

# UPDATE OPTION 5 (Preferred) - Weekly Kerbside Sort (including food waste), 4-weekly residual, AHP service: Wel-being Impact Assessment Report

This report summarises the likely impact of the proposal on the social, economic, environmental and cultural well-being of Denbighshire, Wales and the world.

**Assessment Number: 407** 

**Brief description:** This assessment is required as the Council needs to fundamentally change the way we collect household waste to further improve recycling in the County as part of strategy to meet Welsh Government 70% recycling target by 2024/25 and to address on-going increasing budget pressure due to the cost of sending our mixed recycling for further separation at a Materials recovery Facility. In Option 5 (preferred) the comingled blue recycling 240l bin would be replaced with a TrolliBocs System, where residents present sorted waste into separate stackable containers. The Trollibocs and the existing food waste caddy would be collected weekly on the same vehicle, resulting in resource revenue savings from the provision of higher quality, pre-sorted recycling. Residual waste would be collected every 4 weeks in a 240l bin (plan to re-use redundant 240l blue bins). An optional human hygiene waste (AHP) service would be offered to remove "smelly waste" from the residual bin where required. New recycling waste streams would be targeted, including batteries, small electrical, electronic equipment (WEEE) and textiles and collected. Currently residents put paper, card, wax cartons, plastic containers/bottles, can and glass bottles/jars altogether in a 240litre blue bin which is collected fortnightly.

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Completed by: Peter Clayton

Responsible Service: Highways and Environmental Services

Localities affected by the proposal: Whole County,

Who will be affected by the proposal? All Residents / Households in Denbighshire; Operational Waste Team as new model rolled out, Trade Waste Customers, Landlords/Social landlords, Contact Centre and range of Council departments

Was this impact assessment completed as a group? No

**Summary and Conclusion** 

Before we look in detail at the contribution and impact of the proposal, it is important to consider how

the proposal is applying the sustainable development principle. This means that we must act "in a

manner which seeks to ensure that the needs of the present are met without compromising the ability

of future generations to meet their own needs."

Score for the sustainability of the approach

3 out of 4 stars

Actual score: 33/36.

Summary for each Sustainable Development principle

Long term

We will develop a wider waste strategy linking to the Welsh Government strategy /ambition to become carbon neutral by 2030. Developed a Benefits Realisation Plan that will be tracked during and beyond project implementation. The service change will include modernisation through the use of in cab technology / pioneering microchipped waste containers. Application of trial data on latest

advancements with electric vehicles will be used to optimise green fleet procurement.

**Prevention** 

Working with partners on assessing carbon reduction impact of new service model. Working with Partners to promote pro-recycling behaviours. Wider adoption of social norming to instructional messages and nudges including via associated communication plans. Introduction of microchipped containers to prevent recyclables being put in residual bin. Implementation of In-Cab technology to

improve data gathering to allow more targeted engagement to address issues.

Integration

Consortium of local businesses involved in depot project, providing a wider industrial development on a site allocated under the LCP for expansion. The depot design evolved to include Highway/Streetscene Services waste streams. The Modernisation of Technology is being led by the

ICT business Partner and compliments the wider corporate ambition to digitise and streamline

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#### Collaboration

HMO licence/agreement amendments. SLA with Co-Options (Third Sector (textiles). WRAP on various waste campaigns. Private Sector (Schaeffer) to test and develop microchip technology; Integration of plans with DCC Carbon Reduction Team. Working with private business on site in Colomendy to facilitate expansion of their premises / business via collaboration on Phase 1 works.

#### Involvement

Communication strategy; Community champions, engagement with DCC Staff Council; Ongoing stakeholder Events/roadshows; Eco Schools engagement as school children will become our recycling champions reinforcing accurate messaging in the home. Additional staff budgeted deal with higher numbers of calls at the contact centre during implementation.

# **Summary of impact**

Well-being Goals	Overall Impact
A prosperous Denbighshire	Positive
A resilient Denbighshire	Positive
A healthier Denbighshire	Neutral
A more equal Denbighshire	Positive
A Denbighshire of cohesive communities	Neutral
A Denbighshire of vibrant culture and thriving Welsh language	Neutral
A globally responsible Denbighshire	Positive

#### **Main conclusions**

Overall the proposed project to Remodel the Waste Service Collection should have positive impacts in terms of a prosperous and resilient and a globally responsible Denbighshire as the new service will increase recycling performance by 6%. The higher quality recyclable stream will support the adoption of EU Circular Economy measures and the Welsh Economic Action Plan. The model is also the most cost efficient of all options considered, bringing in a new income stream that protects other council services from further resource reductions. There is also a positive impact on equality due to the introduction of a new service to deal with hygiene waste sometimes produced by young families and the elderly, greater capacity afforded to store and present waste and more frequent recycling collections. We are also offering weekly residual collections to flats in our most deprived areas who are unable to store their waste in bins. We have reviewed our waste policies to ensure exemptions can be awarded to households that struggle to participate fully in the recycling service for genuine physical or metal health reasons. There are no health implications for the new service. Residual waste will be collected less frequently but smelly waste such as nappies and food waste will be collected fortnightly. There is a neutral impact on vibrant culture and welsh language as all communications will be available in Welsh and English. There will be a significant focus on community engagement throughout and post implementation, encouraging intergenerational learning (young people as ambassadors) and motivational communications material. There is a neutral impact on cohesive communities as the new waste model supports and strengthens a social enterprise operating model for the collection and re-use of textiles, and the service changes are supported through a new (draft) household waste collection policy, to support the regulation of the new operating model.

The likely impact on Denbighshire, Wales and the world.

A prosperous Denbighshire

**Overall Impact** 

**Positive** 

# **Justification for impact**

The new waste service will secure the long term future of the service and associated jobs and importantly contribute to increasing recycling rates in the County which will minimise residual waste generated by the County's residents. There is an overall reduction in the Council's carbon footprint through enhanced capture of recycling, especially food waste. Materials recycled are of higher quality which will help stimulate growth in the manufacturing industry within the UK.

# **Further actions required**

Maximising the positive impacts from higher recycling rates will be dependant on undertaking a comprehensive communication campaign and ongoing education strategy that provides both instructional and motivational information to encourage people to take the extra effort to recycle more and separate their household waste items into various containers. A YouGov Survey stated that 70% of people want to know what happens to their rubbish and 32% would be more likely to separate their materials if they knew what happened to them. the Viridor Recycling Index 2017 (consumer survey) showed that only a quarter of people believed their waste was properly recycled and showed a clear need for better education, with seven in ten (69%) people feeling frustrated about not having enough education materials on recycling. There is an opportunity to re-engage with Denbighshire citizens to provide the information that will inform and influence pro-environmental behaviours.

Consideration to reducing manual handling concerns will be given when specifying the new kerbside recycling vehicles, including consultation with Unions and the workforce. W and R team to investigate introduction of a "ready for work" programme to train up new operatives (workforce succession planning) and career pathways opportunities for existing employees to upskill.

Positive impacts identified:

A low carbon society

Application of the waste hierarchy, enhanced opportunity for closed loop recycling. Increased in recycling performance of projected to meet WG target of 70%. There is a wide evidence base to show that Kerbside Sort yields a lower carbon footprint than co-mingled collections. The carbon impacts of different methods of collection and post collection sorting were shown by the ADAS report for London Borough of Camden which stated that: "The carbon footprint of the whole process for the co-mingled collection, transfer and MRF is 77% greater than for the kerbside sorted recyclate collection system."

High quality materials are more likely to be used in closed loop recycling where glass bottles and jars are recycled into similar products, paper into paper and so on. The carbon benefits of the closed loop recycling of glass were demonstrated in a 2006 paper "The impact of the carbon agenda on the waste management business", Grant Thornton, Oakdene Hollins.

The reduced carbon impact of kerbside sort vehicles compared to large Refuse Collection Vehicles currently used to collect recycling in DCC are considerably lower, as supported by the following paper "Kerbside Recycling in Wales: Environmental Costs, Waste and Resources action Programme (WRAP), March 2009. Opportunity to integrate Ultra Low Carbon Emission vehicles due to timing of vehicle procurement. Depot development includes PV and air source heat pump and rain water harvesting. Heat offtake from existing food waste anaerobic digestion plant can be used to power AHP treatment facility. recovered bins will be collected and sent for recycling. Recovered plastic is often recycled into new waste containers. procurement of new containers will specify so me recycled content (whilst maintaining strength / life expectancy of the container).

# Quality communications, infrastructure and transport

All new waste collection rounds will undertake route optimisation analysis to reduce unnecessary mileage and optimise efficiency, as well as round risk assessments to avoid traffic congestion where practical. The changes will be supported by a communications plan, to include face to face public engagement, a schools education package, and revised instructional material. Option 5 will result in significant capital investment in local authority depots (North Wales) and new waste containers. Centralised depot will reduce overall fleet mileage compared to other options considered.

# **Economic development**

Collected recycling will be of adequate quality to be reprocessed in the UK (as opposed to being shipped oversees), encouraging home grown manufacturing industries to develop/expand. Collecting high quality recycling through source segregation is a priority for Welsh Government as they recognise the opportunities the EU "Circular Economy" package brings to helping Wales grow its own economy, and in a more sustainable way (www.gov.wales news article "Wales leading the way

towards becoming a circular economy" 28th June 2018. Positive impacts of the circular economy on economic growth are also recognised in the Welsh Government's Economic Action Plan.

The paper by the Resources Association "Putting quality recycling at the heart of a circular economy" August 2015 concludes that mandatory source separation of recyclables, including biowaste, would reduce recycling contamination and create new economic opportunity. By example, an article by Simon Weston (LetsRecycle.com 17th July 2017) director of raw materials (Confederation of Paper Industries) states "Recent work conducted by the Confederation of Paper Industries (CPI) estimates that an increase of one percentage point in contamination would increase costs by about £8 million per annum across the entire UK mill system. For a large paper reprocessor this could equate to as much as £1.25 million per percentage point increase for each 100,000 tonnes of raw material procured. These sorts of additional costs undermine the viability of domestic re-processors when compared with foreign competitors using other material streams, and could lead to plant closures and job losses."

Kerbside Sort systems yield very low contamination rates (1% Friends of the Earth, compared to Commingled recycling schemes that rarely achieve contamination rates below 5% and often in excess of 10%.

Hygiene waste will be collected separately in the Option. It is possible that this waste stream can be recycled and future discussions with Welsh Government are anticipated over the opportunity for this waste to be re-processed in Denbighshire. This would created further jobs through the construction and operation of a new facility. Phase 1 Depot works included collaboration with local busin esses to facilitate their expansion securing their presence in the County and option to expand further.

# Quality skills for the long term

Waste operatives will require enhanced manual handling training. In addition, the service will be modernised to closely monitor recycling habits of individuals through enhanced data capture of weight based information. Team members will be trained to use route optimisation software. DCC's waste technical team will be trained to collate and report on a wider range of performance data. The team will be required to deliver behaviour change messages to a wide range of audiences, including to school groups and private/social landlords. Increased procurement skills and experience will also be required. The service change would be supported through the adoption of an environmental enforcement policy which the team will be required to adopt. Whilst the existing enforcement team have all existing knowledge and skills, wider adoption by the rest of the team will be required. Potential develop and Operate a treatmentfacility for Absorbent Hygiene product treatment (nappies and incontinence waste) in DCC will lead to upskilling of workforce and additional employment.

# Quality jobs for the long term

All waste operatives will be required to become "recycling ambassadors" as their acceptance/rejection of presented material will be fundamental to providing weekly feedback to the residents about what can and can not be collected on the kerbside sort scheme. Expected that Waste team jobs will be secured, may be need for additional Waste Team members depending on future operational model - to be confirmed as part of further development of Business Case. The baseline is unaffordable and jobs across other council service are at risk should we not change the way we deliver our services.

This option will secure at least 9 full time jobs in a local Social Enterprise, and support people with learning disabilities, through the collection, sorting, cleaning and resale of textiles.

#### Childcare

There are no known increased benefits arising from changing from the baseline to Option 5. Working hours are not modelled to change.

## **Negative impacts identified:**

# A low carbon society

c. 30,000 black residual bins will become redundant.

# Quality communications, infrastructure and transport

None

## **Economic development**

None - the current receiver of comingled recycling would prefer source segregated material, due to higher quality of paper.

#### Quality skills for the long term

It is envisaged that the increased manual handling requirements on the kerbside sort option will lead to a number of operatives seeking redeployment or retirement. This will produce a knowledge gap in the service for which we must prepare over the next 2 years.

# Quality jobs for the long term

The manual handling implications of the kerbside sort system may present as a barrier to older operatives or operatives with pre-existing conditions that limit repetitive lifting operations. A key HR work stream has been set up to identify redeployment opportunities for staff who may not be able to carry out the new duties and jobs will be re-evaluated to reflect the change in operations. The Service has already identified the Council's Career Pathways programme as a strategy to deliver succession planning and develop skills of existing employees. They are also proactively engaged in promoting career opportunities externally, such as attending job fairs.

#### Childcare

There are no known increased implications arising from changing from the baseline to Option 5.

# A resilient Denbighshire

# **Overall Impact**

Positive

## **Justification for impact**

Overall, despite potential for negative consequences due to potential increase in collection vehicle mileage and possible negative behaviour reactions by disgruntled residents who may take against recycling agenda as a consequence overall it is felt the overall message will raise awareness of the importance of recycling and the new model will support the capacity to further increase domestic recycling rates. New WTS incorporates LCZ technologies to mitigate and minimise impact and reduce carbon including on management of surface water. In addition new service will roll out a number of ULEV vehicles as part of new Fleet

# **Further actions required**

Negative behaviour issues will be tackled through targeted communications on the benefits of the change to collection model to try to get all residents on board. As far as is possible new collection vehicles will be the most fuel efficient models affordable to reduce fuel consumption and emissions as far as practical to mitigate this issue. Electric vehicles will be integrated into the new fleet to further reduce emissions.

# Positive impacts identified:

# Biodiversity and the natural environment

This option enables the reprocessing industry to operate closed loop recycling solutions, saving the need to use virgin materials extracted fro the natural environment across the world. More recycling will be recovered than the baseline option. Evidence suggest that people adopting pro-recycling behaviours on a kerbside sort system become more supportive of wider environmental issues. As part of development of new WTS a commuted sum paid for off site ecological enhancements plus on site enhancements including pond creation.

#### Biodiversity in the built environment

Currently around 5000 households are receiving a sack collection for residual/recyclable waste. Sacks are ripped open by scavenging animals (seagulls, rats and foxes) providing an unnatural source of food, leading to unhealthy increases in populations of some species that may displace other species. This option will seek to reduce the number of households on a sack collection and provide a more regulated system that will prohibit residents placing food waste into sacks. The Trollibocs system does help contain litter as it must be presented lidded but will require enforcement to ensure boxes are not presented off the trolley and without lids.

# Reducing waste, reusing and recycling

Option will improve and increase domestic recycling performance and produce cleaner material more suitable for closed loop recycling. Potential to recycle new waste streams such as absorbent hygiene products.

# Reduced energy/fuel consumption

Food waste is co-collected on the same recycling vehicle as dry material and the number of residual collection passes per month associated with this are reduced. Integration of some electric vehicles through the fleet procurement. PV and air source heat pump installation and rainwater harvesting at depot.

# People's awareness of the environment and biodiversity

New collection model will further raise awareness of need to and issues around recycling. A communications Strategy has been developed and includes and Education Campaign to promote

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# Flood risk management

SUDS and surface water attenuation applied to design of new WTS in Colomendy to meet 100 year + 30 year event risk to mitigate impacts from surface water flooding events

**Negative impacts identified:** 

Biodiversity and the natural environment

None

Biodiversity in the built environment

None

# Reducing waste, reusing and recycling

May encourage negative behaviour from disgruntled Residents who take against new arrangements and deliberately reduce recycling efforts. . there is no evidence to suggest an increase in fly tipping in these authorities. However, it is necessary to support these service changes with fair but firm household waste collection policy and resource enforcement activities adequately to ensure that dumping of rubbish and deliberately cross contaminating waste streams is appropriately regulated.

# Reduced energy/fuel consumption

None

# People's awareness of the environment and biodiversity

May encourage negative behaviour from disgruntled Residents who take against new arrangements and deliberately reduce recycling

# Flood risk management

None

# A healthier Denbighshire

# **Overall Impact**

Neutral

# **Justification for impact**

Neutral overall as few relevant impacts, where potential impacts do exist they are likely to me minimal - mainly in relation to good local environmental quality being associated to better feeling of well being.

# Further actions required

Engaging people in a positive way will be stressed and highlighted as part of communications during/post implementation. Introduction of a behaviour change support with enhanced education and targeted enforcement through data gathered by microchipped bins / In Cab Technology is planned to mitigate the risk of people failing to comply with the new scheme and waste escaping into the environment as a result. Additional capacity for cardboard containerisation is also planned to prevent waste escaping.

# Positive impacts identified:

# A social and physical environment that encourage and support health and well-being

This option requires the householder to do more to manage their waste responsibly. More support will be offered to residents to comply and a sustained and focussed environmental campaign will offer opportunities for social norming and intergenerational learning, where schools and their pupils encourage their communities to recycle more.

# Access to good quality, healthy food

NONE

# People's emotional and mental well-being

Engaging people further in the need and activity of increasing recycling will engage them in a positive activity that can improve their sense of participation and doing good. There is evidence that people

E OPTION 5 (Preferred) - Weekly Kerbside Sort (including food waste), 4-weekly residual, AHP using a kerbside sort system are more "bought into" recycling as they believe more strongly the material is going to be made into new products. There is also evidence to suggest engaged recyclers are more likely to engage or be supportive of wider environmental initiatives.

#### Access to healthcare

**NONE** 

## Participation in leisure opportunities

NONE

### **Negative impacts identified:**

## A social and physical environment that encourage and support health and well-being

There is a risk that those residents who do not currently engage with DCC's waste collection system will find the new system more challenging. therefore incidents of alleyway dumping may increase if not managed. DCC will introduce a new enforcement policy and increased communications programme to mitigate these risks. the introduction of microchipped bins is planned to mitigate this risk and optimise recycling.

# Access to good quality, healthy food

NONE

# People's emotional and mental well-being

Possible issues with the change upsetting residents and affecting their well being due to change and the need to adapt to new arrangements which they may feel antagonism towards, or be fearful they will not be able to cope with the new system.

#### Access to healthcare

NONE

## Participation in leisure opportunities

# A more equal Denbighshire

# **Overall Impact**

Positive

## **Justification for impact**

Most protected groups should be unaffected by the new waste model as households already present and segregate their rubbish. There may be a negative impact on residents with disability or who are elderly/infirm but variants to the main system will be put in place to recognise and manage this. The service will see more capacity provided to all households for managing waste and more frequent collections, residual waste frequencies for those on a sack service will be weekly or fortnightly (not monthly as on the standard service). This means residents in shared accommodation, or with very little storage will be able to manage their waste better in the future, compared to the current service. In Cab technology and microchipped technology will enable early intervention /support and monitoring of vulnerable and non-compliant households.

# Further actions required

Recycling rates in areas with poor economic circumstances is often lower than in other areas. More targeted communications, such as roadshows, School visits and door to door support will be required to ensure residents in these areas fully understand the new system and take care to store their waste and recycling containers on their own properties so they are not abused or stolen.

# Positive impacts identified:

Improving the well-being of people with protected characteristics. The nine protected characteristics are: age; disability; gender reassignment; marriage or civil partnership; pregnancy and maternity; race; religion or belief; sex; and sexual orientation

The new Service will include a free separate collection of nappy/incontinence waste upon request, helping households with young children, or residents with medical needs cope better with the Waste Collection Service. This is an improvement to the existing service. Where possible discreet but accessible collection points from inside the household property boundary may be requested for

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# People who suffer discrimination or disadvantage

The Service recognises the challenges inherent in our most deprived communities. The West Rhyl project will ensure the service design reflects local limitations, such as storage for containers and social challenged, to include alternative container sizes, curtilage collections and a more frequent service where needed.

# People affected by socio-economic disadvantage and unequal outcomes

People in poverty often produce more waste - especially food waste and packaging waste. The new model provides greater capacity overall, on a 4 weekly basis to manage and contain waste.

## Areas affected by socio-economic disadvantage

All trollibocs and new waste containers will be provided free of charge during the service change, even though the Council has a right to charge for them.

W and R department will liaise with the Council's troubled families team and other appropriate outreach workers to ensure that waste requirements are understood and passed on to households, should waste issues or questions arise.

A schools Education programme will be launched to support the new waste model, and priority focus will be given to schools in deprived areas.

The new waste model will increase the opportunities for employment and "ready to work" schemes.

# **Negative impacts identified:**

Improving the well-being of people with protected characteristics. The nine protected characteristics are: age; disability; gender reassignment; marriage or civil partnership; pregnancy and maternity; race; religion or belief; sex; and sexual orientation

People with some disabilities may find the new way of presenting waste more challenging, due to the need to separate waste into more containers, and due to the fact that they may need a larger residual bin, which could be heavier to manoeuvre. Consultation with disability user group representatives has also identified that the new Trollibocs system requires more "bending" that could prevent or put off

some infirm residents from using the service. The Trolliboc design will take account of feedback received through consultations. DCC operate an assisted collection service so if a household find their residual bin too heavy due to size can either be given a smaller bin (subject to having capacity) two smaller bins, or may apply to be on the assist list where we collect the bin from the curtilage of their property.

The new DCC waste enforcement policy will allow for households to be listed as exempt from recycling some or all materials if a disability and/or lack of support genuinely prevents them from doing so (e.g. sheltered accommodation with occupants with dementia).

Trollibocs can be provided with braille stickers where needed and all associated instructional material will be provided in appropriate mediums for sight impaired occupants.

Opportunities for upskilling and redeployment will be provided to employees who are unable to manage the new manual handling requirements of the collection service

# People who suffer discrimination or disadvantage

If a household has suffered discrimination from sections of their community in the past, they are more likely to be reported to us if they struggle to comply with the new system.

The DCC enforcement policy will always include an initial educational step before enforcement action is taken to help residents to adjust to the new requirements.

# People affected by socio-economic disadvantage and unequal outcomes

The Council has the right to issue a fixed penalty to residential occupants for failing to recycle, or dumping black bag waste. In order fo rthe new scheme to work longer term, it will be necessary to monitor activities of non-compling households more rigorously, that could lead to FPN's being issued. However, the revised Council enforcement procedure will ensure that every household will be given the opportunity to correct behaviours In addition, an early payment option with a reduced fine level can also be included.

# Areas affected by socio-economic disadvantage

Recycling rates in areas with poor economic circumstances is often lower than in other areas.

# A Denbighshire of cohesive communities

# **Overall Impact**

Neutral

# **Justification for impact**

Overall positive impact as new collection model offers opportunities to raise awareness of need to and increase ability to recycle for residents and benefit this may bring to engagement and reducing littering but is small risk it may also lead to feeling that change being done to residents and an associated problem of littering and fly tipping may result however this is thought to be low risk. The new system will be better regulated to identify non-compliance quickly and target behaviour change processes efficiently. There will be less (no) abandoned contaminated bins on the streets in the future preffered model.

The Recycle More Waste Less Survey showed that households are currently more likely to have space in their residual black bin on collection day than their recycling bins, evidencing that the new model, to increase recycling capacity by 57litres per week and reducing residual capacity by 10litres per week is manageable. This, combined with the fact that on average 51% of the waste in the black bins could be recycled on our existing services supports a move to shift the focus and resources to collecting more recyclable waste.

# Further actions required

There is a perception that a reduced residual collection frequency could attract pests. The new model will offer a weekly opt-in service for human hygiene waste and the weekly food waste service will continue and be expanded to all houses, meaning waste most likely to attract pests and vermin should not be in the residual bin. Households remaining on a sack collection will be provided with gull-proof sacks to contain their disposal pink sacks. This will keep waste and odours contained and enable the Council to regulate the capacity given to sack customers so that recycling behaviours are still incentivised.

# Positive impacts identified:

#### Safe communities and individuals

All wheeled bins and Trollibocs will be assigned to individual properties, encouraging ownership so they are not left out on the highway where they pose a fire risk. Currently there are excessive numbers of abandoned blue recycling bins on the public highway in high density areas due to them becoming

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# Community participation and resilience

All residents have had the opportunity to be surveyed about the changes and will have the opportunity to raise concerns they may have already that can be addressed via the proposed changes or concerns they may have in relation to the new change.

A sustained schools education programme will result in a significant number of young people becoming recycling ambassadors, and offering learning /recycling opportunities within their communities.

#### The attractiveness of the area

With improved recycling it may be that this leads to a reduction in litter / waste as more recyclable material is captured via the new collection arrangements. Sack collections and on street solutions (currently abused) will be phased out wherever possible. Enhanced consultation with HMOs and private landlors will seek to ensure adequate and appropriate provision is made for tenanted properties.

#### **Connected communities**

Intention to use social norming as a way to promote pro-recycling behaviours and identify recycling champions.

#### Rural resilience

In Cab technology, on board cameras on all new fleet and microchipped bins will help deliver a reliable service in these areas. the new kerbside sort vehciles will be able to access more properties than the Refuse Collection Vehciles, meaning some can come off the sack service for recycling. Animal proof sacks will be offered to households on a sack service to prevent pests such as foxes. End of lane collection points will be reviewed to ensure reliable access to the collection points.

# **Negative impacts identified:**

#### Safe communities and individuals

Residents who fail to comply with the new system and dump their waste will lower the environmental

quality where they live - leading to the broken windows effect. The new waste model, however, will have boosted resources to target those individuals with appropriate education and enforcement action. It is not envisaged, however that these issues will increase in number from the baseline model. Areas causing issues now will be visited to ensure the optimal system is put in place to prevent waste escaping into the environment.

#### Community participation and resilience

Many residents will not have actively engaged during the proposal phase and provide resistance as the service is rolled out.

#### The attractiveness of the area

Residents who fail to comply with the new system and dump their waste will lower the environmental quality where they live - leading to the broken windows effect. The new waste model, however, will have boosted resources to target those individuals with appropriate education and enforcement action. It is not envisaged, however that these issues will increase in number from the baseline model. Areas causing issues now will be visited to ensure the optimal system is put in place to prevent waste escaping into the environment.

There is a perception that a reduced residual collection frequency could attract pests but minimise risk by getting as many properties as possible on weekly food collection..

#### **Connected communities**

Initially some recyclers may disengage with the new service if they disagree with the proposals. Mitigate with regular and targeted coms using the Waste Recycling Action Programme's (WRAP's) segmentation research. New scheme must be flexible to address individual needs where appropriate.

#### Rural resilience

The service intends to revisit and apply its existing lane ends collection policy wherever practical to optimise the service. This may be met with resistance by some rural properties than are requested to present their bins on the public highway.

# A Denbighshire of vibrant culture and thriving Welsh language

# **Overall Impact**

Neutral

# **Justification for impact**

There will be a lot of communications material produced to provide instructional and motivational information to target audiences and the public in general. Every opportunity to promote the Welsh Language and cultures will be taken during the development of our campaigns.

## **Further actions required**

There are no identified negatives.

# Positive impacts identified:

#### **People using Welsh**

The proposed waste collection system is more aligned to those in the other Welsh authorities. This consistency will assist in general understanding in any language as families and friends communicate beyond County boundaries. All communications, including the survey, media releases and instructional information will be produced in Welsh as well as English.

# **Promoting the Welsh language**

There is an opportunity to display bi-lingual advertisements with simple messages/ catch phrases

## **Culture and heritage**

In the longer term, once kerbside capture of materials is maximised, there is an opportunity to promote re-use of kerbside materials and carry out campaigns to extend the life of items through repair. This will encourage people to learn traditional skills, such as sewing. There is also an opportunity to appeal to target audiences through tying together traditional activities and recycling/re-use behaviours

# **Negative impacts identified:**

**People using Welsh** NONE **Promoting the Welsh language** NONE **Culture and heritage** NONE A globally responsible Denbighshire **Overall Impact** Positive **Justification for impact** Positive overall as aligns with other North Wales LA's - developing common resident experience and producing higher quality resources that can stimulate local and national manufacturing opportunities. The main purpose of this service change is to improve the environmental benefits of our waste collection processes. **Further actions required** 

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As part of design and communications around collections model change Denbighshire will learn from experience at Conwy CBC and from all previous service changes in Wales and wider afield, through data held by WRAP (Waste Resources Action Programme)

Service to work with eth newly establish carbon reduction team to calculate and monitor carbon impact of the physical service changes.

# Positive impacts identified:

# Local, national, international supply chains

The baseline waste model produces low quality recycling which has limited markets, often oversees.

This option produces source segregated material which can be used by local and national manufacturing companies.

# **Human rights**

NONE

# Broader service provision in the local area or the region

By making the proposed changes the waste collection model in Denbighshire will more closely align with others across North Wales, including specifically Conwy CBC therefore making any option for Service of Council mergers in future a simpler task. DCC are proposed to be the lead operators of a treatment facility for the recycling of nappies and incontinence waste, to be used by all participating North Wales authorities.

# Reducing climate change

reduced carbon footprint through: Increasing recycling from 64% to 70%; Integration of electric vehicles in the waste collection fleet; energy saving initiatives for the depot design such as PV, water harvesting and air source heat pump. Green supply chain procurement.

# **Negative impacts identified:**

# Local, national, international supply chains

Initially there will be a drop in the volume of some non-target plastic that is currently being marketed but the benefits of producing cleaner material far outweigh this.

# **Human rights**

To support the introduction of the new scheme, the Council will be reviewing its waste enforcement policies to ensure the scheme is regulated. The Council will, in all cases act in accordance with the Regulators Code (2014).

# Broader service provision in the local area or the region

**NONE** 

# Reducing climate change

Initial carbon impact of infrastructure provision - additional vehicles , containers and new depot - this impact will need to be calculated and netted off the overall gains.