

Wigan Local Development Framework Core Strategy

Sustainability appraisal of thematic options (Version 2)

January, 2009

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1.0 Introduction

Sustainability appraisal is a way of checking our plans and proposals to see what effect they might have on the environment, economy and our general quality of life.

To make sure we are concentrating on the most important issues, we collected lots of evidence. This information helped us to set up a sustainability checklist (which consists of 18 objectives).

By checking our plans and proposals against each objective in the checklist we are able to make them more sustainable. We can also compare the different options to see which perform best against the various sustainability objectives.

At the 'issues and options' stage of the Core Strategy preparation, we appraised and compared five options setting out where we could focus development in the borough. The results of this process can be found in an <u>interim appraisal report for the broad spatial options</u>.

We also developed a number of different options for tackling 'thematic' issues such as sustainable design, housing density and the provision of renewable energy. These factors can affect development irrespective of the broad spatial location.

The results of the thematic options appraisal helped to inform a series of core policy principles that make up a key element of our Core Strategy Development Plan Document.

2.0 Methods

The diagrams that follow (in the results section) show the positive and negative impacts of each of the thematic options against all 18 sustainability objectives. The more green blocks there are, the more positive the impacts are in relation to that sustainability objective. The more red blocks there are, the more negative the impacts are for that sustainability objective. There is a guide to the right of each diagram explaining just how positive or negative the impacts are.

This appraisal helped us to outline what effects each option would be likely to have on the sustainability objectives. It did not make the decision as to what approach we would follow, but helped us to pick the best parts of different options to achieve the best balance against the objectives; helping to shape the details of policy principles at the subsequent 'preferred options' stage.

2.1 Who did the sustainability appraisal?

The sustainability appraisal process was coordinated and completed by the council's sustainability officer with support from members of the council's Sustainability Team and Planning Policy Team.

However, many more people were involved in carrying out the sustainability appraisal of the five spatial options. We asked for input from a range of council officers and partner organisations that have experience and knowledge in specific aspects of sustainability. For example, for the health objective, we involved members of the NHS Primary Care Trust in the appraisal of the five options; for the community safety objective we involved officers from the council's Community Safety Team.

We sought further involvement from these participants, as well as encouraging more people to get involved in the process at it progressed.

Further information

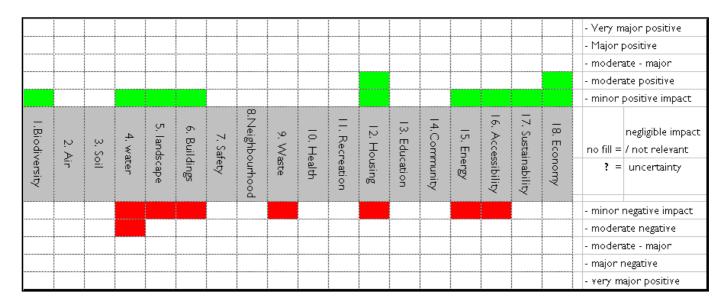
This interim appraisal report should be read in conjunction with the <u>Core Strategy Issues</u> and <u>Options Report</u>. For more information about sustainability appraisal please visit our website (www.wigan.gov.uk)

This is where we have put any other sustainability appraisal documents, for example, our **broad scoping report**, which contains our evidence and more detail about the methods we are using for the appraisal process.

Thematic options on sustainable design and construction

The evidence told us that sustainable design and construction is a key issue that we need to consider. We identified three thematic options that could help to inform our approach to this issue.

Option SDC 1: Ensuring development is in accordance with national planning policy and building regulations.



Appraisal Comments

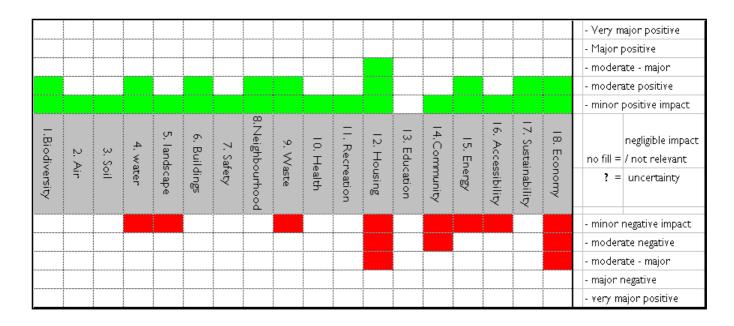
There is an aspiration by the Government that all housing development will be 'zero carbon' by 2016 and all other built development by 2019, which will be achieved by progressively tightening building regulations and implementing appropriate planning policies. There will also be 'Merton style' initiatives that Local Authorities will be required to consider as part of their Local Development Frameworks. This graduated approach will give developers time to adapt to higher standards (and costs/perceived costs) and have a lesser impact on the ability to deliver housing and economic growth (so in this respect this option would be positive).

However, although new buildings are generally more 'sustainable' than older stock, our regulations are way behind countries such as denmark and sweden (where high standards of efficiency and design are delivered regularly), and sustainable buildings/developments are an exception at the moment.

Therefore, under such an approach it is likely that many new homes and buildings will be built (before higher standards are introduced) that do not make the best use of existing sustainable design techniques.

Based on the current economy and standards, development per se is associated with increased energy and water use, waste generation (construction and operational), private-transport and loss of land. Therefore, there are significant negative impacts on these aspects of sustainability, particularly water use, drainage and energy use. It could therefore be argued that this approach does not tackle issues such as climate change with the urgency that is required and stated in documents such as the Stern Report.

Option SDC 2: Developing higher borough-wide standards for all development, covering issues such as energy, water (use, storage and disposal), biodiversity, waste, materials, etc... (This may follow standards set out in the Code for Sustainable Homes and/or BREEAM).



Appraisal comments

This option would ensure that development was better integrated with the built and natural environment. For example, Code Level 3 or equivalent would (as a minimum for all development) ensure that all new development was more energy and resource efficient than national standards require at present. There would also be opportunities to enhance biodiversity, minimise flood risk, improve waste management, promote sustainable modes of travel and be sensitive to local character.

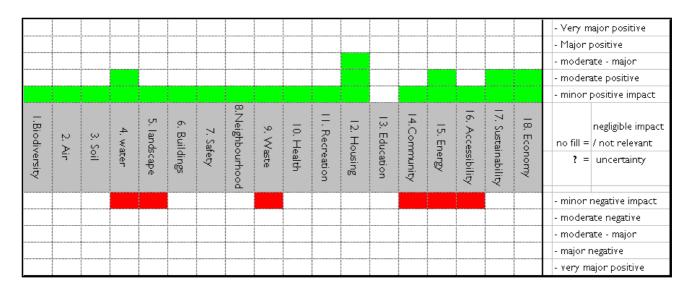
However, setting borough-wide standards above national requirements would increase build cost; making houses less affordable and certain sites for development less attractive to some developers. This could squeeze some people out of the housing market, and increase inequalities between different parts of the borough as development would be more attractive in areas of high demand and high prices (which some local people would be unable to afford). A lack of investment in the housing-market could also have knock-on adverse effects on the local economy.

However, setting higher standards would support the renewables and recycling industries, help to drive down costs in the medium to long term and encourage the development of new and more efficient technologies and processes.

It should also be noted that about 75% of the housing in use by 2050 will already have been built. Therefore, the benefits of implementing sustainable design for new developments (such as less energy demand and more resource efficiency) need to be considered in this context.

A borough-wide policy would also reduce the disparity in standards between publicly and privately funded developments (for example, publicly funded homes have to achieve Code Level 3, whilst it is voluntary for the private sector at the moment). Despite the improvements that would be gained through higher standards, some development would still have unavoidable sustainability impacts such as increased waste, energy and water use.

Option SDC 3: Develop a range of standards to be applied on a site-specific basis.



This would allow the benefits of sustainable construction to be acquired for the most appropriate developments, without affecting opportunities for housing supply / economic investment in other parts of the borough.

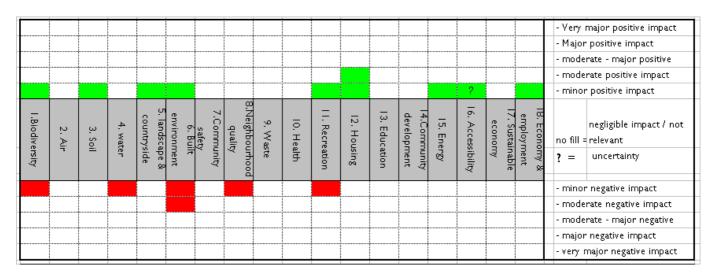
Whilst the positive impacts would be less profound overall and not as widespread as a standardised approach would offer, there would be minimal adverse impacts.

However, based on current practice, development *per* se is likely to increase overall demands for energy, land/environmental resources, waste disposal and transport networks (*represented by minor negative impacts*).

It might be appropriate to apply less ambitious minimum standards for all development, with even higher standards expected for certain developments.

Thematic options on housing density

Option HD 1 – To require **all** residential development to be a minimum of 40 dwellings per hectare.



Appraisal comments

Ensuring all residential development is at least 40 dwellings per hectare could encourage more efficient use of land and infrastructure, reducing potential adverse impacts on biodiversity, soil resources, landscapes and recreational spaces.

However, there could be detrimental impacts to the built and natural environment if development was in 'sensitive' locations, and lower densities were desirable. For example, in areas characterised by lower density housing, new development at 40dph may not be in keeping with the built environment and may damage local character. However, denser development is generally associated with a lower demand for energy and better access to goods and services via sustainable modes.

Where there is a shortage of open space for recreation, requiring at least 40 dph may also alleviate shortages (although conversely denser developments may have less scope for recreation/open space).

Option HD 2 – To deliver some residential development that is substantially in excess of 40 dwellings per hectare to allow other development of less than 40 dwellings per hectare.

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Appraisal comments

In general, a tailored approach would allow for greater variation and choice of housing, and development would be more appropriate to site characteristics; benefiting the built environment and most other sustainability objectives. However, where adverse impacts did occur they could be of greater magnitude than a borough-wide standard of 40 dwellings per hectare would result in. For example, substantially higher densities could result in less green space on site, which could increase surface water run-off and reduce the water storage capabilities of that land. However, it would also be possible to avoid areas where the impacts would be most acute, and 'land-take' overall would be much less.

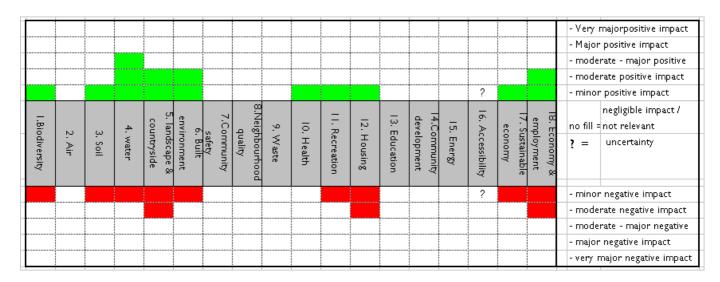
Higher densities in existing urban areas could also make better use of the existing infrastructure, although there is a possibility of overwhelming sewers, drainage and energy networks and there may be problems with water pressure. Higher density development if coupled with higher levels of transport use may also create local air quality issues. Conversely, it may reduce the need to travel if services and employment are attracted to locate nearby; which is more likely and viable with denser catchments.

Denser development has also been associated with lower energy demands and offers better opportunities for district CHP and renewables schemes (including retrofit).

Denser communities may also be more vibrant and active, with increased natural surveillance to improve feelings of safety. However, higher density development needs to be better managed to avoid health impacts and care must be taken to avoid gated communities and town-cramming. Higher densities leading to smaller homes and rooms sizes could make them less able to meet Lifetime Homes standards for example. Similarly, communities may be less able to accommodate a broad social mix and changing societal needs. Nevertheless, this option would help deliver on housing targets, which would have a knock-on positive impact on the economy.

Thematic options on development and flood risk

Option DFR I – Only allow development in areas with low flood risk



Appraisal comments

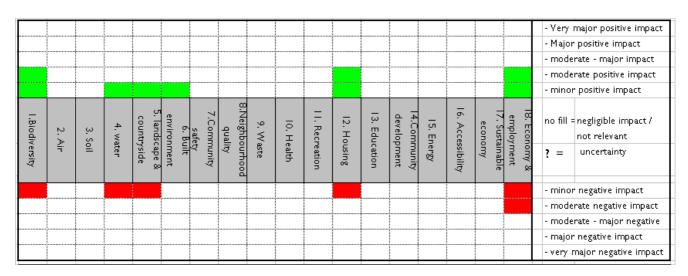
This could reduce the amount of new development vulnerable to fluvial flood risk, prolong the life-cycle of buildings and ensure less disruption and potential health impacts throughout the lifetime of a development's use. It could also reduce pressure on the ability of existing flood risk areas to cope with more severe flood events by preserving parcels of land with natural drainage capabilities.

However, it may be difficult to find space for new development, which could affect housing supply and have a detrimental impact on economic growth and development. It is also likely that previously developed land in flood risk areas would be underused; potentially becoming degraded if development for 'soft-end' use was not attractive. This could lead to increased pressure on Greenfield sites elsewhere in the borough and/or generally higher concentrations of development.

Such concentrations might be effective in securing the efficient use of land and resources, but may also result in localised flooding (although these impacts are likely to be less severe than those in existing flood risk areas) adverse impacts on built heritage and limited space for recreation and biodiversity.

As most new development would not be located in flood risk areas, there may also be a tendency for developers to be complacent about sustainable drainage / design opportunities (if not required), which could increase overall strategic flood risk. The risk of pluvial flooding also needs to be taken into account, as this could be an issue across the borough.

Option DFR 2 – Allow certain types of development in flood risk areas but only if appropriate mitigation measures are implemented.

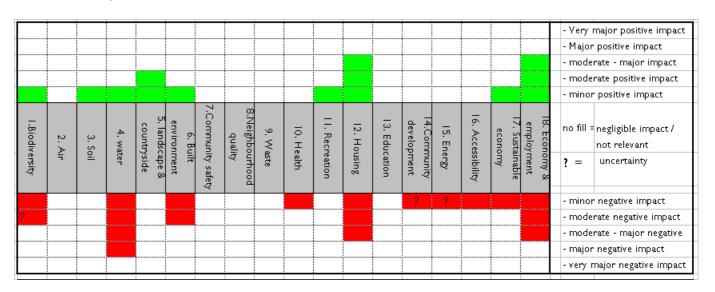


To an extent, impacts are dependant on the type of development. It is likely that a large proportion would be residential (RSS targets), with some offices / other employment (knowledge economy).

There may be increased potential to secure improvements in flood risk areas through mitigation (which would be required by developers) and it may also ensure higher quality development occurred in flood risk areas (taking advantage of development values).

However, development per se could worsen flood risks and mitigation may not compensate for increased flood risk. Allowing development in flood risk areas would reduce some of the negative impacts associated with increased demand for land away from these areas (for example on wildlife habitats, landscapes etc...). There would also be fewer restrictions on economic growth / development and housing provision, which would contribute to positive impacts against these objectives. However, in the longer-term, developments in the flood risk areas may become unattractive and lose their value, putting renewed pressure on less-developed areas in the future.

Option DFR 3 – Allow development in all flood risk areas with mitigation at the developer's discretion

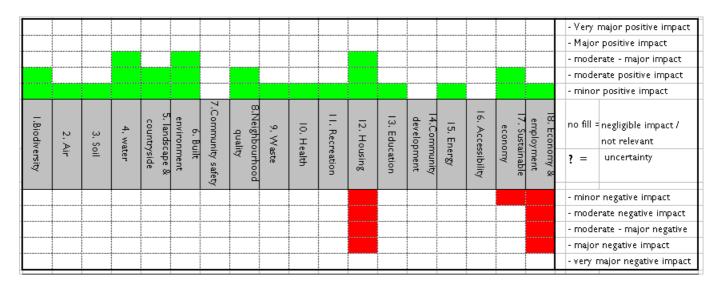


This would not ensure mitigation for all development, and mitigation may also not be adequate or suitable. It would make it much easier for housing development and economic growth, but in the long term this is unsustainable as the developments would be prone to disruptions, accessibility issues, insurance problems and loss of market value.

Health effects (physical and mental) from flooding may become an issue in the longer-term too. Development may also become particularly unattractive in flood risk areas in the longer-term if flooding becomes/remains a major issue.

A more relaxed approach to development in the flood plain may reduce pressure on Greenfield sites, soil resources and wildlife habitats and encourage the reuse of land and buildings. However, it could create additional problems in some areas where flood risk is an issue. The risk of pluvial flooding also needs to be taken in to account as this could be an issue across the borough. This general approach is not in accordance with Planning Policy Statement 25 or the Supplement to PPSI on climate change.

Option DFR 4 – Require that all development integrates sustainable design features such as rainwater recycling, green roofs, 'sustainable urban drainage Systems' and the use of the natural environment as 'green infrastructure' to help to tackle and adapt to the effects of climate change.



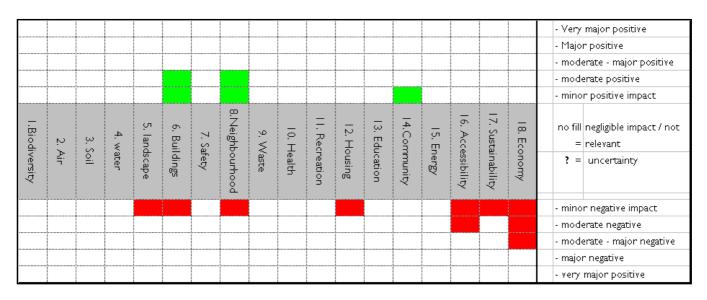
Appraisal comments

Viewed in isolation, this would have a minimal impact on the ability of existing flood risk areas to cope with flooding, and it may encourage some development in high risk areas. However, it would ensure that all new development contributed to improved mitigation and adaptation to the flood risks associated with climate change (both fluvial and pluvial). Sustainable design and construction would also create knock-on positive impacts in various aspects of sustainability such as built environment, energy, biodiversity, waste, housing, economy and so on.

At present, developers may consider certain technologies to be uneconomic (which could have a major adverse affect on investment in the borough and the provision of affordable housing). However, in-line with the Stern Report, investment now would be more cost-effective than inaction and these technologies will become more viable as they become more commercialised.

Thematic options on built heritage and local character

Option BHLC I: Target areas outside of conservation areas (and those covered by design guides) for development.



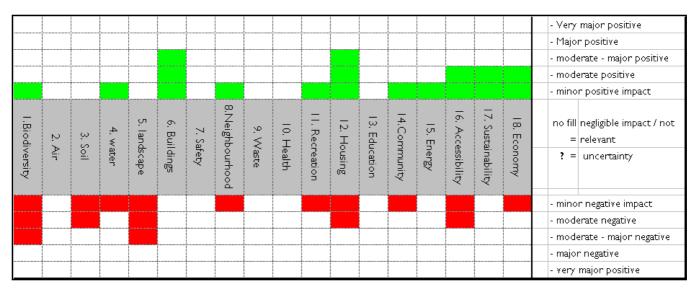
Appraisal comments

This would offer more protection for designated areas, but potential intensification in other areas could lead to a loss of character in some places.

Too much restriction in designated areas may also result in buildings standing empty rather than being used for a purpose that causes no harm to the building.

Such an approach would discourage inappropriate development in and around Wigan and Leigh Town centres (both conservation areas). Whilst this would protect the character and 'attractiveness' of these areas, it may also stifle regeneration opportunities in areas that are highly accessible (including heritage-led schemes).

Option BHLC 2: Avoid 'infill' and focus on the provision of new sustainable settlements that have their own distinct character.

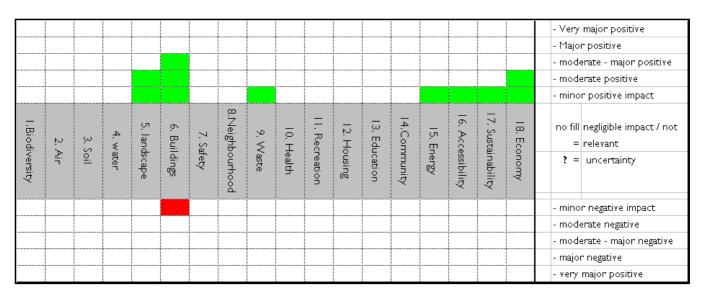


This is likely to preserve the character and local distinctiveness of existing settlements. There may also be knock-on positive effects on local open-space as green infrastructure (for example, recreation, drainage, biodiversity and other uses). However, suitable sites for development within existing built up areas would be discouraged, which could affect regeneration opportunities and housing delivery.

Whilst a focus on 'new' settlements would provide opportunities to create mixed-use 'sustainable' developments with new housing and employment, it is likely that there would be an overall shortage of land for development, and a greater proportion of greenfield land would need to be set aside to accommodate. This could have a major adverse affect on biodiversity, landscapes, soil, mineral and water resources.

A focus on new settlements could also promote better access to services in those areas, but it also misses opportunities to develop in areas that are already well served by services and infrastructure. There is also a danger that the borough could become a 'dormitory' for commuters travelling out of the borough.

Option BHLC 3: Focus on regeneration-led development utilising the borough's built heritage (recycling old buildings/places).



This approach would encourage the reuse of historic buildings, resulting in less use of primary aggregates and more efficient use of land and embodied energy.

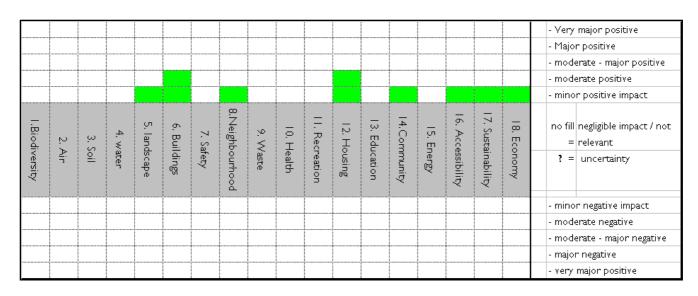
Regeneration of some of the most deprived and declining areas could also be achieved, which includes areas that are relatively well serviced and have good public transport links.

However, inappropriate development (cumulative impacts for example) could lead to some damage to the historic environment and local character.

Some historic buildings due to their historic nature of construction could be difficult to modernise and adapt to climate change. A focus on historic-led regeneration could also help to boost the borough's image.

There may be limited opportunities to pursue such an approach in isolation, but it provides benefits if considered as a general policy principle that forms part of the strategic approach.

Option BHLC 4: Consider on a development-specific basis taking into account existing patterns of local development and local distinctiveness.



Promotes a design-led approach where development would be appropriate / tailored to its locality. Although there could be development in some sensitive areas, it would be more likely to be in keeping with local character and the natural environment. Regeneration opportunities could also be pursued with a greater degree of flexibility; encouraging a mix of modern, sustainable design with the best 'historic' features.

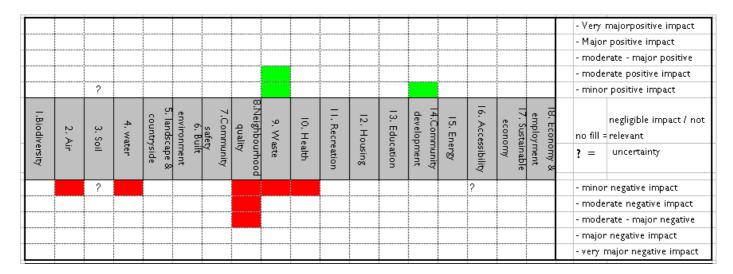
The efficient use of land and buildings would be encouraged, but not where this was detrimental to local character.

Whilst some new communities could be created in the most appropriate locations, this would also encourage development of existing settlements; improving community vitality, the provision of services and sustainable transport choices.

Overall, good quality housing should be delivered without too many restrictions.

Thematic options on waste

Option W1: Sustainably manage waste locally on - site (such as home composting, management of construction wastes) complementing and enhancing current service provision.

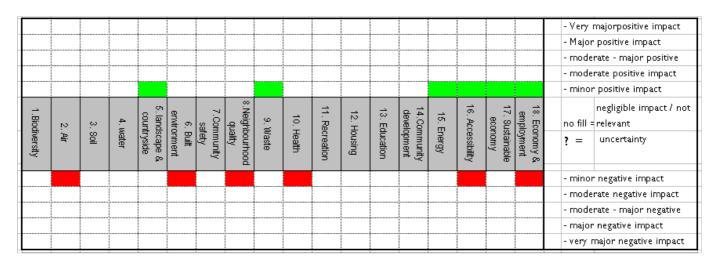


Appraisal comments

This approach promotes more community involvement in waste management activities and may encourage 'good behaviours' (for example through local community composting schemes). However, it is not feasible to deal with some waste streams in this way and economies of scale would not be secured (due to the type of waste [toxic/hazardous] and existing capacity/facilities in the borough).

Shifting the focus of waste management to the neighbourhood level might also lead to local environmental problems (or perceived problems) such as air quality, water pollution, noise disturbances, vermin and odour (with knock on effects on health). However, this approach does support the polluter-pays principle.

Option W2 - Sustainably manage waste in-line with the preferred spatial option (i.e. concentrate management of waste where development is concentrated).



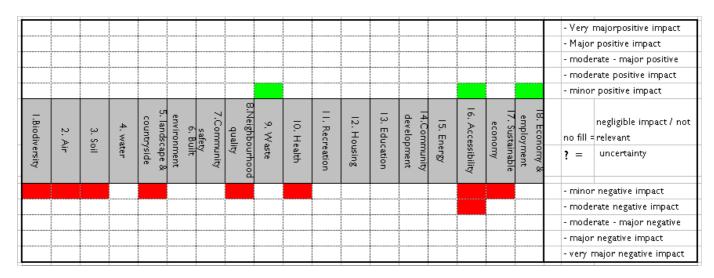
The parts of borough that would benefit least from the positive aspects of development would be 'spared' the negative impacts associated with waste management facilities (such as local environmental pollution / nuisance / congestion / visual amenity). However, managing waste were the majority of new development was located may be seen as a constraint and could make some types of development less attractive (due to negative impacts).

There may also be increased traffic impacts (to recycling centres / civic amenity sites etc...) depending upon where development was focused. It may also be necessary to export certain wastes, because the borough does not have capacity at the moment to manage them, and certainly not sustainably.

If energy from waste facilities were implemented (to divert from landfill) there could be significant environmental impacts that would need to be considered and mitigated.

Waste facilities also need to be highly accessible, so restricting facilities to where development is focused may not always be feasible or desirable. However, there would be opportunities to integrate waste facilities into industrial/business sites and within larger buildings; helping to promote waste processing as an economic activity.

Option W3 - Sustainably manage waste away from where development overall is to be concentrated through the preferred option.



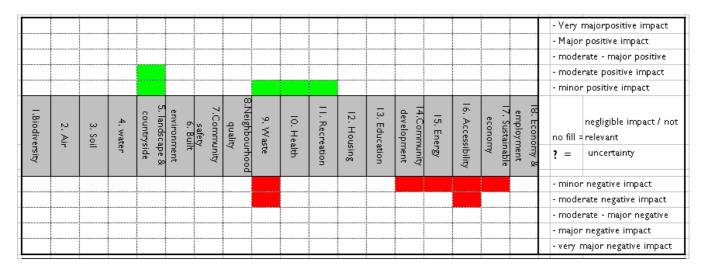
The communities benefiting least from new development would be most 'burdened' with the negative impacts associated with waste management facilities (local environmental problems / traffic / visual). Although all communities produce waste, this may be perceived as unfair.

However, locating waste management facilities away from sites for new development could help them retain their attractiveness to developers. It may also be necessary to export certain wastes, because the borough does not have capacity at the moment to manage them, and certainly not sustainably.

If energy from waste facilities where implemented (to divert from landfill) there could be significant environmental impacts that would need to be considered and mitigated.

Waste facilities also need to be highly accessible, so restricting facilities away from where new development is focused may not always be feasible / desirable. There would probably be fewer opportunities to integrate waste management facilities into new development and there may also be greater impacts on the 'countryside' and green spaces.

Option W4 – Export waste outside the borough



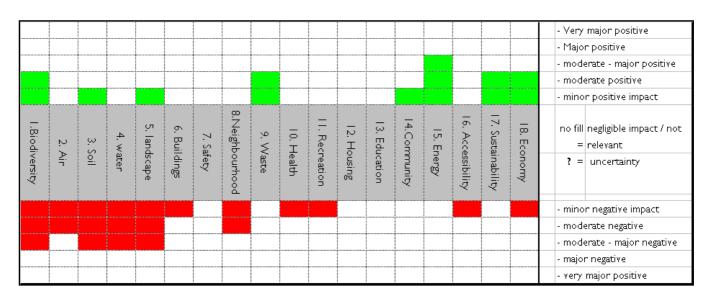
Exporting waste is currently necessary for certain wastes (e.g. WEEE Directive). Some wastes also require a catchment area larger than the borough to make recycling / disposal economically viable, so this option is attractive in that respect.

There is also a lack of certain facilities in the borough (for example plastics recycling, energy recovery). However, dependant on delivery, exporting wastes can increase vehicle mileage, with increased greenhouse gas emissions. Although there would be minimal impacts on the borough's environmental assets we would be merely shifting the problem elsewhere (Albeit, to what may be a more suitble location).

In the medium to long term there may not be capacity to continue exporting waste, and the global impacts of doing so can be more acute as well. It may also result in missed opportunities for local recycling/composting and energy recovery with a lack of community involvement/ownership.

Thematic options on renewable and low-carbon energy supply

Option RLCES I: Focus on developing the infrastructure and a market for biomass power.



Appraisal comments

The biomass fuels most likely to be used would be forestry and agricultural residues, wood waste and energy crops such as willow coppice. To ensure a secure supply of fuel in the borough it would be necessary to implement forestry programmes (existing and new) and to plant energy crops. Poorly managed, these could have a negative impact on the borough's landscapes, soil resources and biodiversity. In particular, biomass crops need a lot of water to grow, which may put pressure on local water sources and alter drainage patterns. There could also be pollution impacts due to the use of fertiliser and pesticides. Although such crops can be grown in low nutrient soils, there could still be a loss of land suitable for agriculture and other forms of land-use. Conversely, well managed afforestation / cropping schemes could help to enhance or create habitats, stabilise soil, encourage crop-rotation, create jobs and provide additional income to farmers; helping to boost the 'rural' economy.

It is also likely that we would need to import biomass fuel to meet the demand that a focused approach would create. The delivery of biomass supplies to sites throughout the borough could increase pressure on the borough's road networks, although the effects are likely to be minor. Storage and burning of the fuels locally may also create environmental health problems for some communities, including air quality and noise issues, and have a detrimental impact on the historic environment (although these impacts could potentially all be mitigated).

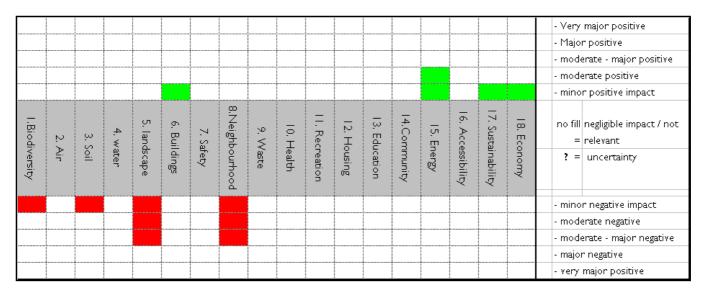
There are also opportunities to reduce the amount of waste sent to landfill by 'recovering' it for use as biomass fuel. Massive changes to infrastructure would be required to support a switch to biomass on a large-scale and this could affect the success of such a focused approach.

Biomass could provide a reasonable amount of low-carbon energy for the borough (The UK renewable Energy Strategy Consultation estimates that the major growth areas for renewables will be wind and biomass). However, a switch to biomass would be difficult

and limited by regional fuel resources, therefore there could still be a need for other energy sources, including coal and gas and a reliance on imports.

There may be opportunities for community-led schemes, which would help build community capacity and improve understanding of the sustainability agenda.

Option RLCES 2: Focus on 'large-scale' wind-turbines.



Appraisal comments

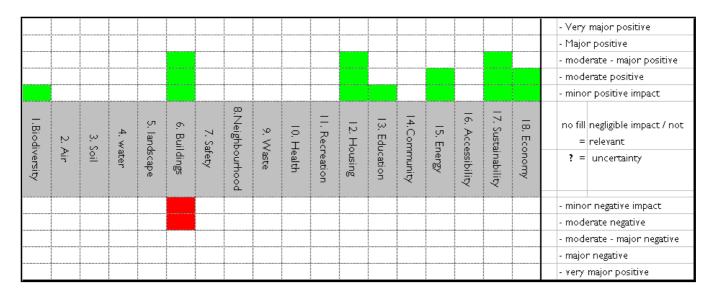
Potential opportunities to provide business clusters or residential areas with renewable energy supplies through the provision of 'large-scale' turbines close to new and existing development sites.

Wind energy technology has the potential to provide a large proportion of renewable energy generation, in Greater Manchester, however it may also be restricted by the availability of suitable sites in Wigan. Economic viability may also present problems and it is likely that other sources of energy would be required to meet our needs.

Major detrimental impacts to landscape character and visual amenity could also be expected if turbines were erected in areas of open space and countryside (which are often suitable for good generation). There may also be adverse impacts on bird populations if a network of wind turbines / farms was created throughout the borough.

Local environmental and social concerns (for example shadow flicker and noise) may also limit the potential for large-scale turbines to be erected throughout the borough, which would affect our ability to secure significant supplies of renewable energy to businesses and domestic users.

Option RLCES 3: Focus on energy efficiency measures and micro-renewable technologies (through a 'Merton-style' rule) (solar panels, mini-wind turbines, ground source heat pumps etc...).



Appraisal comments

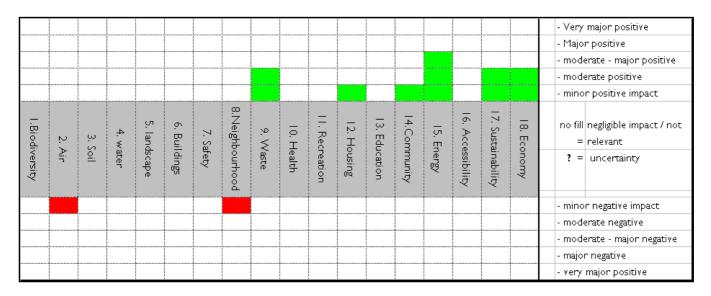
A focus on efficiency and particular micro-renewables would help to reduce emissions of greenhouse gases from the built environment. However, in isolation this would not be sufficient to secure a low-carbon supply of energy for the borough.

Furthermore, a large proportion of energy use and emissions is from existing stock; and the impacts of spatial planning must be taken in this context (although there may be opportunities to secure improvements to existing buildings through developer contributions). Some buildings could also present a particular problem for the implementation of on-site energy measures as there are perceived conflicts with the historic environment and/or structural constraints. However, focusing on efficiency measures and micro-renewables would reduce the impact on landscapes and biodiversity associated with larger renewable schemes.

The visibility and experience of micro-generation technologies may also raise awareness of sustainability amongst the public, engendering 'good behaviour'. However, this effect would probably be minor.

Improved efficiencies and less reliance on fossil fuels would also contribute to a more sustainable and resilient local economy.

Option RLCES 4: Focus on developing a network of district 'combined heat and power' systems.



Decentralised energy production through a network of CHP plants would help improve the efficiency of energy generation / use. This would help reduce emissions of greenhouse gases (The exact impacts on emissions would depend upon the fuel source as biomass, gas or coal could be used).

Whilst such a network would help improve the energy performance of new development (particularly large scale / high density), it would also be possible to 'retrofit' CHP schemes into areas with a high demand for power and heat (for example: town centres, industrial / employment sites, retail and leisure parks). This would have positive impacts on the local economy and may also help to tackle fuel poverty and in adaptation to climate change (e.g. cooling through tri-generation). However, there may be some local environmental quality issues such as air quality (particularly with biomass) and noise. This option would also present good opportunities for energy from waste.

Option RLCES 5: A mix of the above approaches, implementing different renewable / low carbon energy schemes where they are most appropriate, feasible and viable.

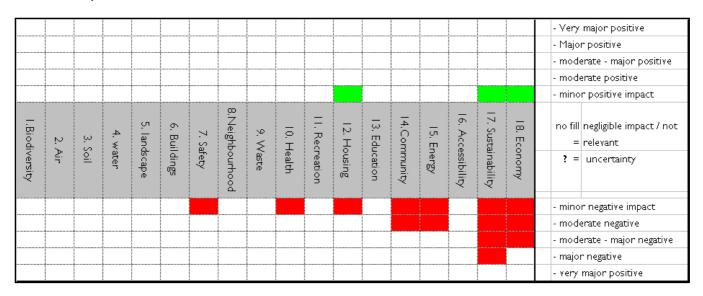
																		- Very major positive - Major positive - moderate - major positive - moderate positive
																		- minor positive impact
1.Biodiversity	2. Air	3. Soil	4. water	5. landscape	6. Buildings	7. Safety	8.Neighbourhood	9. Waste	10. Health	II. Recreation	12. Housing	13. Education	14.Community	15. Energy	16. Accessibility	17. Sustainability	18. Economy	no fill negligible impact / not = relevant ? = uncertainty
																		- minor negative impact
																		- moderate negative
																		- moderate - major negative
																		- major negative
																		- very major positive

Appraisal comments

Pursuing a mix of renewable energy schemes would provide a more diverse and secure supply of 'cleaner' energy to the borough. There would be greater opportunities to contribute towards the development of a low-carbon economy in the borough, which would be positive for business growth and efficiency, for local residents (reducing fuel poverty) and for reducing greenhouse gas emissions.

This approach also allows some of the negative impacts associated with renewable energy schemes to be minimised, because there is no focus on any one approach. For example, there would be less pressure to erect turbines in sensitive locations, more scope to restrict certain microgeneration technologies in areas of historic importance, and decreased pressure for biomass fuel supplies and associated adverse impacts. Having said this, there could still be some unavoidable (but minor) impacts on landscape, the built environment, amenity and biodiversity (associated with the impacts discussed for options 1-3 above).

Option RLCES 6: Carry on as we do at the moment, using mainly centralised supplies of energy and relying on individuals to implement renewable energy schemes in their homes, businesses or new developments.

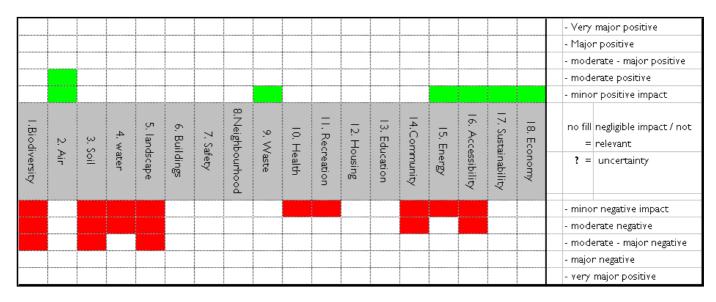


This would not be sufficient to meet the borough's carbon reduction targets and would not promote sustainable economic development. Having said this, many of the opportunities for large scale renewable energy schemes fall outside the borough (e.g. energy coast), and one could argue that we cannot contribute greatly to regional targets. However, it is unacceptable to take a passive approach, because essentially, we would be shifting our environmental impacts (from energy) elsewhere and would be too dependant on external sources of energy (which will probably become more and more expensive and less secure).

Some homes and businesses would probably install their own technologies anyway, but this would be governed by the attractiveness and affordability of renewables. Furthermore, it would do little to tackle fuel poverty if technologies were not accessible to those living in deprived areas. This 'centralised' approach would not be in accordance with national planning policy (Particularly PPS 22 and PPS 1 Summplement on Climate Change).

In the longer term, the economy and cost of living would be likely to suffer. There could also be knock on impacts on community cohesion with greater divides between 'rich' and 'poor' and more civil unrest.

Option RLCES 7: Focus on developing the infrastructure and a market for alternative transport fuels (such as biofuels, electricity etc...)



Appraisal comments

This may require large-scale planting of energy crops. Whilst this would help diversify the rural economy and reduce our dependency on oil, the negative environmental and social impacts of most biofuels are major.

Significant amounts of land would be lost that could otherwise be important for agriculture, biodiversity, recreation and ecosystem services such as drainage and carbon sequestration. Recent experience indicates that food shortages will become an ever-increasing issue with anticipated climate change. Therefore, agricultural land needs to be valued for its ability to produce food, particularly as there is a need to reduce the carbon footprint of products through local sourcing.

This option would also promote continued reliance on private transport, perpetuating accessibility issues such as congestion. For those people who have no alternative to the private car to access goods and services, this constitutes a positive impact. However, this is a minority of the population.

There are also problems relating to the energy yield of certain bio fuels, and alternatives such as fuel cell technology and biogas are unlikely to contribute much to low-carbon transport developments.

Given the difficulties associated with alternative fuels and the need to develop fuel distribution networks (e.g. for electricity), this option may simply be unfeasible and impractical. Having said this, there would be positive impacts on local air quality if an electricity-based fuel network was developed. However, there would still be significant carbon emissions due to the fuel mix and inefficiencies of current electricity generation.

NB: The Greater Manchester Energy Study will help us better understand the implications and attractiveness of these options for Wigan. Impacts also need to be taken in the context of national decisions (nuclear) and regional energy schemes that will contribute a large proportion towards renewable energy targets.

9.0 Limitations

Wherever possible, the sustainability appraisal impacts were identified on the basis of strong evidence and reference to the baseline position. However, there is still an amount of subjectivity that must be borne in mind when interpreting the results. The impact scores were also determined by a range of different people, and one person's definition of a 'major impact' may differ from another's. To ensure as much consistency as possible, a review of the impacts and scores was undertaken by the council's sustainability team after the individual appraisal sessions had taken place.

Although our appraisal is sufficiently thorough, we are aware that the process is somewhat subjective, and we may revise our assessment in light of new evidence and/or consultation responses.

10.0 What happened next?

This interim sustainability appraisal report was available to view and comment on alongside the 'Core Strategy: Issues and Options for community and stakeholder involvement' in February / March, 2008. Any comments received were taken into consideration and incorporated into a final sustainability appraisal report.

Along with consultation responses, the results from this interim report were also taken into consideration as the preferred spatial option for the borough was being developed.

Further sustainability appraisal work was undertaken as the Core Strategy progressed. This included:

- An assessment of a range of <u>broad spatial options</u>.
- Detailed appraisal of the preferred option(s) and identification of mitigation / enhancement measures.
- Identification of monitoring indicators.
- Preparation of a full Sustainability Appraisal Report and non-technical summary that meets the requirements of the Strategic Environmental Assessment Directive.
- A Habitats Regulations Assessment of the preferred option(s).

11.0 Consultation and involvement

At this stage of the appraisal we had already consulted with a wide range of stakeholders about our approach to sustainability appraisal. Further details about whom we consulted with, the responses and suggestions we received, and the methods we are using can all be found in our **Sustainability Appraisal Scoping Report.**

Further information

For further information about sustainability appraisal and to download other supporting documents (such as the scoping report) please visit our website at: www.wigan.gov.uk

From here click on 'Planning' and scroll down to 'Local Development Framework', then click on 'sustainability appraisal'.