

## NATURAL ENVIRONMENT

### **CE/28 – Energy**

**Requires the development to contribute to climate change control and energy conservation measures by incorporating technology to reduce CO<sub>2</sub> emissions by 10% over current threshold levels and a similar proportion of energy requirements to be generated using renewable technology.**

Sustainability Appraisal Objectives [abridged in some cases]	Assessment			Comments / Proposed Mitigation
	Short	Med.	Long	
1.1 Minimise irreversible loss of undeveloped land and productive agricultural holdings	~	~	~	
1.2 Reduce the use of non-renewable resources including energy	+	++	+++	The supporting text also makes it clear the Council envisages renewable energy technology to be incorporated into buildings <u>and</u> to be generated by other facilities within the development.
1.3 Limit water consumption to sustainable levels	~	~	~	
2.1 Avoid damage to designated sites and protected species	~	~	~	See below.
2.2 Maintain / enhance range and viability of characteristic habitats and species	~	~	~	(Although there is a long-term indirect benefit from reducing climate change impacts.)
2.3 Improve opportunities for people to access the countryside and wild places	~	~	~	
3.1 Avoid damage to designated historic sites and their settings	?	?	?	It is assumed renewable technology can be incorporated into housing and employment sites relatively unobtrusively, but the visual impact of free-standing structures will need to be reviewed and addressed in the site design brief.
3.2 Maintain diversity and distinctiveness of landscape	~	~	~	Effect neutral provided there is no visual impact of any additional

and townscape				free-standing structures.
3.3. Create places and spaces that look good and work well	+	+	+	As for 3.1, although at present the inclusion of sustainable energy technology meets the condition for high standards of design.
4.1 Reduce emission of greenhouse gases and other pollutants	+	++	+++	Clearly beneficial as emission calculations address both direct contribution (CO <sub>2</sub> generation from combustion) and indirect contribution (rate of heat loss). This policy corresponds to Core Strategy policy NE/1. We have separately suggested that the Council might consider a slight tightening of the wording of policy on this issue since it currently adopts a target the developers should not have too much difficulty achieving and since it only encourages rather than mandates adoption of these targets.
4.2 Minimise waste production and support recycling	~	~	~	
4.3 Limit or reduce vulnerability to flooding and other climate change impacts	(+)	(+)	(+)	Does not strictly address vulnerability; beneficial impacts are subsumed under 4.1.
5.1 Maintain and enhance human health	~	~	~	
5.2 Reduce and prevent crime and the fear of crime	~	~	~	
5.3 Improve the quantity and quality of publicly accessible open space	~	~	~	
6.1 Improve the quality, range and accessibility of services and facilities	~	~	~	
6.2 Redress inequalities in age, gender, race, location, faith, disability, etc.	~	~	~	

6.3 Ensure all groups have access to decent, appropriate and affordable housing	?	?	?	The initial assessment identified concern about the impact of energy conservation technology on house building costs, while acknowledging some design options can (for example) reduce heat loss with limited cost impact. This issue might have an impact on house costs and therefore arrangements for funding affordable housing, however applying the policy on this scale should help to reduce the unit cost per dwelling of the technology, and some of this cost might also be offset by the sale of surplus energy to the National Grid if additional generation facilities are installed within the urban quarter.
6.4 Encourage and enable active involvement of local people in the community	~	~	~	
7.1 Help people gain access to satisfying work appropriate to skills, potential and location	~	~	~	
7.2 Support appropriate investment in people, places, communications and infrastructure	~	(+)	+	Possibility of local generation of renewable energy some of which may be used locally.
7.3. Improve the efficiency, competitiveness, vitality and adaptability of the local economy	~	~	~	
<b>Summary of assessment:</b> Clearly a sustainable policy that reflects the requirement for effective action to reduce emissions, and which capitalises on the development to install both energy conservation and generation technology in a large number of new structures. The policy suggests that additional generating facilities may be installed, without making it clear what these might be and where they might be located, and clearly this will need to be defined in parallel with preparation of the site design and design brief.				

**Summary of mitigation proposals:** In assessing the corresponding policy in the Core Strategy we have recommended that the Council considers some tightening of the terms since the proposal requires an increase above current thresholds that should be relatively easy to achieve, and it only encourages adoption of these energy saving measures rather than mandating them. We acknowledge that the Council has separately advised us that it considers the proposals strike an appropriate balance between the need to introduce these measures and ensuring they do not act as a disincentive to developers and have to reflect Government guidance that planning policy should not seek to impose stricter requirements than the relevant legislation (in this case the energy efficiency determined by Building Regulations). However policy CE/32 may provide an opportunity to implement this change on a more limited scale.

**Secondary, cumulative or synergistic effects:** Again, the policy mentions the possibility of additional energy generation in the development, and it is not clear what proportion of the energy would be sold to the National Grid, and how the income from this would be distributed between site developer and other local facilities, though clearly there is an opportunity to subsidise energy costs locally from this source.

#### ***CE/29 – Sustainable building methods and materials***

**Requires the use of sustainable materials, including recycled aggregates and other resources, wherever feasible, and for these to be sourced locally to limit impacts of transporting them to the site.**

Sustainability Appraisal Objectives [abridged in some cases]	Assessment			Comments / Proposed Mitigation
	Short	Med.	Long	
1.1 Minimise irreversible loss of undeveloped land and productive agricultural holdings	~	~	~	

1.2 Reduce the use of non-renewable resources including energy	+	++	+++	Clearly a strong impact in principle, though actual benefit depends on the availability of suitable materials within a reasonable distance. Within the site the former runway and taxiways, plus airport buildings that will not be preserved are a potential source of hardcore and secondary aggregates. However these materials will not be available for development of the northern part of the site, which will begin before the airport is relocated. However, there will be available material from the redevelopment of hardstandings and buildings from the parts of the North Works which are redeveloped.  Other policies that support include CE/33 (use of construction spoil) and CE/23 (possible re-use of airport buildings for appropriate contemporary purposes).
1.3 Limit water consumption to sustainable levels	~	~	~	Potential adverse impacts of construction on water use and discharge assumed to be addressed by policy CE/33.
2.1 Avoid damage to designated sites and protected species	~	~	~	
2.2 Maintain / enhance range and viability of characteristic habitats and species	?	?	?	Depends on impact of local materials extraction on the area's characteristic habitats, but it is assumed these would be mitigated at source by development controls in the MWDF.
2.3 Improve opportunities for people to access the countryside and wild places	~	~	~	
3.1 Avoid damage to designated historic sites and their settings	(+)	(+)	(+)	Potential for re-use of airport buildings sensitively for appropriate uses (although these buildings are also a source of secondary materials if they have no heritage value).
3.2 Maintain diversity and distinctiveness of landscape and townscape	~	~	~	

3.3. Create places and spaces that look good and work well	~	~	~	
4.1 Reduce emission of greenhouse gases and other pollutants	+	+	+	Policy requires developer to minimise transport impacts relating to movement of materials and workforce access.
4.2 Minimise waste production and support recycling	+	+	+	Involves recycling of materials. Marking might be more positive if there are guaranteed, suitable sources of materials available locally throughout the life of the development.
4.3 Limit or reduce vulnerability to flooding and other climate change impacts	~	~	~	
5.1 Maintain and enhance human health	~	~	~	
5.2 Reduce and prevent crime and the fear of crime	~	~	~	
5.3 Improve the quantity and quality of publicly accessible open space	~	~	~	
6.1 Improve the quality, range and accessibility of services and facilities	~	~	~	
6.2 Redress inequalities in age, gender, race, location, faith, disability, etc.	~	~	~	
6.3 Ensure all groups have access to decent, appropriate and affordable housing	~	~	~	
6.4 Encourage and enable active involvement of local people in the community	~	~	~	
7.1 Help people gain access to satisfying work appropriate to skills, potential and location	~	~	~	
7.2 Support appropriate investment in people, places, communications and infrastructure	~	~	~	

7.3. Improve the efficiency, competitiveness, vitality and adaptability of the local economy	~	~	~
<b>Summary of assessment:</b> Clearly a sustainable policy, the only qualification being the uncertainty about the volume of secondary materials that are available within a reasonable distance – clearly there are substantial areas of tarmac and some buildings of no heritage value that can be used once the airport is relocated.			
<b>Summary of mitigation proposals:</b> None identified.			
<b>Secondary, cumulative or synergistic effects:</b> None identified.			

CE/30 – Noise				
Restates the overarching Core Strategy policy which gives the Council discretion to refuse planning applications which pose an unacceptable risk of noise impacts on adjacent land uses which cannot be mitigated.				
Sustainability Appraisal Objectives [abridged in some cases]	Assessment			Comments / Proposed Mitigation
	Short	Med.	Long	
1.1 Minimise irreversible loss of undeveloped land and productive agricultural holdings	~	~	~	
1.2 Reduce the use of non-renewable resources including energy	~	~	~	
1.3 Limit water consumption to sustainable levels	~	~	~	
2.1 Avoid damage to designated sites and protected species	~	~	~	
2.2 Maintain / enhance range and viability of characteristic habitats and species	~	~	~	
2.3 Improve opportunities for people to access the countryside and wild places	~	~	~	
3.1 Avoid damage to designated historic sites and their	~	~	~	

settings				
3.2 Maintain diversity and distinctiveness of landscape and townscape	~	~	~	
3.3. Create places and spaces that look good and work well	?	?	?	Policy text primarily concerns human impacts. Possibly mention explicitly the impact on green corridor/separation areas to ensure a degree of tranquillity is available.
4.1 Reduce emission of greenhouse gases and other pollutants	++	++	++	Clearly addresses noise impact, which is one of the decision-making criteria for this objective. Construction impacts assumed to be addressed separately by CE/33.
4.2 Minimise waste production and support recycling	~	~	~	
4.3 Limit or reduce vulnerability to flooding and other climate change impacts	~	~	~	
5.1 Maintain and enhance human health	+	+	+	Positive impact in preventing intrusive noise and its impact on peace of mind, etc.
5.2 Reduce and prevent crime and the fear of crime	~	~	~	
5.3 Improve the quantity and quality of publicly accessible open space	?	?	?	As for 3.3 (in terms of the quality of space) – this would also apply to the country park.
6.1 Improve the quality, range and accessibility of services and facilities	~	~	~	
6.2 Redress inequalities in age, gender, race, location, faith, disability, etc.	~	~	~	
6.3 Ensure all groups have access to decent, appropriate and affordable housing	~	~	~	
6.4 Encourage and enable active involvement of local people in the community	~	~	~	



7.1 Help people gain access to satisfying work appropriate to skills, potential and location	~	~	~
7.2 Support appropriate investment in people, places, communications and infrastructure	~	~	~
7.3. Improve the efficiency, competitiveness, vitality and adaptability of the local economy	~	~	~
<b>Summary of assessment: A straightforward policy imposing planning controls consistent with those in the Core Strategy, current generic planning guidance, and the avoidance of impacts from new developments which would be investigated in an EIA of this site or its main components.</b>			
<b>Summary of mitigation proposals: As the policy text focuses on impacts on sensitive receptor sites occupied by humans, possibly add an additional clause seeking to protect recreational and open space from intrusive noise?</b>			
<b>Secondary, cumulative or synergistic effects: None identified, provided temporary but long-running noise impacts during construction are addressed by policy CE/33.</b>			

### **CE/31 – Air quality**

**Requires development proposals to show there would be no adverse air quality impacts, including indirect ones resulting from additional traffic. The text requires a detailed assessment of impacts prior to redevelopment of the area north of Newmarket Road.**

Sustainability Appraisal Objectives [abridged in some cases]	Assessment			Comments / Proposed Mitigation
	Short	Med.	Long	
1.1 Minimise irreversible loss of undeveloped land and productive agricultural holdings	~	~	~	
1.2 Reduce the use of non-renewable resources including energy	~	~	~	
1.3 Limit water consumption to sustainable levels	~	~	~	
2.1 Avoid damage to designated sites and protected species	~	~	~	

2.2 Maintain / enhance range and viability of characteristic habitats and species	~	~	~	Potential adverse impacts from dust contamination and emissions during construction will need to be addressed through policy CE/33.
2.3 Improve opportunities for people to access the countryside and wild places	(+)	(+)	(+)	Possible impact on green corridors and need to ensure traffic emissions don't detract from its amenity.
3.1 Avoid damage to designated historic sites and their settings	~	~	~	No obvious impacts, though there may be potential impacts on very old listed buildings (deterioration of masonry).
3.2 Maintain diversity and distinctiveness of landscape and townscape	(+)	(+)	(+)	Is there a potential benefit here? Areas of Cambridge are known for their congestion problems so any local controls to prevent a repetition of this problem would be beneficial.
3.3. Create places and spaces that look good and work well	+	+	+	We would expect air quality to affect residents' satisfaction with their local environment.
4.1 Reduce emission of greenhouse gases and other pollutants	+	++	+++	The principal objective of this policy.
4.2 Minimise waste production and support recycling	~	~	~	
4.3 Limit or reduce vulnerability to flooding and other climate change impacts	~	~	~	
5.1 Maintain and enhance human health	+	+	+	Marking may be understated if air quality controls and policy on sustainable transport help to maintain current levels.
5.2 Reduce and prevent crime and the fear of crime	~	~	~	
5.3 Improve the quantity and quality of publicly accessible open space	(+)	(+)	(+)	As for 2.3.
6.1 Improve the quality, range and accessibility of services and facilities	~	~	~	Sustainable transport policies neutralise any potentially adverse impact on vehicle access as a result of this policy.
6.2 Redress inequalities in age, gender, race, location,	~	~	~	

faith, disability, etc.				
6.3 Ensure all groups have access to decent, appropriate and affordable housing	~	~	~	
6.4 Encourage and enable active involvement of local people in the community	~	~	~	
7.1 Help people gain access to satisfying work appropriate to skills, potential and location	~	~	~	
7.2 Support appropriate investment in people, places, communications and infrastructure	~	~	~	
7.3. Improve the efficiency, competitiveness, vitality and adaptability of the local economy	~	~	~	It is not clear that any potential industrial / commercial land uses would have direct effects (ie. emissions) although this needs to be confirmed once potential uses are better understood.
<b>Summary of assessment:</b> Another straightforward policy transposing Core Strategy policy to Cambridge East. The impact of this policy will be easier to assess once there are more details about the site layout and pattern of land use. Other policies mitigate the impact of traffic within the site where this is related to the new development, however the impact along Newmarket Road in particular will depend on traffic management measures that will need to be coordinated with the City Council.				
<b>Summary of mitigation proposals:</b> None identified.				
<b>Secondary, cumulative or synergistic effects:</b> None identified.				