

# **Sustainability Appraisal Appendices Report**

**October 2018**

# **1. Sustainability Appraisal of the Strategic Options**

<b>Policy text:</b>	<b>Capacity options: How much of North London's waste can be managed within North London</b> <ol style="list-style-type: none"> <li>1. Meeting the London Plan apportionment</li> <li>2. Net self-sufficiency for LACW and C&amp;I waste streams</li> <li>3. Net self-sufficiency for LACW, C&amp;I and C&amp;D waste streams</li> <li>4. Complete self-sufficiency</li> </ol>
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<i>Assessment framework</i>		<i>Permanence</i>			<i>Characteristics of impacts</i>		<i>Additional impacts</i>	<i>Nature / scope of mitigation</i>	<i>Score</i>
<i>SA Objective</i>	<i>Evaluation criteria</i>	<i>Duration</i>			<i>Certainty</i>	<i>Scale of impact(s)</i>	<i>Secondary, Cumulative, Synergistic</i>	<i>Nature / scope of mitigation</i>	<i>Score</i>
		<i>0-5 yrs</i>	<i>5-10 yrs</i>	<i>&gt;10 yrs</i>	<i>[delete as appropriate]</i>				
<b>1. To protect people's health, communities and local environmental quality from the adverse effects of waste management</b>	Option 1			X	Low	Given the nature of the urban area in North London, each of the options is likely to result in waste management development taking place in close proximity to sensitive receptors and will therefore have the potential to have negative impact on the objective. Nevertheless, as Options 3 and 4 would require more facilities to be provided, there is a greater likelihood that these options would have a negative impact on the objective in the Plan area. Conversely, Options 1 and 2 would result in more waste being managed outside of North London and, as a result, any adverse impacts would affect a wider area (or more locations).	Secondary impacts on quality of life and perceptions of the area.	Enforce appropriate controls through planning conditions and environmental permitting.  Ensure that only enclosed facilities are developed close to sensitive receptors.	-
	Option 2			X	Low				-
	Option 3			X	Medium				-
	Option 4			X	Medium				-
<b>2. To maintain green infrastructure and open space</b>	Option 1			X	Low	Although each option would support the development of waste management facilities, it is uncertain whether the development of these facilities under any option would result in the loss of green infrastructure or open space. As a result, the impact of each of the options on the objective is considered to be uncertain.			?
	Option 2			X	Low				?
	Option 3			X	Low				?
	Option 4			X	Low				?
<b>3. To promote sustainable modes of transport, reduce the need to travel and improve choice of more sustainable transport modes</b>	Option 1			X	Low	By providing enough waste management capacity to manage at least the equivalent of the waste generated in North London, Options 3 and 4 would help to maximise self-sufficiency in the management of waste and would therefore reduce the need for waste to be transported out of the Plan area. Option 2 would result in a lower amount of waste being managed in the Plan area and would therefore make a lesser contribution to the objective of reducing the need to travel. As North London does not presently meet its apportionment, Option 1 could also result in some reduction in the need for waste to be transported out of the Plan area. There is however a lower level of certainty that the impact of Option 1 on the objective would be significant.	Secondary impact on greenhouse gas emissions from the transport sector and air quality.		+
	Option 2			X	Medium				+
	Option 3			X	Medium				++
	Option 4			X	High				++
<b>4. To conserve and enhance the historic environment, heritage assets and their settings</b>	Option 1			X	Low	Although each option would support the development of waste management facilities, it is uncertain whether the development of these facilities under any option would take place in areas where it would have an impact on the setting of heritage assets. As a result, the impact of each of the options on the objective is considered to be uncertain.			?
	Option 2			X	Low				?
	Option 3			X	Low				?
	Option 4			X	Low				?
<b>5. To maintain and enhance the quality and character of North London's townscapes and</b>	Option 1			X	Low	Although each option would support the development of waste management facilities, it is uncertain whether the development of these facilities under any option would take place in areas where it would have an impact on the character and quality of the townscape and landscape.			?
	Option 2			X	Low				?
	Option 3			X	Low				?

Assessment framework		Permanence			Characteristics of impacts		Additional impacts	Nature / scope of mitigation	Score
SA Objective	Evaluation criteria	Duration			Certainty	Scale of impact(s)	Secondary, Cumulative, Synergistic	Nature / scope of mitigation	Score
		0-5 yrs	5-10 yrs	>10 yrs	[delete as appropriate]	Characterise the scale / severity for each impact as necessary			
landscapes	Option 4			X	Low	As a result, the impact of each of the options on the objective is considered to be uncertain.			?
6. To maintain, protect and enhance biodiversity, protected species, habitats, geodiversity and features of geological interest	Option 1			X	Low	Although each option would support the development of waste management facilities, it is uncertain whether the any option would result in development taking place in locations where it would have a significant detrimental impact on biodiversity. As a result, the impact of each of the options on the objective is considered to be uncertain.			?
	Option 2			X	Low				?
	Option 3			X	Low				?
	Option 4			X	Low				?
7. To reduce and manage flood risk	Option 1			X	Low	Although each option would support the development of waste management facilities, it is not certain that any of these facilities would result in development taking place in areas at risk of flooding. As a result, the impact of each of the options on the objective is considered to be uncertain.			?
	Option 2			X	Low				?
	Option 3			X	Low				?
	Option 4			X	Low				?
8. To adapt to, and reduce the impacts of climate change	Option 1			X	Low	Although each option would support the development of waste management facilities, it is not certain that any of these facilities would result in development taking place in areas at risk of flooding or which results in the loss of green infrastructure features which could help reduce the impacts of climate change. As a result, the impact of each of the options on the objective is considered to be uncertain.			?
	Option 2			X	Low				?
	Option 3			X	Low				?
	Option 4			X	Low				?
9. To reduce climate change contributions, promote energy efficiency and increase use of energy from sustainable sources	Option 1			X	Low	By providing enough waste management capacity to manage at least the equivalent of the waste generated in North London, Options 3 and 4 would help to maximise self-sufficiency in the management of waste and would therefore reduce waste miles and associated greenhouse gas emissions. Option 2 would result in a lower amount of waste being managed in the Plan area and would therefore make a lesser contribution to the. As North London does not presently meet its apportionment, Option 1 could also result in some reduction in the need for waste to be transported out of the Plan area with an associated decrease in greenhouse gas emissions from the transportation of waste. There is however a lower level of certainty that the impact of Option 1 on the objective would be significant.			+
	Option 2			X	Medium				+
	Option 3			X	Medium				++
	Option 4			X	High				++
10. To protect and improve air, water and soil quality	Option 1			X	Low	The options which result in a higher level of self sufficiency would reduce emissions associated with the transportation of waste. Although individual waste management facilities could have localised impacts on air quality, such as dust, this could be mitigated. As such, Options 3 and 4 have the potential to have a positive impact on the objective. The options which do not result in self sufficiency are less likely to result in a significant reduction of emissions associated with the transportation of waste. As such, it is uncertain whether Options 1 and 2 would have a significant impact on the objective.	Secondary impacts on health	Dust suppression and other measures such as wheel-washing.	?
	Option 2			X	Low				?
	Option 3			X	Medium				+
	Option 4			X	Medium				+

Assessment framework		Permanence			Characteristics of impacts		Additional impacts	Nature / scope of mitigation	Score
SA Objective	Evaluation criteria	Duration			Certainty	Scale of impact(s)	Secondary, Cumulative, Synergistic		
		0-5 yrs	5-10 yrs	>10 yrs	[delete as appropriate]	Characterise the scale / severity for each impact as necessary			
<b>11. To manage waste sustainability, maximise self-sufficiency in the management of waste, minimise production of waste and increase re-use, recycling and recovery rates</b>	Option 1			X	Low	By providing enough waste management capacity to manage at least the equivalent of the waste generated in North London, Options 3 and 4 would help to maximise self-sufficiency in the management of waste and would therefore have a major positive impact on the objective. Option 2 would result in a lower amount of waste being managed in the Plan area and would therefore make a lesser contribution to the objective of maximising self-sufficiency in the management of waste. Option 1 would still support the sustainable management of certain waste streams in North London but there is a lower level of certainty that it would have a significant impact on the objective .	Secondary impact on greenhouse gas emissions from the transport sector and air quality.		+
	Option 2			X	Medium				+
	Option 3			X	Medium				++
	Option 4			X	High				++
<b>12. To ensure efficient use of land and natural resources and the sustainable use of existing resources</b>	Option 1			X	Medium	The options differ in where material would be recycled and not the level of recycling achieved. Each option would support the provision of waste management facilities that can support recycling and recovery and therefore help ensure the efficient use of natural resources.			+
	Option 2			X	Medium				+
	Option 3			X	Medium				+
	Option 4			X	Medium				+
<b>13. To encourage sustainable economic growth, exploit the growth potential of business sectors and improve productivity and competitiveness of local waste industry</b>	Option 1			X	Low	Each of the options would support the provision of waste management facilities which would support economic growth and could help improve the productivity and competitiveness of the local waste industry. As a result, each option has the potential to have a positive impact on the objective. There is however a greater level of certainty that Options 3 and 4 would have a positive impact on this objective given that they would result in the provision of a greater number of waste management facilities in the plan area.			+
	Option 2			X	Low				+
	Option 3			X	Medium				+
	Option 4			X	Medium				+
<b>14. To reduce economic disparities, unemployment and deprivation</b>	Option 1			X	Low	Each of the options would support the provision of waste management facilities which would generate employment opportunities. As a result, each option has the potential to have a positive impact on the objective of reducing unemployment and deprivation. There is however a greater level of certainty that Options 3 and 4 would have a positive impact on this objective given that they would result in the provision of a greater number of waste management facilities in the plan area.			+
	Option 2			X	Low				+
	Option 3			X	Medium				+
	Option 4			X	Medium				+

**Summary of Assessment**

Although each of the capacity strategy options has the potential to have a positive impact on a number of sustainability objectives, there are a number of instances where Options 3 and 4 could have a more significant positive impact on the objectives. In particular, by providing enough waste management capacity to manage at least the equivalent of the waste generated in North London, Options 3 and 4 have the potential to have a more significant positive impact on the objectives that relate to maximising self-sufficiency in the management of waste, reducing contributions to climate change and reducing the need to travel. Options 3 and 4 could also have a positive impact on the objective of protecting and improving air, water and soil quality. All four of the options would however have a positive impact on the objectives that relate to ensuring the efficient use of natural resources, encouraging sustainable economic growth and reducing unemployment.

Each option could however have some negative impact on the objective that relates to amenity. Key mitigation measures are likely to include enforcing appropriate controls through planning conditions and environmental permitting and ensuring that only enclosed facilities are developed close to sensitive receptors. Each option would have an uncertain impact on the remaining objectives.

<b>Policy text:</b>	<b>Management options: How waste will be managed within North London</b> Option I –Baseline (maintain current levels of recycling and recovery) Option II – Maximised recycling Option III - Maximised recovery and median recycling
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Assessment framework		Permanence			Characteristics of impacts		Additional impacts	Nature / scope of mitigation	Score
SA Objective	Evaluation criteria	Duration			Certainty	Scale of impact(s)	Secondary, Cumulative, Synergistic		
		0-5 yrs	5-10 yrs	>10 yrs	[delete as appropriate]	Characterise the scale / severity for each impact as necessary			
<b>1. To protect people's health, communities and local environmental quality from the adverse effects of waste management</b>	Option I			X	Low	Given the nature of the urban area in North London, each of the options is likely to result in waste management development taking place in close proximity to sensitive receptors. Irrespective of the management method, waste management facilities have the potential to have some negative impact on health and amenity if it takes place in close proximity to sensitive receptors. Each option therefore has the potential to have negative impact on the objective. Nevertheless, as Options II and III would require a greater number of facilities to be provided, there is a greater likelihood that these options would have a negative impact on the objective.	Secondary impacts on quality of life and perceptions of the area.	Enforce appropriate controls through planning conditions and environmental permitting.  Ensure that only enclosed facilities are developed close to sensitive receptors.	-
	Option II			X	Medium				-
	Option III			X	Medium				-
<b>2. To maintain green infrastructure and open space</b>	Option I			X	Low	The choice of management strategy option will influence the number of new facilities that need to be provided in North London. Nevertheless, it is uncertain whether any of the options would lead to the loss of green infrastructure or open space.			?
	Option II			X	Low				?
	Option III			X	Low				?
<b>3. To promote sustainable modes of transport, reduce the need to travel and improve choice of more sustainable transport modes</b>	Option I			X	Medium	By seeking to maximise recycling rates, Option II would reduce the need for waste to be exported out of the plan area for landfill or other management methods. As a result, it has the potential to have some positive impact on the element of the objective that relates to reducing the need to travel. By contrast, Option I would result in a higher proportion of waste being exported to landfill and could therefore have a negative impact on the objective. A significant proportion of the capacity for recovery is within the Plan area. As a result, Option III has the potential to reduce the need to export waste from North London and could therefore have a positive impact on the objective.			-
	Option II			X	Medium				+
	Option III			X	Medium				+
<b>4. To conserve and enhance the historic environment, heritage assets and their settings</b>	Option I			X	Low	The choice of management strategy option will influence the number of new facilities that need to be provided in North London. Nevertheless, it is uncertain whether any of the options would result in development taking place in close proximity to heritage assets and also whether any such development would have a negative impact on the setting of these assets.			?
	Option II			X	Low				?
	Option III			X	Low				?
<b>5. To maintain and enhance the quality and character of North London's townscapes and landscapes</b>	Option I			X	Low	The choice of management strategy option will influence the number of new facilities that need to be provided in North London. Nevertheless, it is uncertain whether the development of these facilities under any option would take place in areas where it would have an impact on the character and quality of the townscape and landscape. As a result, the impact of each of the options on the objective is considered to be uncertain.			?
	Option II			X	Low				?
	Option III			X	Low				?

Assessment framework		Permanence			Characteristics of impacts		Additional impacts		Score
SA Objective	Evaluation criteria	Duration			Certainty [delete as appropriate]	Scale of impact(s) Characterise the scale / severity for each impact as necessary	Secondary, Cumulative, Synergistic	Nature / scope of mitigation	
		0-5 yrs	5-10 yrs	>10 yrs					
6. To maintain, protect and enhance biodiversity, protected species, habitats, geodiversity and features of geological interest	Option I			X	Low	The choice of management strategy option will influence the number of new facilities that need to be provided in North London. Nevertheless, it is uncertain whether the any option would result in development taking place in locations where it would a negative impact on biodiversity. As a result, the impact of each of the options on the objective is considered to be uncertain.			?
	Option II			X	Low				?
	Option III			X	Low				?
7. To reduce and manage flood risk	Option I			X	Low	The choice of management strategy option will influence the number of new facilities that need to be provided in North London. Nevertheless, it is uncertain whether any of the options would result in development taking place in areas at risk of flooding.			?
	Option II			X	Low				?
	Option III			X	Low				?
8. To adapt to, and reduce the impacts of climate change	Option I			X	Low	The choice of management strategy option will influence the number of new facilities that need to be provided in North London. Nevertheless, it is uncertain whether any of the options would result in development taking place in areas at risk of flooding or would result in the loss of green infrastructure which could help limit the impacts of climate change.			?
	Option II			X	Low				?
	Option III			X	Low				?
9. To reduce climate change contributions, promote energy efficiency and increase use of energy from sustainable sources	Option I			X	Low	By seeking to maximise recycling rates, Option II would reduce waste miles and greenhouse gas emissions associated with landfill. As result, it has the potential to have a major positive impact on the objective. By contrast, Option I would result in a higher proportion of waste being exported to landfill and could therefore have a negative impact on the objective. Option III would result in some reduction of greenhouse gas emissions associated with landfill. In addition, a significant proportion of the capacity for recovery is within the Plan area. As a result, Option III has the potential to minimise the need to export waste from North London and could therefore help minimise waste miles and associated emissions.			-
	Option II			X	Low				++
	Option III			X	Low				++
10. To protect and improve air, water and soil quality	Option I			X	Low	Options II and III could lead to a reduction in the need to transport waste out of the plan area for disposal in landfill or other management methods. This could reduce waste miles and associated emissions. Conversely, Option I may have the opposite impact and could result in higher levels of waste exports just to maintain current recycling performance.			-
	Option II			X	Low				+
	Option III			X	Low				+
11. To manage waste sustainability, maximise self-sufficiency in the management of waste, minimise production of waste and increase re-use, recycling and recovery rates	Option I			X	Medium	By seeking to maximise recycling, Option II could have a major positive impact on the objective of managing waste sustainably. Option III would result in a greater proportion of local waste being managed lower down the Waste Hierarchy while Option I would maintain the current level of reliance on landfill and it is therefore uncertain whether it would have a positive impact on the objective.			?
	Option II			X	Medium				++
	Option III			X	Medium				+

Assessment framework		Permanence			Characteristics of impacts		Additional impacts	Nature / scope of mitigation	Score
SA Objective	Evaluation criteria	Duration			Certainty	Scale of impact(s)	Secondary, Cumulative, Synergistic		
		0-5 yrs	5-10 yrs	>10 yrs	[delete as appropriate]	Characterise the scale / severity for each impact as necessary			
12. To ensure efficient use of land and natural resources and the sustainable use of existing resources	Option I			X	Medium	By seeking to maximise recycling, Option II would be particularly have a significant positive impact on the objective of ensuring the efficient and sustainable use of natural resources. By supporting median levels of recycling, Option III could also have some positive impact on this objective. By contrast, Option I would maintain the current level of reliance on landfill and it is therefore uncertain whether it would have a positive impact on the objective.			?
	Option II			X	Medium				++
	Option III			X	Medium				+
13. To encourage sustainable economic growth, exploit the growth potential of business sectors and improve productivity and competitiveness of local waste industry	Option I			X	Low	By seeking to maximise recycling, Option II would be likely to necessitate improvements in the productivity and competitiveness of the waste industry in order to achieve this ambitious target. As a result, it has the potential to have a major positive impact on the objective. Option III has the potential to have some positive effect on the objective but the impact of Option I on the objective is considered to be uncertain as the extent to which it would encourage improvements in the productivity and competitiveness of the waste industry is unclear.			?
	Option II			X	Medium				++
	Option III			X	Medium				+
14. To reduce economic disparities, unemployment and deprivation	Option I			X	Low	Options II and III could support the creation of employment opportunities and thereby have a positive impact on the objective. By contrast, Option I would maintain current levels of recycling and recovery and is therefore unlikely to result in the creation of a significant number of new employment opportunities. As a result, Option I is unlikely to have a significant impact on the objective.			0
	Option II			X	Medium				+
	Option III			X	Medium				+

#### Summary of Assessment

Although each of the management strategy options would have an uncertain impact on the majority of the sustainability objectives, there are clear differences in the performance of the options in some aspects of the SA process. In particular, Options II and III have the potential to have a positive impact on the greatest number of objectives. Specifically, Option II could have a major positive effect on the objectives that relate to managing waste sustainably, improving the productivity of the waste industry, ensuring the efficient use of resources and reducing contributions to climate change. Option III could also have a positive impact on each of these objectives and both options could also have some positive impact on the objectives that relate to minimising the need to travel and reducing economic disparities. By contrast Option I would have a negative, uncertain or neutral impact on each of these objectives.

Each option could however have a negative impact on the objective that relates to amenity. Key mitigation measures are likely to include enforcing appropriate controls through planning conditions and environmental permitting and ensuring that only enclosed facilities are developed close to sensitive receptors. Each option would have an uncertain impact on the remaining objectives.