

# DEPOSIT LOCAL DEVELOPMENT PLAN UP TO 2021 STRATEGIC ENVIRONMENTAL ASSESSMENT/SUSTAINABILITY APPRAISAL

Part 1 - Document 3  
The Assessment of the Preferred  
and Alternative LDP Strategies

October 2008

# CYNLLUN ADNEUO DATBLYGU LLEOL HYD AT 2021 ASESIAD AMGYLCHEDDOL STRATEGOL/GWERTHUSIAD CYNALADWYEDD

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## THE SEA/SA PART 1 DOCUMENTATION

### **I**

Part 1 of the Strategic Environmental Assessment /Sustainability Appraisal of the emerging Caerphilly Local Development Plan is comprised of 3 documents, namely:

#### *Document 1:*

##### *The Scoping Report*

The Scoping Report provides the background to the SEA/SA. It contains a review of the current state of the environment of the County Borough and sets out the Sustainability Objectives that form the basis of the Assessment Tests used to assess the LDP throughout its production.

#### *Document 2:*

##### *The Review of Relevant Plans, Policies and Programmes*

In order to meet the procedural requirements of the SEA Directive, Part 1 of the SEA/SA must include a Review of Relevant Plans, Policies and Programmes that might have implications for the production and implementation of the LDP. All relevant plans, policies and programmes need to be reviewed, from European level documents

down to local level documents and their implications for the LDP identified.

#### *Document 3 :*

##### *The Assessment of the Preferred and Alternative Strategies (This Document)*

The first part of the assessment process is the formal assessment of the Preferred and Alternative Strategies at the pre-deposit consultation stage of the LDP. This document outlines how the strategies will be tested and then provides details of the assessments and analysis that will modify the LDP. Details of mitigation and changes to the Preferred Strategy will also be included, although the assessment of the Deposit LDP Strategy will be included in SEA/SA Part 2 Documentation.

### **II**

Part 2 of the Strategic Environmental Assessment /Sustainability Appraisal of the emerging Caerphilly Local Development Plan is comprised of two documents that set out the results of the assessments of the detailed LDP:

#### *Document 4:*

##### *The Environmental Report*

The Environmental Report provides the background to identifying the detailed Assessment Tests, and the results of the SEA/SA tests for the Deposit Plan. This includes a re-assessment of the LDP Strategy against the strategic Assessment Tests as well as the assessment of the detailed plan against the detailed Assessment tests. The main part of the Environmental Report will be the individual assessment of policies and proposals, which will be in the form of matrix tables.

#### *Document 5:*

##### *The Habitats Regulations Assessment (HRA) of the LDP*

The EC Habitats Directive (92/43/EEC) requires that any impacts that the LDP may have on European designated sites of conservation importance need to be assessed and, where necessary, mitigated against. The HRA is a stand-alone assessment that does not, in itself form part of the SEA/SA. However, the HRA process utilises much of the back-

ground information and work that has been undertaken upon the SEA/SA and as such it is appropriate to include it within the SEA/SA umbrella as documents that have influenced the production of the LDP. The HRA influences the LDP in respect of its impact upon Natura 2000 sites in the same way as the SEA/SA does in respect of environmental considerations.

### **III**

Together the 5 documents comprise the complete SEA/SA Assessment on the Caerphilly Local Development Plan.

# 1. BACKGROUND AND PROCESS

## 1.1

It is a requirement that the emerging LDP be subject to Strategic Environmental Assessment and Sustainability Appraisal as part of its process of development. The SEA Directive requires that SEA be undertaken on the LDP and reasonable alternatives to it. The Environmental Assessment of Plans and Programmes (Wales) Regulations 2004 (the Regulations) require that an assessment be undertaken at the pre-deposit consultation stage of the LDP, i.e. the Preferred and Alternative Strategies. As a result, assessments have been undertaken of the Preferred and Alternative Strategies, and the findings of those assessments have been incorporated into the LDP Preferred Strategy.

## 1.2

Prior to starting the SEA/SA process officers and members of the County Borough, along with representatives from Cadw, Countryside Council for Wales (CCW), Environment Agency (Wales) (EA) and the Welsh Assembly Government (WAG) were asked for their input into identifying the key environmental issues facing the County Borough. These were then incorporated into the initial working draft of the SEA/SA Scoping Report.

## 1.3

In line with recommended best practice, the Council has sought to ensure that the SEA/SA is produced as part of an open and inclusive process. In order to ensure that a wide range of expertise and information was incorporated into the process, the Council setup an advisory group to assist in the production of the SEA/SA. This group, called the Sustainability Group, was composed of a balance of internal and external representatives, incorporating a wide range of expertise that reflects the SEA issues, identified in Schedule 1 of the SEA Directive. The Sustainability Group has agreed 'Terms of Reference' for the group and have, to date held six very fruitful meetings, which have been very helpful in producing the current SEA/SA.

## 1.4

The SEA/SA has been produced with the specific objective of incorporating both the Council's Community Strategy and the Council's Sustainable Development Strategy. Both documents have formed the starting point from which the Scoping Report, and in particular the Sustainability Object-

ives, have been derived. The Sustainability Objectives in the Scoping Report are listed in relation to the 4 Community Plan themes, i.e. Living Environment, Regeneration, Education for Life and Health, Social Care and Well-Being.

## 1.5

The initial meetings of the Sustainability Group during March and April provided the basis for producing the draft Scoping Report. The SEA Directive and the Regulations both require that CCW, Cadw and EA are involved in the production of the Scoping Report, and also provide for a 5-week period for these bodies to comment on the emerging report. The draft Scoping Report was subject to a 5-week involvement process between 14th June and 19th July. Comments were received from all three bodies. These comments have been considered and, as a result, amendments have been made to the Scoping Report and the Review of Relevant Plans, Programmes and Policies. The comments, and the Council's response, are included in the Report of Consultation for the Involvement Process. In November 2006 the Council agreed

that the amended Scoping Report and Review of Relevant Plans, Programmes and Policies be the subject of full consultation in conjunction with the pre-deposit consultation on the LDP.

### **1.6**

With the Scoping Report agreed for consultation, the Council and the Sustainability Group commenced work on identifying relevant Assessment Tests (Tests) against which the emerging Preferred and Alternative Strategies for the LDP would be assessed. In identifying the Tests, it was essential that they were sufficiently strategic to ensure that the strategies could be appropriately assessed. The 24 Sustainability objectives in the Scoping Report were the basis for identifying the appropriate Tests. However, in order to ensure that the Tests were appropriate for assessing at a strategic level, it was necessary, in some instances, for Tests to incorporate more than one objective. Consequently there are 20 Assessment Tests against which the strategies will be assessed. A table linking the Assessment Tests to the Sustainability Objectives is included as Appendix 1 to this document. It should be noted that the Tests in this document are only applicable to the strategic level of the LDP.

A different set of Tests will be produced for assessing the emerging detailed LDP in due course.

### **1.7**

The draft Assessment Tests were submitted to the Sustainability Group to seek their input into the Tests and to undertake a mock assessment to verify whether they were an appropriate method of assessing the Preferred and Alternative Strategies. The Sustainability Group revised some of the Tests to more accurately reflect the nature of the Sustainability Objectives. The Tests were then applied to a mock strategy with some success and it was agreed that the Tests, as amended, were appropriate for assessing the LDP strategies.

## 2. THE ASSESSMENT PROCESS

### 2.1

With the Assessment Tests having been agreed, the focus moved onto the process of undertaking the assessments of the strategies. Firstly the issue of who would undertake the assessments and how, were addressed. It was initially thought that council officers, from a small range of services, would carry out the assessments in a round table session. However, throughout the process the Sustainability Group had been working in an inclusive and productive way, making effective and important contributions to the production of the SEA/SA. The wide range of expertise and the impartiality of the group also had the potential to offer significant benefits to the assessment process. It was finally decided that the Sustainability Group would be utilised in undertaking the assessments of the strategies, with officers of the Council overseeing and reviewing the output of the assessment process.

### 2.2

The final issue for the assessment process related to how to record the responses to the assessment questions. In undertaking previous sustainability appraisals response matrices have been used (a

simple table of results) that utilise symbols and/or colours to represent the outcomes. Current guidance and best practice on SEA/SA also recommends the use of result matrices as the best vehicle for conveying the results to the assessment.

### 2.3

When undertaking the mock Assessment Test with the Sustainability Group, the group were asked to record their responses using a simple set of five

codes to represent the answers (i.e. single or double green “plus” signs for positive results, a blue circle for neutral results and single or double red “crosses” for negative results). In implementing the mock assessment it was found that the symbols for positive and negative results were appropriate. However in applying the tests it was found that there were instances where the results could not be ascertained, either because there was not suf-

**Assessment Test Responses**

xx	The strategy delivers significant negative impacts that undermine the Sustainability Objective and cannot be overcome by change or mitigation to the strategy.
x	The strategy delivers negative impacts that undermine the Sustainability Objective, but could be overcome with mitigation or amendment to the strategy.
●	The strategy has little or no anticipated impact, either positive or negative.
○	Impacts are anticipated, but more detailed information would be required to identify the level and nature of the impacts.
?	The strategy could result in positive or negative impacts dependant upon how it is implemented dependant upon how it is implemented.
+	The strategy delivers minor positive impacts that only go part way to meeting the Sustainability Objective.
++	The strategy delivers significant positive effect, which help achieve the Sustainability Objective.

**Table 1:** Symbols used to Record the Assessment Test Results

ficient detail to base a response upon, or that it was dependant upon how specific elements of the strategy were to be implemented. Consequently the results set were amended to include symbols to relate to these circumstances.

### **2.4**

The most important part of the assessment process is to provide mitigation or amendments to the strategy where negative results are recorded. The mitigation or amendments, if implemented, would be sufficient to revert the result from negative to, at least, a neutral, if not positive, response. The mitigation and amendments identified through this process would then inform the process of producing the LDP Preferred Strategy, making the Strategy more sustainable, in line with the overall aim of the SEA/SA, which is to ensure that the LDP contributes to the provision of sustainable development. It should be noted that, whilst the SEA/SA informs the decision processes associated with the production of the LDP, it does not dictate them. The role of the SEA/SA is to provide advice, which the LDP should incorporate, where appropriate.

### 3. THE ASSESSMENTS

#### 3.1

The assessments of the strategies were undertaken in workshop sessions with the Sustainability Group. Two workshop groups were used so that the results could be cross-referenced to see if the assessments varied greatly and to provide an element of quality control. In general there is a high degree of correlation between the results from the two workshops, and the results of the assessments have been reviewed by officers of the Council and have been found to be reasonable and acceptable assessments of the strategies.

#### 3.2

The SEA Directive requires that the SEA assessment should not only consider the likely direct effects that the plan may have, but should also consider secondary, cumulative and synergistic effects as well. However it should be noted that the assessments are being taken at a strategic level that will, by their very nature, be highly integrated and are unlikely to realise any secondary, cumulative or synergistic effects of such significance as to be identifiable in the assessments. As such the assessment will not dwell on these aspects unless there is significant effect that warrants discussion.

#### 3.3

The results matrices for the assessments are included as Appendix 2 to this report. In this section it is not intended to provide a rundown of the results in detail, as this is self-evident from the matrices in Appendix 2. This section will provide a commentary of the findings relating to their broad compatibility with the Sustainability Objectives in the SEA/SA and will also identify where there are underlying issues that may have led to some of the responses.

**Option A - The UDP Strategy**  
(Continuation of Existing Trends)

<i>Summary of Results</i>						
Negative		Neutral			Positive	
XX	X	●	○	?	++	+
4	22	0	3	4	0	7
26		7			7	

#### 3.4

The assessment of this strategy revealed it would have a strongly negative impact upon the environment. In fact over half of the results are negative, with at least four instances of impacts that could not be mitigated (represented by **XX**).

It is interesting to note that none of the double negative responses appeared in the assessments of both working groups, although they all correspond to single negatives. The lack of positive responses from the assessment reinforces the negative outcome of the assessment for the UDP Strategy.

#### 3.5

The positive outcomes for the strategy are largely focussed on Tests based upon economic factors of the SEA/SA. This shows that the UDP Strategy has a significant economic development bias. It is undoubtedly for this reason that the aim of the Mid-Valleys Growth Corridor has been realised, when there was significant concern that growth and development could not be attracted to the Mid-Valleys area. However, according to the comprehensive assessment undertaken by the Tests, the Strategy fails to deliver on social and particularly on environmental factors.

#### 3.6

In general terms the UDP Strategy would require significant modification and a high degree of mitigation if it were to be the strategy upon which the LDP is based.

**Option B -  
(Urban Containment Strategy)**

<i>Summary of Results</i>						
Negative		Neutral			Positive	
XX	X	●	○	?	++	+
7	16	2	0	6	0	9
23		8			9	

**3.7**

The assessment of this strategy revealed a very large number of negative responses, including 7 instances of negative impacts that could not be mitigated. By contrast the assessment identified no double positive results, and only 9 positive results in total. In all the strategy realised positive results in less than 25% of the total assessment.

**3.8**

This assessment realised three completely positive results, namely in respect of conserving of biodiversity, reducing the need to travel and ensuring the effective use of land. This reflects the principle of the strategy that development would be contained within existing settlement limits, resulting in higher density development making better use of land and protecting the environment outside of the settlements.

**3.9**

By contrast the strategy realised 9 completely negative responses, including 2 negatives that could not be mitigated. In addition to this, negative results were recorded against all but 5 of the Assessment Tests. Only one test realised a purely neutral response, although neutral responses generally accompanied single negative responses in the assessments. The neutral and negative responses combined account for more than three quarters of the test results for this strategy.

**3.10**

The wide-ranging scope of the negative responses suggests that the strategy is unsustainable and, given the number of negative responses that cannot be mitigated, it is questionable whether this strategy could be adopted without significant environmental damage.

**Option C -  
(Sustainable Growth Strategy)**

<i>Summary of Results</i>						
Negative		Neutral			Positive	
XX	X	●	○	?	++	+
0	8	0	1	4	2	25
8		5			27	

**3.11**

The assessment of this strategy realised a large number of positive effects (27), including 2 double positives. In contrast only a small number of negative results were realised (8), none of which were double negatives. Overall this suggests that the strategy is fairly sustainable. The assessment realised only 5 neutral responses, none of which were that no effects were anticipated, indicating that, in general terms, the strategy was fairly clear and understandable, with little need of clarification.

**3.12**

In realising the large number of positive results, the strategy realised two sets of positive results in no less than 13 Assessment Tests, compared to just 6 where there was not one positive result. The areas where no positive results were realised revolved around protection of air quality and flooding (which is a theme throughout all the four strategies due to the fact that development, by its very nature will have adverse impacts due to increased populations and built area) and potential loss of biodiversity and landscape due to possible allocation of greenfield sites.

**3.13**

The double positives were realised in respect of encouraging residents to remain in the County Borough and the protection of the cultural identity of the County Borough. Both of these issues are directly related to the primary aim of this strategy to make more sustainable settlements by providing development that will meet the needs of each settlement associated to its function.

**Option D -  
(Hybrid Strategy)**

<i>Summary of Results</i>						
Negative		Neutral			Positive	
XX	X	●	○	?	++	+
0	8	2	2	7	2	19
8		11			21	

**3.14**

The assessment of this strategy realised a large number of positive effects (21), including 2 double positives. In contrast only a small number of negative results were realised (8), none of which were double negatives. Overall this suggests that the strategy is fairly sustainable. The assessment realised 11 neutral responses, 2 of which were that no effects were anticipated. This suggests that, in

general terms, the strategy had some issues in respect of clarity and potential ambiguity or problems with the implementation of the strategy.

**3.15**

The assessment of the strategy realised eight sets of wholly positive results compared to just two sets of completely negative results, these negatives coming in respect of flooding and supply and use of renewable energy. Overall at least one positive result was realised in 13 of the 20 Assessment Tests.

**3.16**

The assessment of this strategy realised the most number of neutral responses of all the strategies assessed, suggesting that this strategy has issues in respect of the clarity of what it is seeking and how it will be implemented. This assessment did actually realise 2 genuine neutral responses (little or no effects) but these are secondary to the much larger number of neutral responses based upon an inability to determine the outcomes.

**ASSESSMENT OF RANK OF SUSTAINABILITY**

**3.17**

The final part of the assessment process was to consider the strategies in terms of the assessment

findings and identify the order, or ranking, of the strategies in respect of their level of sustainability. Generally the strategies fall into two distinct pairs, the UDP Strategy and the Urban Containment Strategy that realised notably poor results in the assessment and the Sustainable Growth Strategy and the Hybrid Strategy that realised notable good results in the assessment. In considering the latter two strategies, it should be noted that the strategies recorded exactly the same levels of negative responses, suggesting that they are no worse than each other. However the Sustainable Growth Strategy registered a higher number of positive results.

**3.18**

In order to provide a realistic ranking of the strategies all of the participants in the assessment process were asked for their view on what they considered to be the most sustainable strategy, through to the least sustainable. The results of this exercise are included as Appendix 3 to this document. The strategies have been ranked in the following order:

- Most Sustainable** - Sustainable Growth Strategy
- 2<sup>nd</sup> Most Sustainable** - Hybrid Strategy
- 2<sup>nd</sup> Least Sustainable** - UDP Strategy
- Least Sustainable** - Urban Containment Strategy

## 4. THE PREFERRED STRATEGY - AMENDMENTS AND MITIGATION

### 4.1

The overall aim of the SEA/SA process is to ensure that environmental and sustainability considerations are taken into account in decision making in the LDP. Consequently whilst the findings of the Strategy Assessment procedure found that the Sustainable Growth Strategy was the most sustainable strategy, it does not mean that it is the strategy that should be adopted as the basis of the LDP. However, the findings of the assessment are a fundamental consideration of the strategy for the LDP and are required to be addressed.

### 4.2

In consideration of all the issues and factors, it has been decided that the Hybrid Strategy will form the basis of the LDP strategy document that will be the subject of consultation in April 2007. The reasons for this decision are contained in paragraph 9.8 of the *“Caerphilly County Borough Council Local Development Plan : Draft Preferred Strategy”* document and it is not intended to review those reasons in this document.

### 4.3

In assessing all of the strategies the workshop groups were asked, where they recorded neutral or negative responses, to provide views and thoughts on how the strategy could be modified to make the responses more likely to be positive. As the Draft Preferred Strategy will dictate the direction of the LDP, it is only the recommendations arising out of the assessment of that strategy that should be addressed, i.e. the assessment of the Hybrid Strategy. The suggestions made by the workshops have been combined into the following series of amendments, which are proposed for the Draft Preferred Strategy:

1

Include a statement in text that explicitly states that the strategy will actively seek to identify sites in close proximity to transport nodes (from test 1).

2

Include a statement in the text that outlines that the role and function of a settlement is a major consideration in the identification of allocations (from test 1).

3

Include a statement in the text that the strategy will address equality in all areas, not just in the provision of community facilities (from test 4).

4

Include a statement in the text outlining how employment opportunities will be delivered in the north to complement housing developments (from test 5).

5

Include a statement in the text relating to how the strategy will deal with industries that could have detrimental impacts upon air quality (from test 9).

6

Include a statement in the text to outline that the plan will seek improvements to public transport provision to complement new development (from test 9).

7

Include a statement in the text to outline that the plan will seek obligations, and will include relevant site policies, that will seek to protect water resources and quality, and reduce the impact of flooding (from test 12).

8

Include a statement in the text to outline that the plan will seek obligations, and will include relevant site related policies, that will seek to protect water resources and quality, and reduce the impact of flooding (from test 13).

9

Include a statement in the text to outline that the plan will seek mitigation and benefit from development on greenfield sites (from test 14).

10

The strategy should address the issue of waste management facilities in the plan, possibly including facilities as community facilities (from test 15).

11

Include a statement in the text to outline that the plan will seek provision for enhancement and biodiversity gain from development (from test 6).

12

The strategy will need to address the fact that accommodating new development will result in a net increase in CO2 emissions unless the plan proactively seeks to reduce emissions as part of the development process (from test 17).

13

Include a statement in the text that explicitly states that the strategy will actively seek to identify sites in close proximity to transport nodes (from test 18).

14

The strategy needs to address how the plan will realise increases in renewable energy generation and use (from test 19).

15

Include a statement in the text to explain that the plan will seek to allocate infrastructure development dependant upon the functional analysis for each settlement (from test 20).

#### 4.4

The above recommendations have been considered in Appendix 12 of the "Caerphilly County Borough Council Local Development Plan : Draft Preferred Strategy" document. The Appendix outlines the response to each recommendation, indicating whether an amendment has been made or justifying why no change has been made at the current time. The consideration of the assessment results and the recommendations proposed for the Preferred Strategy are in accordance with the requirements of the SEA Directive.



## APPENDIX 1 - SUSTAINABILITY OBJECTIVES AND ASSESSMENT TESTS

Population and Human Health						
	Issue	Sustainability Objective	Assessment Test	Changes By Sustainability Group	Final Assessment Tests	
1	Resource Consumption	To reduce the average resource consumption of each resident.	1 <i>Promote reduced resource-consumption by residents.</i>	Agreed without amendment.	1	Promote reduced resource consumption by residents.
2	Housing	To improve the condition of housing and ensure the range of housing types are accessible to meet the needs of residents.	2 <i>Provide a sufficient amount and mix of housing to sustain communities.</i>	The last three words should be deleted as they pre-empt the strategies and favour the Sustainable Settlement Strategy unfairly.	2	Provide a sufficient amount and mix of housing.
4	Education	To improve educational achievement.	3 <i>Provide a range of educational opportunities.</i>	The test should seek that all, or at the very least a large proportion, of educational opportunity are catered for. Include the word "wide" before "range".	3	Provide a wide range of educational opportunities.
5	Equalities	To allow equal opportunities for all.	4 <i>Promote equality of opportunity.</i>	The test as worded is unwieldy and unspecific. The test should be reworded to test equal opportunity, rather than equal access.	4	Promote equality of opportunity.
6	Employment	To increase the percentage of people of working age in employment.	5 <i>Provide for business investment and increase the range of job opportunities.</i>	Agreed without amendment.	5	Provide for business investment and increase the range of job opportunities.
8	Business	To ensure a sufficient range of employment sites are available.				
7	Wealth - Level of Economic Activity	To increase the wealth of individuals in CCBC.	6 <i>Promote reduced resource consumption by residents.</i>	A mixed economy doesn't necessarily mean a healthy one. Mixed "should be deleted and "diverse" be included instead.	6	Promote a diverse economy and increase the wealth of residents.
10	Population	To retain the population of County Borough to at least current levels and attain a more balanced demographic structure?	7 <i>Encourage residents to remain in the County Borough.</i>	Agreed without amendment.	7	Encourage residents to remain in the County Borough.

<b>Population and Human Health</b>						
	<b>Issue</b>	<b>Sustainability Objective</b>		<b>Assessment Test</b>	<b>Changes By Sustainability Group</b>	<b>Final Assessment Tests</b>
9	Health	To improve the health of individuals.	8	<i>Provide a healthy and safe environment and an improved feeling of well-being for residents.</i>	Agreed without amendment.	8 Provide a healthy and safe environment and an improved feeling of well-being for residents.
11	Well-Being	To allow all residents easy access to leisure facilities.				
3	Crime	To reduce the incidence of crime.				
<b>Air Pollution</b>						
1	Air Quality	To reduce air, noise, light and odour pollution and ensure air quality improves.	9	<i>Ensure no deterioration to air quality.</i>	The test did not reflect the Sustainability Objective, which sought an improvement to air quality.	9 Ensure improvement to air quality.
<b>Cultural Heritage and Landscape</b>						
1	Landscape	To protect the landscape value of the most important landscapes in the County Borough and maintain a clean and accessible environment to encourage a greater sense of belonging.	10	<i>Protect the landscape and built heritage of the County Borough.</i>	Agreed without amendment.	10 Protect the landscape and built heritage of the County Borough.
2	Historic Assets	To protect and enhance important historic assets.				
3	Culture	To protect the cultural identity of the County Borough.	11	<i>Protect the Cultural Identity of the County Borough and its settlements.</i>	It is unnecessary to include the statement regarding settlements, as that is inherent in protecting the cultural identity of the County Borough as a whole.	11 Protect the cultural identity of the County Borough.

<b>Water</b>						
	<b>Issue</b>	<b>Sustainability Objective</b>	<b>Assessment Test</b>	<b>Changes By Sustainability Group</b>	<b>Final Assessment Tests</b>	
1	Water quantity, quality and use	To protect aquifers and improve the quality and quantity of the water in our rivers and to reduce water consumption.	12 <i>Ensure the protection of water resources and water quality improved.</i>	Agreed without amendment.	12	Ensure the protection of water resources and water quality improved.
2	Flood	To minimise the number of developments affected by flooding.	13 <i>Ensure the incidence of flooding is not increased.</i>	It is the scale and extent of flooding that is the issue and not the number of times it occurs.	13	Reduce the impact of flooding.
<b>Geology and Geomorphology</b>						
1	Soils	To make the most efficient use of land and to reduce contamination and safeguard soil quantity, quality and permeability.	14 <i>Ensure the efficient use of land and soils including the protection of important geological sites.</i>	The test should assess whether the use of land is effective in protecting important sites, land and soils.	14	Ensure the effective use of land and soils including the protection of important geological sites.
2	Geology	To protect geologically important sites and improve their accessibility.				
3	Waste	To reduce the amount of waste produced and increase the reuse of materials.	15 <i>Reduce the amount of waste produced and increase the reuse of materials.</i>	Agreed without amendment.	15	Reduce the amount of waste produced and increase the reuse of materials.
<b>Biodiversity</b>						
1	Biodiversity	To enhance the biodiversity of the County Borough.	16 <i>Safeguard the biodiversity of the County Borough.</i>	The appropriate word is conserve, not safeguard.	16	Conserve the biodiversity of the County Borough.

Climatic Factors					
	Issue	Sustainability Objective	Assessment Test	Changes By Sustainability Group	Final Assessment Tests
1	Climate Change	To reduce the total amount of CO <sub>2</sub> produced within the County Borough each year.	17 <i>Assist in meeting climate change obligations primarily through reducing CO<sub>2</sub> production.</i>	Agreed without amendment.	17 Assist in meeting climate change obligations primarily through reducing CO <sub>2</sub> production.
2	Transport	To reduce congestion by minimising the need to travel, encourage alternatives to the car and make best use of the existing transport infrastructure.	18 <i>Reduce the need to travel.</i>	The impact of the car is the predominant measure within the authority, as such direct reference in the text is important.	18 Reduce the need to travel, particularly by car.
3	Energy	To increase the proportion of energy gained from renewable sources.	19 <i>Promote the supply and use of renewable energy.</i>	Agreed without amendment.	19 Promote the supply and use of renewable energy.
Material Assets					
1	Material Assets	To improve the performance of material assets within the County Borough.	20 <i>Improve existing infrastructure and promote community satisfaction.</i>	It is misleading to test against "improving" infrastructure, as this could be contrary to other tests. Improvement in performance of existing infrastructure should be what is sought.	20 Improve the performance of existing infrastructure.

## APPENDIX 2 - THE ASSESSMENT RESULTS

WORKSHOP A					
Option A - The UDP Strategy (Continuation of Existing Trends)					
	Assessment Test	Assessment Result	Comment	Mitigation	Issues for Detailed Plan
1	Promote reduced resource consumption by residents	X	No mention of supply of community facilities relating to settlement needs		
2	Provide a sufficient amount and mix of housing	?	Can strategy deliver the mix of housing		
3	Provide a wide range of educational opportunities.	X	No mention of supply of community facilities relating to settlement needs		
4	Promote equality of opportunity	+			
5	Provide for business investment and increase the range of job opportunities.	+			
6	Promote a diverse economy and increase the wealth of residents	+			
7	Encourage residents to remain in the County Borough	+			
8	Provide a healthy and safe environment and an improved feeling of well-being for residents.	X	Perception of deprivation in the north		
9	Ensure improvement to air quality	X			
10	Protect the landscape and built heritage of the County Borough	X	Development of Greenfield sites in Mid Valleys		

WORKSHOP A					
Option A - The UDP Strategy (Continuation of Existing Trends)					
Assessment Test	Assessment Result	Comment	Mitigation	Issues for Detailed Plan	
11	Protect the cultural identity of the County Borough.	○			
12	Ensure the protection of water resources and water quality improved	×			
13	Reduce the impact of flooding.	×	Building on Greenfield land, potentially within floodplain		
14	Ensure the effective use of land and soils including the protection of important geological sites.	?		Reference to protection of soil and landscape	Specific location of allocations
15	Reduce the amount of waste produced and increase the reuse of materials	×	New housing produces waste, strategy does not state how this is dealt with		
16	Conserve the biodiversity of the County Borough	×	Has and could result in development on sites of biodiversity importance		
17	Assist in meeting climate change obligations primarily through reducing CO2 production.	XX	Increased congestion in mid-valleys		
18	Reduce the need to travel, particularly by car	×	Public transport is a poor alternative at the moment.		
19	Promote the supply and use of renewable energy	XX	No reference to how renewable energy will be used or produced in strategy		
20	Improve the performance of existing infrastructure	×			

WORKSHOP B					
Option A - The UDP Strategy (Continuation of Existing Trends)					
Assessment Test		Assessment Result	Comment	Mitigation	Issues for Detailed Plan
1	Promote reduced resource consumption by residents.	X	Increased congestion – Shorter trips, Does not result in sustainable communities, Greenfield and cluster development	Infrastructure and transport improvements	Ability to construct and locate at transport nodes.
2	Provide a sufficient amount and mix of housing	X	Development sprawl in mid valleys		
3	Provide a wide range of educational opportunities.	X	Service rather than physical structure		
4	Promote equality of opportunity	X	Some will not benefit		
5	Provide for business investment and increase the range of job opportunities.	+	Promotes a growth corridor makes best use of resources		
6	Promote a diverse economy and increase the wealth of residents	+	Increased wealth in Mid and south, not in north.		
7	Encourage residents to remain in the County Borough	X	Not guaranteed, effects of development in MVC could drive people away (congestion)		
8	Provide a healthy and safe environment and an improved feeling of well-being for residents.	XX	Doesn't actively seek improvement to north.	Improvements to infrastructure in north needs addressing	
9	Ensure improvement to air quality	X	Not in Caerphilly and Blackwood where Management plans are required	Reduce development levels in Blackwood and Caerphilly	Improvements elsewhere to relieve pressure on Caerphilly.
10	Protect the landscape and built heritage of the County Borough.	X	Losing Greenfield	More urban containment	
11	Protect the cultural identity of the County Borough.	?	Difficult to determine, could be positive as isolated groups are being left alone – difference between physical and social aspects		
12	Ensure the protection of water resources and water quality improved	○	Competing factors, brownfield dev. Removes contamination, traffic generation increases pollution		Protection is a matter of good design within development

WORKSHOP B					
Option A - The UDP Strategy (Continuation of Existing Trends)					
Assessment Test	Assessment Result	Comment	Mitigation	Issues for Detailed Plan	
13	Reduce the impact of flooding.	XX	Doesn't reduce impact	No mitigation possible	
14	Ensure the effective use of land and soils including the protection of important geological sites.	○	Best soils are in the south – consolidated, but is Greenfield development the best use?		Sites need to be appropriately identified avoiding quality soil/land areas
15	Reduce the amount of waste produced and increase the reuse of materials	X	Does not promote re-use of materials		
16	Conserve the biodiversity of the County Borough	X	Brownfield to south has biodiversity importance though Greenfield encroachment reduced		
17	Assist in meeting climate change obligations primarily through reducing CO2 production.	X	Increased congestion in MVC and Caerphilly	Disseminate development evenly as concentrations of development increase probability of increased CO2 emissions	Need to promote sustainable housing design
18	Reduce the need to travel, particularly by car	?			Locate development near transport nodes, with development providing relevant infrastructure improvements
19	Promote the supply and use of renewable energy	X	Strategy does not imply that this is being sought. Dependant upon detailed policies		Should be promoted through housing supply.
20	Improve the performance of existing infrastructure	+	Strategy constrains development where infrastructure is poor.		Development backed up by infrastructure.

WORKSHOP A					
Option B - The Urban Containment Strategy					
Assessment Test		Assessment Result	Comment	Mitigation	Issues for Detailed Plan
1	Promote reduced resource consumption by residents.	X	Housing development likely to be driven to the south		
2	Provide a sufficient amount and mix of housing	XX	Underused community facilities in north – no mention of new facilities		
3	Provide a wide range of educational opportunities.	X			
4	Promote equality of opportunity	X	Supply of brownfield land taken up by housing		
5	Provide for business investment and increase the range of job opportunities	X			
6	Promote a diverse economy and increase the wealth of residents	XX			
7	Encourage residents to remain in the County Borough	XX			
8	Provide a healthy and safe environment and an improved feeling of well-being for residents.	●			
9	Ensure improvement to air quality	+	People located in sustainable locations from environmental point of view		
10	Protect the landscape and built heritage of the County Borough.	+			Care must be taken not to degrade built heritage
11	Protect the cultural identity of the County Borough.	X	Size of development for Caerphilly, and lack of growth in north.		
12	Ensure the protection of water resources and water quality improved.	?			

WORKSHOP A				
Option B - The Urban Containment Strategy				
Assessment Test	Assessment Result	Comment	Mitigation	Issues for Detailed Plan
13	Reduce the impact of flooding.	X		
14	Ensure the effective use of land and soils including the protection of important geological sites.	+		
15	Reduce the amount of waste produced and increase the reuse of materials	?		
16	Conserve the biodiversity of the County Borough	+	Biodiversity on brownfield may be adversely affected.	
17	Assist in meeting climate change obligations primarily through reducing CO2 production.	X	More houses produce more CO2	Policies that reduce the emissions from new development.
18	Reduce the need to travel, particularly by car	+	Use roof taxes fro public transport instead of road improvements	
19	Promote the supply and use of renewable energy	?		
20	Improve the performance of existing infrastructure	?		

WORKSHOP B					
Option B - The Urban Containment Strategy					
Assessment Test	Assessment Result	Comment	Mitigation	Issues for Detailed Plan	
1	Promote reduced resource consumption by residents.	X	No service provision so would need to push out.		
2	Provide a sufficient amount and mix of housing	XX	Can't provide mix		
3	Provide a wide range of educational opportunities.	X	Doesn't negate opportunity but doesn't proactively seek it	Policies need to address this	
4	Promote equality of opportunity	XX			
5	Provide for business investment and increase the range of job opportunities	XX			
6	Promote a diverse economy and increase the wealth of residents	XX	Some will see big benefits, most disadvantaged unlikely to see any		
7	Encourage residents to remain in the County Borough	X	Partially dependant upon what is outside of borough		
8	Provide a healthy and safe environment and an improved feeling of well-being for residents.	X	Will be some benefit but not equal		
9	Ensure improvement to air quality	X			Policy for public transport improvement
10	Protect the landscape and built heritage of the County Borough.	?	Can't deliver both parts, built heritage will suffer		
11	Protect the cultural identity of the County Borough.	X			
12	Ensure the protection of water resources and water quality improved.	X	Some improvement from remediation of contaminated land.		
13	Reduce the impact of flooding.	●			

WORKSHOP B				
Option B - The Urban Containment Strategy				
Assessment Test	Assessment Result	Comment	Mitigation	Issues for Detailed Plan
14	Ensure the effective use of land and soils including the protection of important geological sites.	+		
15	15 Reduce the amount of waste produced and increase the reuse of materials	+		
16	Conserve the biodiversity of the County Borough ?	+		
17	Assist in meeting climate change obligations primarily through reducing CO2 production.	X		Policy required
18	Reduce the need to travel, particularly by car	+		
19	Promote the supply and use of renewable energy	X		Policy Required
20	Improve the performance of existing infrastructure	?	Inequity of loading dependant upon area.	

WORKSHOP A					
Option C - The Sustainable Growth Strategy					
Assessment Test	Assessment Result	Comment	Mitigation	Issues for Detailed Plan	
1	Promote reduced resource consumption by residents.	+			
2	Provide a sufficient amount and mix of housing	+			
3	Provide a wide range of educational opportunities.	+			
4	Promote equality of opportunity	+			
5	Provide for business investment and increase the range of job opportunities	+			
6	Promote a diverse economy and increase the wealth of residents	+			
7	Encourage residents to remain in the County Borough	++			
8	Provide a healthy and safe environment and an improved feeling of well-being for residents.	+			
9	Ensure improvement to air quality	?	Need more detail to identify specific impacts	Development will need to be located close to transport nodes	
10	Protect the landscape and built heritage of the County Borough.	?	Need more detail to identify specific impacts		
11	Protect the cultural identity of the County Borough.	++			
12	Ensure the protection of water resources and water quality improved.	?	Dependant upon Implementation		
13	Reduce the impact of flooding.	X	Difficult to reduce impact	Sustainable urban drainage measures in place	Needs to be addressed specifically by policy.

WORKSHOP A				
Option C - The Sustainable Growth Strategy				
Assessment Test	Assessment Result	Comment	Mitigation	Issues for Detailed Plan
14	Ensure the effective use of land and soils including the protection of important geological sites.	?	Could affect wider area as settlement is not being confined.	
15	Reduce the amount of waste produced and increase the reuse of materials	+		More recycling facilities required.
16	Conserve the biodiversity of the County Borough	x		Replace habitat lost through development - no net loss at UK level. Tan 5 mentions enhancements so should really seek net gain.
17	Assist in meeting climate change obligations primarily through reducing CO2 production.	+	Opportunities exist for production and use of renewable energy	
18	Reduce the need to travel, particularly by car	+	Elimination of short trips	
19	Promote the supply and use of renewable energy	+	Opportunities exist for production and use of renewable energy	
20	Improve the performance of existing infrastructure	+		

WORKSHOP B				
Option C - The Sustainable Growth Strategy				
Assessment Test	Assessment Result	Comment	Mitigation	Issues for Detailed Plan
1	Promote reduced resource consumption by residents.	+		
2	Provide a sufficient amount and mix of housing	+		
3	Provide a wide range of educational opportunities.	+		
4	Promote equality of opportunity	+		
5	Provide for business investment and increase the range of job opportunities.	+		
6	Promote a diverse economy and increase the wealth of residents	+		
7	Encourage residents to remain in the County Borough	+		
8	Provide a healthy and safe environment and an improved feeling of well-being for residents.	+		
9	Ensure improvement to air quality	X		Development will need to be located close to transport nodes
10	Protect the landscape and built heritage of the County Borough.	X	Loss of landscape, the only way to protect built heritage is through re-use	
11	Protect the cultural identity of the County Borough.	+		
12	Ensure the protection of water resources and water quality improved.	X	No protection specified. Could be addressed through policy.	Site specific Mitigation
13	Reduce the impact of flooding.	X	Difficult to reduce impact	Sustainable urban drainage measures in place Needs to be addressed specifically by policy.

WORKSHOP B				
Option C - The Sustainable Growth Strategy				
Assessment Test	Assessment Result	Comment	Mitigation	Issues for Detailed Plan
14	Ensure the effective use of land and soils including the protection of important geological sites.	O	More detail on allocations is required.	
15	Reduce the amount of waste produced and increase the reuse of materials	+		
16	Conserve the biodiversity of the County Borough	X	Allows Greenfield release to bolster development	Can be addressed
17	Assist in meeting climate change obligations primarily through reducing CO2 production.	+		
18	Reduce the need to travel, particularly by car	+	If allocating close to transport nodes	
19	Promote the supply and use of renewable energy	X	Doesn't promote, but could encourage	
20	Improve the performance of existing infrastructure	+		

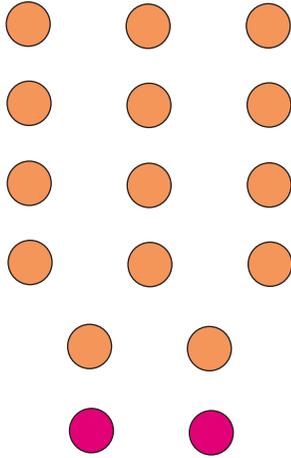
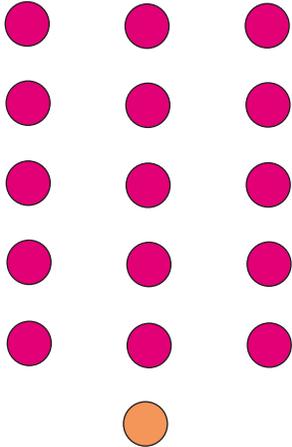
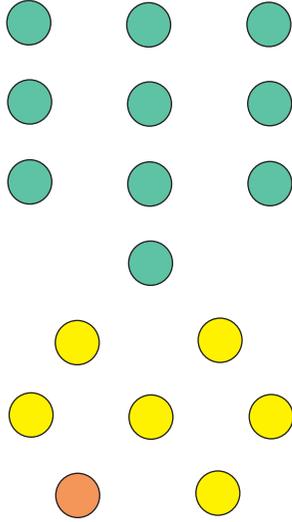
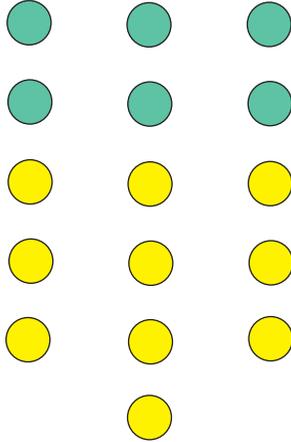
WORKSHOP A				
Option D - The Hybrid Strategy (The Preferred LDP Strategy)				
Assessment Test	Assessment Result	Comment	Mitigation	Issues for Detailed Plan
1	Promote reduced resource consumption by residents.	?	Location in respect of Transport nodes needs to be defined. Public awareness of environmental issues in respect of resource consumption	Site specific location to transport nodes
2	Provide a sufficient amount and mix of housing	+		
3	Provide a wide range of educational opportunities.	+		
4	Promote equality of opportunity	+	Does not address issues of inequality other than in provision of community facilities.	
5	Provide for business investment and increase the range of job opportunities.	?	Questionable whether industry will move north with other development.	
6	Promote a diverse economy and increase the wealth of residents	+		
7	Encourage residents to remain in the County Borough	++		
8	Provide a healthy and safe environment and an improved feeling of well being for residents.	+		
9	Ensure improvement to air quality	○	Dependant upon the nature of industry and employment uses that are developed/present.	
10	Protect the landscape and built heritage of the County Borough.	+		
11	Protect the cultural identity of the County Borough.	+		

WORKSHOP A				
Option D - The Hybrid Strategy (The Preferred LDP Strategy)				
Assessment Test	Assessment Result	Comment	Mitigation	Issues for Detailed Plan
12	Ensure the protection of water resources and water quality improved.	?		Depends upon detailed location of development and any proposed mitigation
13	Reduce the impact of flooding.	X		
14	Ensure the effective use of land and soils including the protection of important geological sites.	+		
15	Reduce the amount of waste produced and increase the reuse of materials	?		Provision of waste management facilities as a community facility
16	Conserve the biodiversity of the County Borough	X		Provision for enhancement and biodiversity gain
17	Assist in meeting climate change obligations primarily through reducing CO2 production.	X	Accommodating new development will have a negative impact	Renewable energy. Use of renewable materials, carbon neutral development.
18	Reduce the need to travel, particularly by car	+		Employment opportunities near to where people live and travel plans as part of developer obligations
19	Promote the supply and use of renewable energy	X		
20	Improve the performance of existing infrastructure	++		

WORKSHOP B					
Option D - The Hybrid Strategy (The Preferred LDP Strategy)					
Assessment Test	Assessment Result	Comment	Mitigation	Issues for Detailed Plan	
1	Promote reduced resource consumption by residents.	?	Depends upon role of settlement – need to travel could produce reduction. Policy needs clarifying Could have major positive effects if done properly.		
2	Provide a sufficient amount and mix of housing	+			
3	Provide a wide range of educational opportunities.	+			
4	Promote equality of opportunity	+			
5	Provide for business investment and increase the range of job opportunities.	+	Positive in the north. Question over the south providing the necessary range		
6	Promote a diverse economy and increase the wealth of residents	+	Should achieve this when linked to educational opportunity		
7	Encourage residents to remain in the County Borough	+			
8	Provide a healthy and safe environment and an improved feeling of well-being for residents.	+			
9	Ensure improvement to air quality	×		Increase provision of public transport	
10	Protect the landscape and built heritage of the County Borough.	○			Dependant upon layout of development sites.
11	Protect the cultural identity of the County Borough.	+			

WORKSHOP B					
Option D - The Hybrid Strategy (The Preferred LDP Strategy)					
Assessment Test	Assessment Result	Comment	Mitigation	Issues for Detailed Plan	
12	Ensure the protection of water resources and water quality improved	X		Site specific policies and obligations are required.	
13	Reduce the impact of flooding.	X		Site specific policies and obligations are required.	
14	Ensure the effective use of land and soils including the protection of important geological sites.	?		Dependant upon mitigation/benefit where Greenfield sites are used	
15	Reduce the amount of waste produced and increase the reuse of materials	●	Need detail to achieve anticipated positive results	Provision of waste Management/recycling facilities	Details of re-use f buildings etc
16	Conserve the biodiversity of the County Borough	?	Dependant upon site details	Potential for enhancement and biodiversity gain	
17	Assist in meeting climate change obligations primarily through reducing CO2 production.	+	Sites would need to have current transport links and high levels of reconstruction benefits		
18	Reduce the need to travel, particularly by car	●	Locating sites close to transport nodes is key factor.		
19	Promote the supply and use of renewable energy	X		Policy required that ensures that both developers and energy suppliers provide facility	
20	Improve the performance of existing infrastructure	+	Depends on what infrastructure is in each settlement	Reliant upon functional analysis of settlements.	

## APPENDIX 3 - RANKING OF ALTERNATIVES IN SUSTAINABILITY ORDER

Most Sustainable 	2nd Most Sustainable 	2nd Least Sustainable 	Least Sustainable 
Option A - The UDP Strategy	Option B - The Urban Containment Strategy	Option C - The Sustainable Growth Strategy	Option D - The Hybrid Strategy (The Preferred LDP Strategy)
			
2nd Least Sustainable	Least Sustainable	Most Sustainable	2nd Most Sustainable