4 A number of small sawmills work within and in close proximity to Flintshire process softwood (spruce, larch, Douglas Fir and pine). This is a sector of the wood processing industry that is heavily dependent on processing high volumes with relatively small returns.

7.2.5 Due to the inherent properties of softwood timber and the need to capitalise on all opportunities, softwood mills tends to have a relatively healthier conversion factor when compared to the hardwood sector. Hardwood sawmills have a relatively low conversion factor which transpires to a recovery rate of 40% when compared to the 65% recovery rate associated with softwood mills.

7.2.6 Nevertheless, all the sawmills have a conversion factor and generate waste or rather co-products. These co-products can be further compartmentalised into 60% sent for chip (cants or offcuts), 20% classified as sawdust and 11% utilised as bark mulch.

7.2.7 Presently a large proportion of the co-products derived for our sawmills are processed into biomass. Should Flintshire CC wish to acquire a proportion of this material then the authority would have to compete with competitors on the open market.

7.2.8 With reference to fine sawdust and planer chips, Flintshire has a significant wood processing sector, composing of sawmills, joiners and furniture makers. All of whom together produce a significant quantity of sawdust which is collected and processed into wood pellets or consumed in the production of electricity by large power stations.

7.3 The report did not consider the biomass potential of bracken, Misacanthus and arable crops.

#### 8.Opportunities

8.1 <u>Potential biomass from Flintshire CC existing woodlands.</u>

8.1.1 This report has briefly focused on the volume of biomass available within Flintshire CC estate, the potential of propagating biomass from its agricultural holdings and investigating other opportunities within the biomass supply chain.

8.1.2 Due to the uncertainty of future economic grant aid from the British Government and European Community, the report does not provide information on grants or financial incentives offered towards renewable energy projects.

8.1.3 However, should Flintshire embark on a programme of harvesting timber for biomass/wood fuel, then it would be prudent to gain financial assistance on matters pertaining to the establishment of suitable energy crops (SRF and SRC), woodland management, capital support for developing an appropriate processing and storage system and capital support for installing appropriate heating systems whilst gaining long-term agreements on available RHI.

8.1.4 The total operational biomass available from Flintshire's woodland resource for heating is 220m3/annum. This is the increment of timber that Flintshire's woodland resource gains each year which can be harvested without depleting its capital reserve of timber. However, due to pasT management intervention, Flintshire's woodlands contain a significant proportion of medium to high quality timber. Medium to high grade timber should be directed to appropriate market niches or processed in house, thus maximising returns. Traditionally, biomass consists of lop and top, first and second thinnings and trees of poor form and character. Thus the majority of timber recommended for biomass should be small round wood, poor quality stems, defective and diseased trees and branches and branch tips.

8.1.5 As a primary producer of timber, Flintshire CC should be more active in exploiting this resource. Recently Flintshire Countryside Service have embarked on a programme whereby Wepre timber has been utilised in the construction of buildings, cladding, revetments and countryside fixtures. As part of this programme, unsuitable timber, a by-product of the harvesting, which should have been directed towards biomass but was retained within the woodland environment.

With reference to the commercial capability of Flintshire's woodlands, any 8.1.6 increase in productivity will be offset by the inherent restriction imposed by social requirements. Due to their location, Flintshire's woodlands are very productive woodlands, high vielding and stocked with appropriate tree species (high calorific values). In addition, these woodlands are exceptionally rich in biodiversity and are important recreational features. Nevertheless, the potential to produce biomass from a proportion of Flintshire's woodlands should be viewed as an opportunity. Currently, Flintshire CC woodlands are overstocked and in need of an extensive thinning programme. However, people don't take lightly to felling trees. Years of visiting our woodlands creates a sense of familiarity and ownership. This public antipathy towards tree felling would require addressing. Nevertheless, a strategic change in the silvicultural systems would increase productivity and increase the proportion of available biomass i.e. using short rotation forestry (SRF) to optimise growth volumes (where trees are managed 12 to 15 year rotation, not to be confused with short rotation coppice (SRC)).

8.1.7 One note of caution is the possibility that Ash Dieback and Phytophthoraramorum could severely affect the productivity of our woodlands.

#### 8.2 Short Rotation Coppicing Flintshire's Agricultural Estate

8.2.1 With reference to SRC, the establishment of a biomass crop at Sealand has the capacity to supply a strategic quantity of woodchip fuel. The surrounding area provides sufficient capacity to construct and install a woodchip processing and

storage facility which would reduce handling costs to a minimum. In addition, a storage and processing site, strategically placed adjacent to the A55 link road, would be perfectly positioned to exploit additional timber streams and accept industry co-products, waste timber and unwanted biomass from Flintshire's recycling service.

8.2.2 A biomass processing and distribution site at Sealand would be ideally placed to supply the county should Flintshire embark on a programme of installing a number of small/medium size boilers or construct one large biomass unit. Thus transportation costs would be reduced to a minimum and transportation efficiency and networking increased.

8.2.3 If the information from the agricultural department is correct and the land is adopted for the propagation of biomass, hypothetically Sealand has the capacity to sustainably propagate in excess of 1300 tonnes of willow/poplar biomass annually.

#### 8.3 <u>Other Sources of Biomass</u>

8.3.1 Other sources of biomass are from the arboriculture industry, trees surgeons and land maintenance crews (private and public) who provide a service to our community and also undertake some contractual work regarding site clearance, site maintenance, highway maintenance and line clearance. This sector has the potential of supplying in excess of 1500m3 of biomass per annum. However, for this element to succeed a high degree of organisation is required to coordinate materials to a central point. This provision would easily engage with aspects of our current composting programme.

8.3.2 Approximately 40% to 65% of the volume of timber sold to the sawmills will be converted into timber/timber products. The remaining co-products are recycled into woodchip fuel and/or pelleting (bark being a horticultural product). Should Flintshire wish to obtain a proportion of this material, then it would have to compete with other businesses on the open market.

8.3.3 The acquisition of timber from Flintshire's recycling service would further enhance the total volume of biomass. However, the issues relating to processing this timber and potentially burning pollutants within an urban setting needs further investigation. Nevertheless, it is estimated that a further 2000 tonnes of recycled timber can be redirected into Flintshire's biomass programme.

8.3.4 As previously discussed, the largest supply of biomass open to exploitation is from woodlands (private and public). Flintshire, as a county, has the capacity to produce in excess of 1500m3 of timber annually. There is an opportunity for Flintshire CC to gain timber from NRW and/or local private estates. Presently the softwood timber markets are depressed (a reliance on the housing market to generate a demand). In addition, UK timber production of softwood is set to increase and peak 2020-2025 which could further depress the UK market.

#### 9. Report Limitations

9.1 Due to the limited time constraint of compiling this document, sections have not been referenced. The document has been written with a view of investigating the possibility of exploiting the existing timber resource. Should the local authority embark on a programme of utilising biomass for energy, then it is highly recommended that a formal consultation with specialist biomass engineers be undertaken.



#### ENVIRONMENT OVERVIEW & SCRUTINY COMMITTEE

Date of Meeting	Wednesday 2 <sup>nd</sup> November, 2016
Report Subject	Quarter 1 Improvement Plan Monitoring Report
Cabinet Member	Deputy Leader and Cabinet Member for Environment Cabinet Member for Waste Strategy, Public Protection and Leisure
Report Author	Chief Executive Chief Officer – Streetscene and Transportation Chief Officer – Planning and Environment
Type of Report	Strategic

#### EXECUTIVE SUMMARY

The Improvement Plan for 2016/17 was adopted by the Council on 14<sup>th</sup> June, 2016.

This report presents the monitoring of progress for the first quarter of the Improvement Plan 2016/17 priority 'Modern and Efficient Council' relevant to the Organisational Change Overview and Scrutiny Committee.

Flintshire is a high performing Council as evidenced in previous Improvement Plan monitoring reports as well as in the Council's Annual Performance Reports. This Quarter 1 monitoring report for the 2016/17 Improvement Plan is also a positive report, with the majority of activities being assessed as making good progress 83% and likely to achieve the desired outcome 83%. In addition, 50% of the performance indicators met or exceeded target for the quarter. Risks are also being successfully managed with the majority being assessed as moderate (71%).

This report is an exception based report and therefore detail focuses on the areas of under-performance.

RECOMMENDATIONS		
1	That the Committee consider the Quarter 1 Improvement Plan monitoring reports to monitor under performance and request further information as appropriate.	

#### REPORT DETAILS

1.00	EXPLAINING THE IMPROVEMENT PLAN MONITORING REPORT
1.01	The Improvement Plan monitoring report gives and explanation of the progress being made towards the delivery of the impacts set out in the 2016/17 Improvement Plan. The narrative is supported by performance indicators and/or milestones which evidence achievement. In addition, there is an assessment of the strategic risks and the level to which they are controlled.
1.02	Analysis of performance against the Improvement Plan measures is undertaken using trend arrows.
	Analysis of trend performance (against previous quarters, or against the same quarter of the previous year for Quarter 1) is shown with an arrow;
	<ul> <li>To indicate upward trend&lt;</li> </ul>
	• To indicate downward trend $\square$
	<ul> <li>To indicate no change ⇐⇒</li> </ul>
1.03	<ul> <li>Monitoring our Activities</li> <li>Each of the sub-priorities have high level activities which are monitored over time. 'Progress' monitors progress against scheduled activity and has been categorised as follows: - <ul> <li>RED: Limited Progress – delay in scheduled activity; not on track</li> <li>AMBER: Satisfactory Progress – some delay in scheduled activity, but broadly on track</li> <li>GREEN: Good Progress – activities completed on schedule, on track</li> </ul> </li> <li>A RAG status is also given as an assessment of our level of confidence at this point in time in achieving the 'outcome(s)' for each sub-priority. Outcome has been categorised as: - <ul> <li>RED: Low – lower level of confidence in the achievement of the outcome(s)</li> <li>AMBER: Medium – uncertain level of confidence in the achievement of the outcome(s)</li> <li>GREEN: High – full confidence in the achievement of the outcome(s)</li> </ul> </li> </ul>
1.04	In summary our overall progress against the high level activities is: -
	ACTIVITES PROGRESS
	<ul> <li>We are making good (green) progress in 10 (83%).</li> </ul>
	<ul> <li>vve are making satisfactory (amber) progress in 2 (17%).</li> <li>We are making limited progress (red) in 0 (0%).</li> </ul>

	ACTIVITIES OUTCOME
	<ul> <li>We have a high (green) level of confidence in the achievement of 10 (83%).</li> </ul>
	<ul> <li>We have a medium (amber) level of confidence in the achievement of 2 (17%).</li> </ul>
	<ul> <li>We have a low (red) level of confidence in the achievement of 0 (0%).</li> </ul>
1.05	<b>Monitoring our Performance</b> Analysis of performance against the Improvement Plan performance indicators is undertaken using the RAG (Red, Amber Green) status. This is defined as follows: -
	<ul> <li>RED equates to a position of under-performance against target</li> </ul>
	<ul> <li>AMBER equates to a mid-position where improvement may have been made but performance has missed the target.</li> </ul>
	<ul> <li>GREEN equates to a position of positive performance against target.</li> </ul>
1.06	Analysis of current levels of performance for those PIs which are measured quarterly and where performance could be compared with target, shows the following: -
	<ul> <li>1 (50%) had achieved a green RAG status</li> </ul>
	<ul> <li>0 (0%) had achieved an amber RAG status</li> </ul>
	<ul> <li>1 (50%) had achieved a red RAG status</li> </ul>
1.07	Analysis of the trend for those indicators where performance could be compared with the Q1 period of 2015/16, shows:
	<ul> <li>1 (50%) had improved</li> </ul>
	<ul> <li>0 (0%) had remained at the same level</li> </ul>
	<ul> <li>50 (50%) had downturned</li> </ul>
1.08	Monitoring our Risks Analysis of the current risk levels for the strategic risks identified in the
	Improvement Plan is as follows: -
	<ul> <li>0 (0%) is insignificant (green)</li> </ul>
	<ul> <li>0 (0%) are minor (yellow)</li> </ul>
	<ul> <li>5 (71%) are moderate (amber)</li> </ul>
	<ul> <li>2 (29) are major (red)</li> </ul>
	<ul> <li>0 (0%) are severe (black)</li> </ul>
1.09	The one major (red) risk area identified for the Environment Overview & Scrutiny Committee is:-
	Priority: Environment Risk: Funding will not be secured for priority flood alleviation schemes. The Council continue to monitor the grant situation and availability, and reviewing future capital bids at corporate level.

2.00 RESOURCE IMPLICATION
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2.01	The Council's Medium Term Financial Plan is aligned to resource the priorities of the Improvement Plan.
2.02	Resources to produce the progress and trend analysis reports has reduced significantly through the use of the CAMMS system.

3.00	CONSULTATIONS REQUIRED / CARRIED OUT
3.01	Overview and Scrutiny Committees have been involved in quarterly performance progress reports.
	The Audit Committee receives twice yearly Improvement Plan risk reports.

4.00	RISK MANAGEMENT
4.01	Progress against the risks identified in the Improvement Plan have been reported on for Quarter 1 and the detail is included in the report at Appendix 1.

5.00	APPENDICES						
5.01	Appendix 1 – Environment.	Quarter	1	Improvement	Plan	Monitoring	Report –

6.00	LIST OF ACCESS	IBLE BACKGROUND DOCUMENTS
6.01	None. Contact Officer: Telephone: E-mail:	Margaret Parry-Jones 01352 702427 margaret.parry-jones@flintshire.gov.uk

7.00	GLOSSARY OF TERMS
7.01	<b>Improvement Plan:</b> the document which sets out the annual priorities of the Council. It is a requirement of the Local Government (Wales) Measure 2009 to set Improvement Objectives and publish an Improvement Plan.
7.02	<b>CAMMS:</b> is an integrated planning, risk management and programme / project management and reporting software. It was purchased in April 2015 and work to commence implementation began in May; focusing initially on the Council's Improvement Plan and the Portfolio of Social Services.

7.03	Hea com	<b>Headings: 'Pre. Year Period Actual':</b> Performance Indicators are compared back to the same quarter of the previous reporting year.										
7.04	<b>Irend Arrows:</b> An upward trend arrow doesn't necessarily mean an improvement in performance and nor does a downward trend necessarily mean a reduction in performance. The trend arrows relate to the target set, so if a target is, for example, to reduce sickness absence and the reported actual is less than the previous quarter, a downward trend arrow would be generated, even though the performance has actually improved because less people are off sick. The improved performance will be shown in the RAG status (as detailed below) as green.											
7.05	Risk Matrix: Risks are now assessed using the improved approach to risk management endorsed by Audit Committee in June 2015. Paragraph 6.03 contains a link to the Audit Committee report which outlines the new approach, including the use of a new and more sophisticated risk assessment matrix which provides greater opportunities to show changes over time. Risk Likelihood and Impact Matrix											
		Catastrophic	Y	A	R	R	В	В				
	Severity	Critical	Y	A	A	R	R	R				
	Impact (	Marginal	G	Y	A	A	А	R				
		Negligible	G	G	Y	Y	Α	Α				
			Unlikely	Very Low	Low	Significant	Verv High	Extremely				
			(5%)	(15%)	(30%)	(50%)	(65%)	High (80%)				
			(5%)	(15%) Likelihoo	(30%) od & Percent	(50%) age of risk ha	(65%)	High (80%)				

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## Quarter 1 Improvement Plan 2016/17 Progress Report Environment

age lintshire County Council



Print Date: 23-Sep-2016

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#### 7 Environment

#### Actions

ACTION	LEAD OFFICER	STATUS	START DATE	END DATE	COMPLETE %	PROGRESS RAG	OUTCOME RAG
7.1.1.1 Access available funding to support Council priorities for accessing employment, health, leisure and education	Sue Price - Transport Policy Officer	Not Started	01-Apr-2016	31-Mar-2017	0.00%		600
ACTION PROGRESS COMMENTS: NA							

<u>B</u>		LEAD OFFICER	STATUS	START DATE	END DATE	COMPLETE %	PROGRESS RAG	OUTCOME RAG
G 4 2	7.1.1.2 Prioritise the Councils road infrastructure for repairs and maintenance and implement programmes of work within available funding in order to improve the resilience, efficiency and reliability of the transport network.	Ian Bushell - Technical and Performance Manager	In Progress	01-Apr-2016	31-Mar-2017	50.00%	GREEN	GREEN
	ACTION PROGRESS COMMENTS:							

Road Infrastructure and Repairs and Maintenance are build up of 3 main contracts - Carriageway Surface Dressing - 01/04/16 to 01/05/16 - Works Complete Carriageway Resurfacing - 01/05/16 to 31/10/16 - In Progress Carriageway Patching - 01/01/17 to 31/03/17 - Not started Works are in progress and anticipated completion as per dates above.

Last Updated: 25-Aug-2016

ACTION	LEAD OFFICER	STATUS	START DATE	END DATE	COMPLETE %	PROGRESS RAG	OUTCOME RAG
7.1.1.3 Use available funding to support the Councils priorities to improve road safety on the County's highway network.	Lee Shone - Road Safety Officer	In Progress	01-Apr-2016	31-Mar-2017	40.00%	GREEN	GREEN

ACTION PROGRESS COMMENTS:

Welsh Government funding received for Road Safety Grant Schemes (2016/17) - i) A5026, Lloc - Juntion Improvement ii) A5104 Penymynydd to Warren Hall - Route treatment iii) Liverpool Road/Alltami Road - Route treatment All schemes are at the design/consultation stage. Welsh Government funding received for Safer Routes in the Community (2016/17) for an upgrade of existing zebra Crossing, to a light controlled crossing, London Road, Trelawnyd (Outside School) - Scheme complete

#### Last Updated: 20-Sep-2016

ACTION	LEAD OFFICER	STATUS	START DATE	END DATE	COMPLETE %	PROGRESS RAG	OUTCOME RAG
7.1.1.4 Work closely with the communities to develop innovative and sustainable community transport schemes	Katie Wilby - Transportation and Logistics Manager	Ongoing	01-Apr-2016	01-Apr-2017	-	GREEN	AMBER

#### ACTION PROGRESS COMMENTS:

Working groups have now been set up within the 21 communities that have signed up to the project and working group meetings have been taking place throughout August and September 2016. The purpose of the working groups is to organise the public drop-in events within their communities, arrange publicity for the events and identify the demand within each area. A series of drop in events will be held across the County starting on 30th September 2016 to engage with the wider community and stakeholders to explain how people can get involved in the project, understand the demand and capacity within the areas and what support may be required in setting up the new initiatives.

#### ast Updated: 20-Sep-2016

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ACTION	LEAD OFFICER	STATUS	START DATE	END DATE	COMPLETE %	PROGRESS RAG	OUTCOME RAG			
7.2.1.1 Establish an Environment working Group to ensure that the Council adopts an integrated approach to service delivery which meets the aims and objectives of the Single Environment Grant (SEG).	Andrew Farrow - Chief Officer - Planning and Environment	Complet ed	01-Apr-2016	31-Mar-2017	100.00%	GREEN	GREEN			
ACTION PROGRESS COMMENTS: The Single Environment Working Group was established in June and has met twice since. The Group has successfully coordinated the actions of the two portfolios to meet the aims of the SEG claim. Last Updated: 20-Sep-2016										
		1								
ACTION		STATUS	START DATE	END DATE		DROGRESS	OUTCOME			

RAG

%

RAG

7.2.1.2 Agree the Local Development Plans vision and	Andy Roberts - Planning	In	01-Apr-2016	31-Mar-2017	50.00%		
objectives, and options to accommodate growth	Strategy Manager	Progress				GREEN	GREEN

#### **ACTION PROGRESS COMMENTS:**

The Plan's vision and objectives were consulted on in the spring of 2016 as part of the Key Messages public consultation, where the feedback resulted in only minor amendments to the wording of certain objectives for clarification. The vision and objectives now form part of the emerging Plan strategy. Growth and spatial options have been developed and discussed with Members at the Planning Strategy Group. These will be published for public consultation in the autumn of 2016, in line with the revised Delivery Agreement and Timetable approved by Cabinet in June 2016. The Plan is on target to prepare the Core Strategy by the end of 2016 which will be made available for consultation by March 2017.

#### Last Updated: 12-Sep-2016

ACTION	LEAD OFFICER	STATUS	START DATE	END DATE	COMPLETE %	PROGRESS RAG	OUTCOME RAG
7.2.1.3 Reducing our Carbon footprint	Paul Kindlin - Energy Conservation Building Surveyor	In Progress	01-Apr-2016	31-Mar-2017	25.00%	GREEN	GREEN

#### **UCTION PROGRESS COMMENTS:**

Flintshire County Councils Carbon Reduction Commitment (CRC) returns showed a reduction of 913 tonnes from 22032 tonnes in the year 2014/15 to 21119 in 2015/16. Energy Consumption figures for Q1 compared to Q1 last year showing reductions in all fuels as follows: Electricity - 2 %, Gas - 5%, Oil -10%, LPG -1% Lighting refurbishments have been completed at County Hall (Phase 2), County Offices Flint, Gwynedd CP School and Derwen CP School, Kinnerton. Two small Solar farms being installed on former landfill sites (400KWp rookhill and 700KWp Standard) expected to be complete and commissioned 3rd October. Private wire being connected to Plastics Recycling Centre at Standard. Financial case being prepared to construct an 11Kv overhead or underground line between Brookhill Solar farm and Alltami depot. Evaporative cooling system operational in Alltami Depot data centre replacing the air conditioning system, approximate annual savings of 138 tonnes of carbon. Two Solar Photo Voltaic (P.V.) installations have been completed at Cornist CP School, Flint (25kWp) and Ewloe Green CP School (12kWp).

#### Last Updated: 15-Sep-2016

ACTION	LEAD OFFICER	STATUS	START DATE	END DATE	COMPLETE %	PROGRESS RAG	OUTCOME RAG
7.2.1.4 Reviewing the Flood Risk Management Strategy	Ruairi Barry - Senior Engineer	Ongoing	01-Apr-2016	31-Mar-2017	-	GREEN	AMBER

#### **ACTION PROGRESS COMMENTS:**

Work remains on-going on reviewing Flintshire's Local Flood Risk Management Strategy (LFRMS). The present strategy runs from 2013-2017 and proposes that a review takes place in 2017 following the review of Welsh Government's National Strategy. A review of the LFRMS is needed to ensure the Council's approach to local Flood Risk Management remains in accordance with the document, and that strategic aims and objectives in the National Strategy are being reflected by local approaches to flood risk management.

#### Last Updated: 20-Sep-2016

ACTION	LEAD OFFICER	STATUS	START DATE	END DATE	COMPLETE %	PROGRESS RAG	OUTCOME RAG
7.2.1.5 Reducing the occurrence and impact of environmental crime.	Harvey Mitchell - Waste and Ancillary Services Manager	In Progress	01-Apr-2016	31-Mar-2017	25.00%	GREEN	GREEN
ACTION PROGRESS COMMENTS: Introduction of a third party contractor on a 12 month pi Last Updated: 21-Sep-2016	lot scheme to enforce littering and	d dog foulir	ng offences in line	e with he council	s zero tolerance	approach.	

#### **Performance Indicators**

KPI Title ပ	Pre. Year Period Actual	Period Actual	Period Target	Perf. RAG	Perf. Indicator Trend	YTD Actual	YTD Target	Outcome RAG
P7.1.2M02 Percentage of inspections undertaken to ensure reinstatements meet equired standards so as to improve the standard of works undertaken on Flintshire's network.	No Data	12	12.5	AMBER	N/A	12	12.5	GREEN
Lead Officer: Stephen Jones - Chief Officer - Streetscene and Transportation Reporting Officer: Sam Tulley - Road Space Manager Aspirational Target: Progress Comment: Percentage of inspections undertaken on Utility roadwork's to ensure standards are met, promoting good working practices and reducing the need for site re- visits.								
	Pre. Year				Perf.			

KPI Title	Pre. Year Period Actual	Period Actual	Period Target	Perf. RAG	Perf. Indicator Trend	YTD Actual	YTD Target	Outcome RAG
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IP7.1.3M01 Road safety initiatives to reduce the risk of collisions of high risk groups: Older drivers	7	8	18	RED	1	8	18	AMBER			
Lead Officer: Anthony Stanford - Highways Strategy Manager Reporting Officer: Lee Shone - Road Safety Officer Aspirational Target: Progress Comment: Scheme advertisement options being considered. In-house web development being undertaken and North Wales scheme re-launch plans in discussions. Advertisement has been undertaken in local press. Last Updated: 30-Aug-2016											
KPI Title	Pre. Year Period Actual	Period Actual	Period Target	Perf. RAG	Perf. Indicator Trend	YTD Actual	YTD Target	Outcome RAG			
P7.1.3M02 Road safety initiatives to Meduce the risk of collisions of high risk proups: Newly qualified young drivers	7	4	30	RED	₽	4	30	AMBER			
Lead Officer: Anthony Stanford - Highways Strategy Manager Seporting Officer: Lee Shone - Road Safety Officer Aspirational Target: Progress Comment: Low uptake and scheme issues being considered at Young Persons Steering Group. Last Updated: 30-Aug-2016											
	Pre. Year				Perf.						

KPI Title	Pre. Year Period Actual	Period Actual	Period Target	Perf. RAG	Perf. Indicator Trend	YTD Actual	YTD Target	Outcome RAG
IP7.1.3M03 Road safety initiatives to reduce the risk of collisions of high risk groups: Motorcyclists	20	13	64	RED		13	64	GREEN

Lead Officer: Anthony Stanford - Highways Strategy Manager Reporting Officer: Lee Shone - Road Safety Officer

Aspirational Target:

**Progress Comment:** Initiative includes FBOS, Scooter Safe and Bikesafe. NWP deliver scheme.

Last Updated: 30-Aug-2016

#### RISKS

#### Strategic Risk

RISK TITLE	LEAD OFFICER	SUPPORTING OFFICERS	INITIAL RISK RATING	CURRENT RISK RATING	TREND ARROW	RISK STATUS
Sufficient funding to ensure our highways infrastructure remains safe and capable of supporting economic growth.	Stephen Jones - Chief Officer - Streetscene and Transportation	Barry Wilkinson - Highways Networks Manager	Amber	Amber	\$	Open
Potential Effect: Deteoriation of the condition of high Management Controls: Focussed investment through Road Safety Scheme identification for improvement to Maximize funding received through the quality of the b	ways in Flintshire. the funding of schemes the routes through available f bid submission by aligning s	at maintain or reduce the pace unding mechanisms. submissions to follow successf	e of deterioration	of the condition of th niques.	ne main highway inf	rastructure.

Progress Comment: Identification of schemes for improvement and maintenance works is on-going through departmental wide consultation with Area Managers, Area Coordinators and the Highway Strategy Team. Significant schemes are measured on a internal matrix for the purposes of rank ordering, and then aligned to funding models to ensure highest opportunity of funding success.

Last Updated: 21-Sep-2016

RISK TITLE	LEAD OFFICER	SUPPORTING OFFICERS	INITIAL RISK RATING	CURRENT RISK RATING	TREND ARROW	RISK STATUS
Sustainable transport options do not remain attractive to users.	Stephen Jones - Chief Officer - Streetscene and Transportation	Katie Wilby - Transportation and Logistics Manager	Amber	Amber	<b>‡</b>	Open

Potential Effect: Increase in individual car usage. Increase in deteoriation of the highway. Not meet the requirements of the Active Travel Wales bill. Management Controls: Develop initiatives around fares, ticketing interoperability, transport integration, vehicle standards, accessibility (low floor vehicles), safety and security measures (e.g. CCTV mandatory), driver training, quality of passenger transport information, marketing and promotion of services Progress Comment:

RISK TITLE	LEAD OFFICER	SUPPORTING OFFICERS	INITIAL RISK RATING	CURRENT RISK RATING	TREND ARROW	RISK STATUS
Sufficient funding will not be found to continue to provide subsidised bus services.	Stephen Jones - Chief Officer - Streetscene and Transportation	Katie Wilby - Transportation and Logistics Manager	Amber	Amber	+	Open
Potential Effect: Decrease in bus services to residents, Management Controls: Develop services so that they Progress Comment:	particularly in rural areas. become more commerciall	y viable				

RISK TITLE	LEAD OFFICER	SUPPORTING OFFICERS	INITIAL RISK RATING	CURRENT RISK RATING	TREND ARROW	RISK STATUS
Reduction of the Single Environment Grant.	Andrew Farrow - Chief Officer - Planning and Environment		Amber	Amber		Open
Potential Effect: Potential reduction in future serv Management Controls: Progress Comment: This still remains a risk as we	ce provision await the WG Revenue Grant :	Settlement and the impact tha	t may have on gra	nt levels.		
Last Updated: 16-Sep-2016						

RISK TITLE	LEAD OFFICER	SUPPORTING OFFICERS	INITIAL RISK RATING	CURRENT RISK RATING	TREND ARROW	RISK STATUS
Recycling programmes are not supported by the public and employees.	Stephen Jones - Chief Officer - Streetscene and Transportation	Harvey Mitchell - Waste and Ancillary Services Manager	Amber	Amber	ŧ	Open

 Potential Effect: Decreasing income from resale of recyclates. Increased infraction charges. Carbon reduction targets not met.

 Management Controls: Recycling information to public.

 Employee recycling schemes in place.

 Incentives for local business to recycle.

 Marketing campaigns.

 Targeting of areas with low participation rates.

 Increase meet and greet service at HRCs.

 Early stakeholder engagement.

Progress Comment:

RISK TITLE	LEAD OFFICER	SUPPORTING OFFICERS	INITIAL RISK RATING	CURRENT RISK RATING	TREND ARROW	RISK STATUS
Limitations on suitable Council sites with sufficient area for larger scale renewables schemes and suitable connections to the electric grid.	Andrew Farrow - Chief Officer - Planning and Environment		Amber	Amber	+	Open
<b>Example 1 Effect:</b> Unable to generate power through FC <b>Management Controls:</b> Continue to review the availab <b>Progress Comment:</b> Reviewing scope with green Grow <b>Const Updated:</b> 19-Sep-2016	C controlled renewables s ility of sites. th Wales team.	ources. Continue to pay marke	et prices for energ	ıy.		

RISK TITLE	LEAD OFFICER	SUPPORTING OFFICERS	INITIAL RISK RATING	CURRENT RISK RATING	TREND ARROW	RISK STATUS
Funding will not be secured for priority flood alleviation schemes.	Andrew Farrow - Chief Officer - Planning and Environment		Red	Red	+	Open
Potential Effect: Flood schemes will not be delivered Management Controls: Review our approach to fundi Progress Comment: Need to continue to monitor the Last Updated: 16-Sep-2016	ng capital projects grant situation and availak	ility. Reviewing future capital	bids on a corpora	te level.		

RISK TITLE	LEAD OFFICER	SUPPORTING OFFICERS	INITIAL RISK RATING	CURRENT RISK RATING	TREND ARROW	RISK STATUS	
Customer expectations around the delivery of flood alleviation schemes are not effectively managed.	Andrew Farrow - Chief Officer - Planning and Environment		Amber	Amber	₽	Open	
Potential Effect: Flood schemes will not be delivered Management Controls: Review our approach to funding capital projects Progress Comment: Improved information provided prior to commencement of projects is helping to address expectations Last Updated: 16-Sep-2016							

RISK TITLE	LEAD OFFICER	SUPPORTING OFFICERS	INITIAL RISK RATING	CURRENT RISK RATING	TREND ARROW	RISK STATUS
Divironmental crime programmes are not supported by the public and employees.	Andrew Farrow - Chief Officer - Planning and Environment		Amber	Amber	➡	Open
Getential Effect: Continued problems with littering, graffiti and loss of environmental quality         Comparison of the effectiveness of projects and clarify the purpose of schemes prior to implementation.         Progress Comment: Continue to monitor success of projects and take actions to mitigate         Last Updated: 21-Sep-2016						



#### **ENVIRONMENT OVERVIEW & SCRUTINY COMMITTEE**

Date of Meeting	Wednesday 2 November 2016
Report Subject	Forward Work Programme
Cabinet Member	Not applicable
Report Author	Environment Overview & Scrutiny Facilitator
•	
Type of Report	Operational
5.	

#### EXECUTIVE SUMMARY

Overview & Scrutiny presents a unique opportunity for Members to determine the Forward Work programme of the Committee of which they are Members. By reviewing and prioritising the Forward Work Programme Members are able to ensure it is Member-led and includes the right issues. A copy of the Forward Work Programme is attached at Appendix 1 for Members' consideration which has been updated following the last meeting.

The Committee is asked to consider, and amend where necessary, the Forward Work Programme for the Environment Overview & Scrutiny Committee.

RECO	MMENDATION
1	That the Committee considers the draft Forward Work Programme and approve/amend as necessary.
2	That the Facilitator, in consultation with the Chair of the Committee be authorised to vary the Forward Work Programme between meetings, as the need arises.

#### **REPORT DETAILS**

1.00	EXPLAINING THE FORWARD WORK PROGRAMME
1.01	Items feed into a Committee's Forward Work Programme from a number of sources. Members can suggest topics for review by Overview & Scrutiny Committees, members of the public can suggest topics, items can be referred by the Cabinet for consultation purposes, or by County Council or Chief Officers. Other possible items are identified from the Cabinet Work Programme and the Improvement Plan.
1.02	In identifying topics for future consideration, it is useful for a 'test of significance' to be applied. This can be achieved by asking a range of questions as follows:
	<ol> <li>Will the review contribute to the Council's priorities and/or objectives?</li> <li>Is it an area of major change or risk?</li> <li>Are there issues of concern in performance?</li> <li>Is there new Government guidance of legislation?</li> <li>Is it prompted by the work carried out by Regulators/Internal Audit?</li> </ol>

2.00	RESOURCE IMPLICATIONS
2.01	None as a result of this report.

3.00	CONSULTATIONS REQUIRED / CARRIED OUT
3.01	Publication of this report constitutes consultation.

4.00	RISK MANAGEMENT
4.01	None as a result of this report.

5.00	APPENDICES
5.01	Appendix 1 – Draft Forward Work Programme

# 6.00 LIST OF ACCESSIBLE BACKGROUND DOCUMENTS 6.01 None.

Contact Officer:	Margaret Parry-Jones Overview & Scrutiny Facilitator
Telephone:	01352 702427
E-mail:	margaret.parry-jones@flintshire.gov.uk

7.00	GLOSSARY OF TERMS
7.01	<b>Improvement Plan:</b> the document which sets out the annual priorities of the Council. It is a requirement of the Local Government (Wales) Measure 2009 to set Improvement Objectives and publish an Improvement Plan.

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#### ENVIRONMENT OVERVIEW & SCRUTINY FORWARD WORK PROGRAMME

### **Draft Forward Work Programme**

Date of Meeting	Subject	Purpose of Report/Presentation	Scrutiny Focus	Responsible/Contact Officer	Submission Deadline
2 November 2016 10.00 am	Renewable energy	To receive an update report on progress to date.	Progress monitoring	Energy Manager	
	Q1 Improvement Plan Monitoring	To enable Members to fulfil their scrutiny role in relation to performance monitoring	Assurance	Facilitator	
7 December 2016 10.00 am	North Wales Residual Waste Project update	To receive and consider further details on the progress of the project.	Assurance	Chief Executive	
Dane 5	Q2 Improvement Plan Monitoring report	To enable Members to fulfil their scrutiny role in relation to performance monitoring	Assurance	Facilitator	
וכ	Deeside Environmental Task Group	To receive an update on the work of the group	Update	Streetscene and Transportation	
9 December 2016 10.00 am(Budget meeting)			Budget options consultation	Chief Officer Planning & Environment/Chief Officer Streetscene and Transportation	
11 January 2017 10.00 am	Dog DNA Task & Finish Group feedback	To receive an update report from the Task & Finish Group	Update	Facilitator	
	Planning Enforcement Policy	To consider the proposed changes.	Options consultation	Chief Officer Planning and Environment	

#### ENVIRONMENT OVERVIEW & SCRUTINY FORWARD WORK PROGRAMME

Date of Meeting	Subject	Purpose of Report/Presentation	Scrutiny Focus	Responsible/Contact Officer	Submission Deadline
13 January 2017  10.00 am (Budget			Budget options	Chief Officer Planning & Environment/Chief	
meeting)			constitution	Transportation	
8 February 2017 10.00 am	Trading Standards Collaborative Projects	To receive an update on the collaborative projects	Awareness Raising	Chief Officer Planning and Environment	
8 March 2017 02pm 0 0	Q3 Improvement Plan Monitoring report	To enable Members to fulfil their scrutiny role in relation to performance monitoring	Assurance	Facilitator	
ວກ ວ້າ13 June 2017 10.00 am	Q4 and Year End Improvement Plan monitoring	To enable Members to fulfil their scrutiny role in relation to performance monitoring	Assurance	Facilitator	
11 July 2017 10.00 am					

## ITEMS TO BE SCHEDULED as agreed by Committee

ltem	Purpose of Report/Session	Responsible / Contact Officer

#### **REGULAR ITEMS**

Month	Item	Purpose of Report	Responsible / Contact Officer
Quarterly/ Half-Yearly	Improvement Plan Monitoring and Performance Reports	To enable Members to fulfil their scrutiny role in relation to performance monitoring.	Chief Officers

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