



PARTIAL REVIEW OF REGIONAL
SPATIAL STRATEGY (RSS) –

Consultation on the Draft Options: Renewable
Energy
June – July 2008

CONSULTATION RESULTS

North West Regional Assembly

PARTIAL REVIEW OF REGIONAL SPATIAL STRATEGY (RSS) –

Consultation on the Draft Options: Renewable Energy

A consultation report from

CAG Consultants

in association with **Concept 4 Creative and Community
Consultants**

July 2008

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Introduction

This report brings together the collated responses to the North West Plan Partial Review consultation on the options for Renewable Energy.

The consultation took place between 1st June and 4th July 2008 and focussed on seeking out stakeholder views on a series of options. These options are show in Appendix One.

Stakeholders were invited to contribute their views in one of the following ways;

- Workshops for stakeholders
- An online or paper questionnaire
- Via a free phone number

Stakeholders had also had the opportunity to comment at the earlier Consultation on the Draft Project Plan stage.

The consultation activity is discussed in more detail in the full project report. This report outlines what people told us about the options in these themes through the methods outlined above.

Section One lists the workshop responses and Section Two the Draft Project Plan Responses and Section 3 lists the responses received. These responses were received through the online questionnaire, the paper questionnaire, the free phone line and by letter.



1. Workshop Responses

In this section we draw together all the information given to us by stakeholders who came to the workshops. For this theme there was one workshop in the consultation period.

The Evidence base

In all three workshops participants felt that **no decision could be concluded without viewing the evidence base**. Once the evidence base would be made available, the participants usually felt they would be able to respond. Although overall and based on their existing knowledge and experience participants tended to lean towards the pragmatic approach as being the most viable option.

Consultation input

During the workshops session a range of issues were raised through discussion of the options and the implications of them.

Problems with Maps

The groups suggested that there were issues to consider when representing broad locations through a locations map. Concerns included;

- The constraints map shows those areas where renewable energy sites cannot be put for a number of reasons including where there are:
 - National parks
 - RSPB areas
 - Deep peat locations
 - Monuments
 - Gardens
 - Wind speed too low
- Although the national parks are no-go areas for new developments, they could be used for micro-schemes
- Map shows broad locations for possible sites for renewable energy

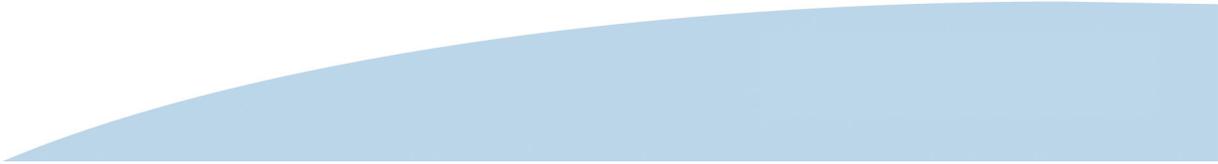


- Having a map was also seen as problematic, especially for developers who might see it as a 'gold rush' opportunity
- Groups felt that the NWRA needed to consider other ways of representing potential developments other than A4 map; but as a map is a requirement, there remains need to set out criteria and definitions of symbols
- Map does provide a spatial steer, but not final say; the maps in the report need to be indicative and not prescriptive
- If broad locations are denoted using letters on a map, developers may go to considerable expense and effort assuming that any submitted planning applications will get a favourable response. This places affected communities under a lot of potentially unnecessary stress, as applications are often turned down.
- The RSS is a steer for LA's, Developers and the local community for renewable energy output targets linking with other policies such as those for waste. The RSS will not provide rigid guidelines but provide a framework promoting broadly acceptable environmental technologies and policies to help locate sites. It may be appropriate to put geographical descriptions in policies rather than indicate broad locations taking into account constraints such as site designations. Many potential sites are self-selecting due to opportunities and constraints
- Maps depicting current biomass resources and potential areas for mass planting (agricultural/marginal land) are required.

Other issues

Within the three workshop session other issues were raised by participants, these included;

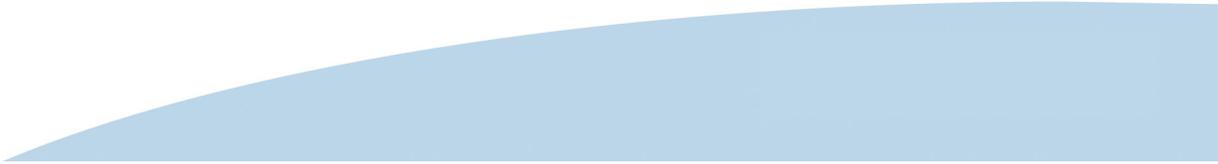
Siting Implications

- Policies must also ensure there are no significant impact on all designated sites including SAC's and SPA's or any impacts are mitigated
 - It has to be recognised that many people do not even want renewable technologies on their doorstep, (Ince Marshes, for example, even though there are existing chemical works in the area).
 - In relation to wind technologies, buffers around populated areas such as in the south of the region prevent siting of turbines and force broad locations further north.
 - Developers are already purchasing land where they see a potential business opportunity and perhaps ultimately it will be the market that drives change.
- 

Social Implications

- There are 'class' issues around siting of technologies. If communities are not used to challenging planning applications, (such as histories of access roads going through council estates), there may be more applications passed in those areas. An equity in where facilities are built is needed accounting for a myriad of issues.
- There may be health risks and the rights of people must be guarded if an energy source has health implications. Health Impact Assessments may be part of a solution.
- It is always important to consult with local people, not to just comply with legislation.
- 'Ownership' of renewable energy facilities by the local community may contribute to acceptance.

Infrastructure / technology considerations

- The long term sustainability of facilities is important, such as the scope and size of incinerators-are they sited where the heat can be used and generated electricity transported effectively to where there is demand? Incinerated waste for energy production may reduce significantly if reusing, recycling and recovery continues at its current pace
 - The potential pollution from burning bio fuel also needs consideration. Wood burners will need desulphurisation technologies. All Environment Agency regulations and permits will apply.
 - Micro-generation technologies will be included in the RSS, as it is predicted that these technologies may balance the projected increases in demand, while the macro technologies will contribute to stipulated targets set for energy creation from renewables.
 - Local fuel sources provide security of supply and may protect from depleting commodities leading to price increases for the consumer or even unaffordable resources
 - It may be wise to take example from other countries and their use of energy. In France, for example, the night tariff for electricity is a tenth of the day rate. People's behaviour changes, such as turning water heaters/dish washers/washing machines on at night. This encourages taking the resource when it is available, not at times of necessary high demand, and so the suppliers do not have to 'dump' excess power.
 - Generated energy needs to get to the consumers with as little 'loss' on the way. It is useful to consider energy generating facilities close to consumers.
 - Smaller technologies may be, politically and practically, easier to locate, but larger technologies, with higher outputs, are more acceptable to developers.
 - Perhaps all technologies need to be viable without subsidy.
- 

Targets and Policies

- Sometimes policies can be in danger of asking too much of the developer (S106, proportion of affordable housing on estates etc). The RSS needs to be sympathetic to this issue.
- If targets are achieved 'on-shore', then off-shore technologies will supplement supply. Some on-shore clusters, i.e. Cumbria, may suggest, if tidal technologies do come on board, that their production targets can be lower, especially as they probably feel their sub-region is already saturated with wind turbines.
- Policies need to be adaptable to dynamic changes in renewable technologies, demand and behavioural changes. Developers may have an optimistic view of potential outputs even though schemes may not come on-line within the scope of the current RSS.
- Targets will be aspirational, but not binding. They will be flexible, non-specific but provide a steer and projection and give knowledge to support decisions on where there are suitable sites for technologies.
- Policies need to be optimistic enough to encourage educational institutions to provide suitable training for future engineers and station operators.
- Policies need to consider spatial plans and land ownership. EM17 needs to look at spatial issues and integrate into the whole issue even at the local level, however the scope of the RSS is not all encompassing.



2. Draft Project Plan Responses

In the Draft Project Plan stage all the comments received were summarised as;

1. Site for renewable energy need to be located where they will not increase CO2 outputs and where they will not cause harm to wildlife
2. Any work needs to consider research that has already taken place, for example, research on water power in the Mersey Basin
3. Any work needs also to acknowledge recent government announcements re nuclear power
4. The North West contains considerable opportunities for the development of a full range of renewable energy sources
5. Bottom up approaches are needed to develop this work area

The following table shows the participant's verbatim comments at this earlier stage;

Organisation:	2d. Renewable Energy.
The National Trust	It will be important to be clear about the potential role that a) energy conservation through high quality design and retrofitting, and b) micro-generation can have in reducing the need for new energy generation including renewables. In this regard attention is drawn, in respect of low energy use/energy conservation to the recently published report 'Volume' which sets out the practical outcomes in respect of the major housing development at Stamford Brook in Trafford (a copy of the report can be provided on request). It will be necessary for proper assessment, based in part upon environmental capacity, to address the potential for such broad areas to be identified. This will not only need to consider statutory designations (including their wider settings) but also take a 'bottom up' approach that has regard to various detailed studies relating to renewables and landscape character such as the recently Adopted Wind Energy SPD for Cumbria.

Organisation:	2d. Renewable Energy.
	The importance of Renewable Energy cannot be over stressed. The West Coast has substantial opportunity for the development of wind farms, wave farms and alternatives providign the correct political approach is taken. By creating incentives and associated development/regeneration opportunities the use of Renewable Energy could be enhanced and would represent an example of Global Best Practice.
	NW TAR endorses the emerging North West Environment Link 'Common Position' paper on renewable energy and the energy hierarchy it extolls.
	Trafford council have proved unimaginative when approached by voluntary groups like Friends of Parks wanting water storage etc
Blackpool Equalities Forum	<ul style="list-style-type: none"> • We identified that Blackpool had a lot of potential regarding renewable energy, our west coast location means that we have the potential to harness wind power, solar energy and tidal power. • We were unaware of what is happening already, e.g. "where does the energy come from?" and "where does it go?" We feel that this information could be included in local plans (e.g. Blackpool's Masterplan) along with any corresponding targets. • We are aware that Blackpool Council has its first energy-efficient building in the shape of the Solaris Centre, which uses wind turbines and solar roof panels. It was designed to be a zero energy building (producing more energy than it uses), surplus energy is sold back to the national Grid. We believe that new Government buildings and community facilities should follow the example of the Solaris, following the principles of sustainability and acting as an example of good practice to the local and regional community.
Heswall Society	<ol style="list-style-type: none"> 1 It is important not just to consider renewable energy but also the impact of other development policies on carbon footprint. 2 In identifying a balanced portfolio of renewable energy resources we would suggest inclusion of the Mersey Forest and its potential for expansion. 3 We would argue against the development for housing, retail or commercial uses of Green Belt or green space or other sites which might contribute to biofuel or food.
The Wildlife Trust for Lancashire, Manchester & North Merseyside	<p>Renewable energy developments will need to be located:</p> <ol style="list-style-type: none"> 1. where their construction and operation does not cause more carbon release (e.g. through oxidation of peat) than these potentially prevent and where it does not impede the restoration of peatland to deliver substantial carbon sequestration. 2. where they are not likely to significantly impact on internationally, nationally, or regionally important

Organisation:	2d. Renewable Energy.
	<p>wildlife habitats or species populations; particularly:</p> <ul style="list-style-type: none"> • migrating and over-wintering birds – large wildfowl (geese and swans) appear particularly vulnerable in their interactions with coastal plain wind turbine array developments • regionally or sub-regionally important populations of breeding birds – “bio-fuel” developments on lowland farmland are of particular potential concern in this regard · • regionally or sub-regionally important populations of bats (all species) and their foraging grounds – though data on such populations in NW England is lacking. (Some general background on the issue as it relates to planning systems is provided by EUROBATS, through the Bat Conservation Trust web site at http://www.bats.org.uk/news_events/documents/EUROBATSWindTurbinesResolutionAnnex.pdf.) • areas functionally linked to designated sites and other important areas – already identified in the Cumbria sub-regional spatial planning document
RSPB	<p>RSPB welcomes a strategic review of renewable energy. A key issue will be to ensure that those areas that are important for wildlife and which do not currently receive statutory protection are not damaged. In our view these are amongst the most vulnerable areas. A number of criteria are proposed:</p> <ul style="list-style-type: none"> • Nature conservation designation sites (SSSI, SAC, SPA, RAMSAR) should absolutely NOT be considered for the location of renewable schemes. • Any additional guidance should dovetail in with existing, designated site legislation and this should be adhered to at all times. • It is important to identify areas where “sensitive bird” species occur in “important populations” around designated sites and in other important areas (e.g. lowland wet grassland sites, wintering bird areas e.g. geese, swans, hen harriers and farmland hot spots for farmland birds. • Buffer areas will be required around designated sites plus other important bird areas. • It will be important to identify areas, which are functionally linked to designated sites and other important areas. • Each renewable type of energy will need modified criteria based on its potential impact on biodiversity.
Cumbria County Council	<p>A report was prepared for a meeting of the Cumbria Planning Group on the 15th February 2008, where it was agreed the County Council should: emphasise the increasing concerns about the emerging conclusions regarding the research on sustainable energy, with particular regard to the importance of addressing wave, tidal and hydro opportunities and the considerable opposition to any further land wind turbines.</p>

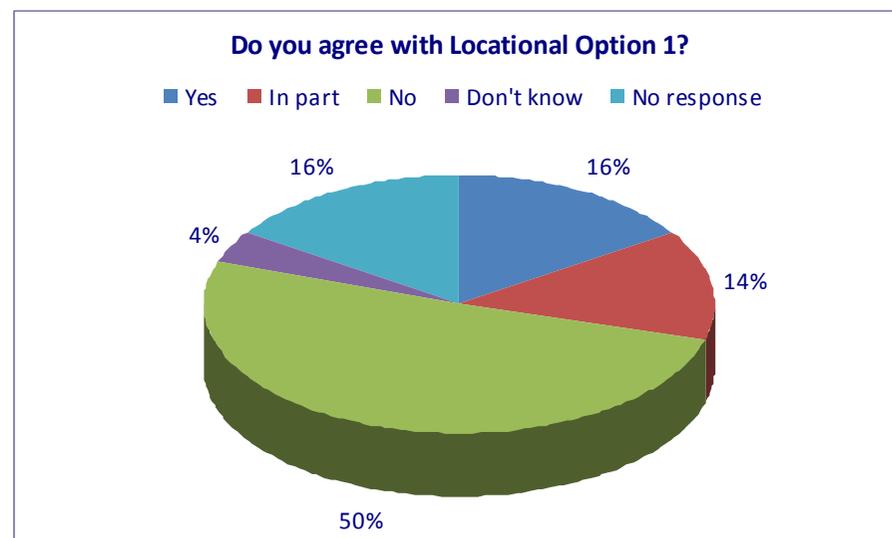
Organisation:	2d. Renewable Energy.
Individual	I shall be attending the workshop on the 31 March and submitting further detailed information on the siting of wind farms on peat moorland and the consequences of this policy.
Forestry Commission	<p>In the Northwest of England we have a significant resource of under and unmanaged woodland capable of producing woodfuel, especially for heating. There are other sources too such as waste wood, arisings from tree surgery and energy crops. There is a Regional Biomass Woodfuel Strategy as well as a national Woodfuel Strategy which identify the main opportunities. The greatest area for potential growth in our region lies in medium scale heat projects at a community scale, where the fuel is sourced locally. Such projects provide opportunities for</p> <ul style="list-style-type: none"> • local employment • tackling fuel poverty • reducing greenhouse gas emissions • Education and demonstration on renewable energy and woodland management Please contact our regional lead on Woodfuel Peter Fox for more information – peter.fox@forestry.gsi.gov.uk
Peel Holdings (Management) Ltd	Peel, in partnership with the NWDA and the Mersey Basin Campaign, is studying the potential to derive renewable tidal energy from the River Mersey. A considerable amount of work has already been carried out in investigating this potential (please visit the website www.merseytidalpower.co.uk). It is therefore vital that the consultants appointed by the NWRA to carry out the renewable energy research described in the draft Project Plan familiarise themselves with the work done to date. To this end, they should establish a dialogue with Peel and its Partners.
North West Environment Link	<p>We acknowledge that, due to PPS22, there is a need to identify broad areas but the limitations on this process needs to be recognised. All proposals will still need to be assessed on a case by case basis. NWEL welcomes a strategic review of renewable energy. A key issue will be to ensure that those areas that are important for wildlife and which do not currently receive statutory protection are not damaged. In our view these are amongst the most vulnerable areas. A number of criteria are proposed:</p> <ul style="list-style-type: none"> • Nature conservation designation sites (SSSI, SAC, SPA, RAMSAR) should absolutely NOT be considered for the location of renewable schemes. • Any additional guidance should dovetail in with existing, designated site legislation and this should be adhered to at all times. • It is important to identify areas where “sensitive bird” species occur in “important populations” around designated sites and in other important areas (e.g. lowland wet grassland sites, wintering bird areas e.g. geese, swans, hen harriers and farmland hot spots for farmland birds. • Buffer areas will

Organisation:	2d. Renewable Energy.
	<p>be required around designated sites plus other important bird areas.</p> <ul style="list-style-type: none"> • It will be important to identify areas, which are functionally linked to designated sites and other important areas – this has indeed been done for the Cumbria spatial planning document • Each renewable type of energy will need modified criteria based on its potential impact on biodiversity - for example onshore wind facilities should avoid degrading peatland habitat, an important carbon sequestration source.
University of Cumbria	The University recognises that it would be helpful to identify broad locations for renewable energy sites given the government's intention to increase capacity in this area. Careful consideration will also need to be given to the outcomes of the recent Government consultation on nuclear power, and the possibility of existing nuclear sites being earmarked for new nuclear build.

1.1 Do you agree with Locational Option 1

When asked this question people told us;

Do you agree with Locational Option 1?	
Yes	8
In part	7
No	27
Don't know	2
No response	8
Total Responses	52



The table below shows the verbatim comments received. We have removed 4 blank responses.

Organisation:	1.1. Do you agree with Locational Option 1?	1.1a. If so why?	1.1b. If not, why not?	1.1c. Please explain your answer to the previous question.
Macclesfield Borough Council	No	<p>Whilst supporting the development of renewable energy provision, Macclesfield BC considers that the development of an approach that follows the 'theoretical maximum' assessment set out in the evidence (option 1) would be over-ambitious and it is likely to fail to meet targets.</p> <p>Development of an approach that follows the 'pragmatic' assessment set out in the evidence base is more likely to be realistically achievable, although perhaps lacks the vision needed to drive forward renewable energy provision in the region.</p> <p>Macclesfield Borough Council considers that an acceptable solution would be to follow the approach based on pragmatic provision with the stated aim of moving towards the theoretical maximum over time.</p>		
On behalf of WRG	Yes	<p>The two main options being considered relate the locational approach for renewable energy facilities. The options relate to "theoretical maximum" or "pragmatic assessment" approaches as set out in the evidence base. Although pragmatism is generally to be supported, the urgent need to develop all renewable sources of energy suggests that the RSS should identify all possible resources of, and locations for development of, renewable energy. In this context, paragraph 13 of the December 2007 supplement to PPS1 in relation to climate change makes it clear that the RSS should "ensure opportunities for renewable and low carbon sources of energy supply and supporting infrastructure, including decentralised energy supply systems, are maximised" and that the RSS should "set targets for renewable energy supply....(that).. fully reflect opportunities in the region." On this basis, Waste Recycling Group considers that the maximum renewable potential energy resource of the region should be recognised and encouraged. What may be considered pragmatic at present may be considered unduly pessimistic or restrictive in a few years time.</p>		
Individual response		<p>Points 1. Although the discussion concerns broad locations the necessity issue of reducing need in the first place should not be forgotten, neither should the encouragement of microgeneration 2. Peat should be an exclusionary factor for wind farms.</p>		

Organisation:	1.1. Do you agree with Locational Option 1?	1.1a. If so why?	1.1b. If not, why not?	1.1c. Please explain your answer to the previous question.
Northwest Regional Development Agency	Yes	We agree with the general approach but clearly it must be tempered with a degree of realism. The region should aim to deliver as much renewable energy as possible.		
GONW		We are supportive of the research to identify broad locations for renewable energy, however it is not considered that it will be inevitable that policy EM17 will need to be changes, although the indicative targets which are based on out of date research may need to be updated.		
Halton Borough Council	No	This option looks at the region's maximum potential for each type of renewable energy technology and, while based in a rigorous technical appraisal, is unlikely to be a realistic assessment of how renewable energy will be developed in real life.		
National Trust	No	With the continuing lack of the 'accompanying evidence base' it is not possible to reach an informed decision about either option as it is unclear what the option actually is, and therefore how appropriate it is to the NW's circumstances. The National Trust is a strong supporter of the utilisation of renewable energy technologies in appropriate locations and has undertaken a number of relevant projects at its properties across the country. Equally, it is aware from other developments close to its interests that some schemes, especially for large scale wind energy developments, can have significant adverse impacts, especially on valued landscapes. The implications of a 'theoretical maximum' suggest that there will be few if any specific constraints on location and that a one-dimensional, rather than the required integrated approach to sustainable development, is being advanced. This is inconsistent with the Core Policies of RSS. It is also a matter of concern that the presentation of this approach will weaken the 'Energy Hierarchy' credentials of RSS with insufficient attention to energy conservation and energy efficiency, and indeed inadequate consideration of the role of micro-generation.		
BWEA	Yes	BWEA agrees with Locational Option 1: Development of an approach that follows the 'theoretical maximum' assessment set out in the accompanying evidence base. Using the 'theoretical maximum' as the starting point provides the greatest impetus for increasing renewable energy generation in the region. By way of justification, BWEA consider that the derivation of the theoretical maximum development potential on the ground should be arrived at through assessment and determination of individual		

Organisation:	1.1. Do you agree with Locational Option 1?	1.1a. If so why?	1.1b. If not, why not?	1.1c. Please explain your answer to the previous question.
		<p>applications where all the relevant factors can be investigated in full. A 50% reduction of theoretical maximum to arrive at a 'pragmatic' maximum through a regional study provides only a partial investigation of all the relevant factors (eg cumulative impact, accessibility), with insufficient robustness to give a meaningful indication of what will come forward and where renewable energy developments could be located. Any locational guidance based on a pragmatic maximum is therefore likely to be significantly flawed. Furthermore, the current theoretical maximum is based on current technology and knowledge, it is quite conceivable that future technology and knowledge will allow greater delivery of installed capacity and a greater theoretical maximum, so anything less than the theoretical maximum based on current knowledge is disingenuous and sends the wrong signals to industry. In order for the RSS to realise the region's potential for renewable energy delivery, BWEA strongly recommends that the RSS introduce specific, robust criteria based policies designed to promote and not restrict renewable energy development.</p>		
the Ramblers' Association, Manchester and High Peak Area	No	<p>As we interpret this, an approach following the 'theoretical maximum' assessment, could imply a strong push to achieve this maximum. This could involve location of technologies such as wind or biomass in areas that we would find unacceptable in terms of impairment of the landscape. We are thinking of things such as wind farm development on or adjacent to areas of high landscape quality or conversion of pasture land to arable land to grow crops such as corn or rapeseed for biofuels.</p>		
Lancashire County Council	No	<p>The "theoretical maximum" exceeds the existing NWRA targets set out in the draft RSS by 40%. Given that the target is already ambitious (based on current levels of renewable energy) using "theoretical maximum" figures may be seen as unrealistic and irrelevant in terms of monitoring and implementation. The figures are important, however, in terms of providing a starting point for the evidence base and "pragmatic" assessment.</p>		
Sustainable Neighbourhoods Pool Manchester	Yes	<p>The current energy demand of the North West is 291 TWh and the project provision of energy from renewable sources as set out in the draft RSS is approx. 7 TWh for the region by 2020. There is a massive discrepancy therefore if we as a region are to achieve 20% energy from renewable sources by 2020. If we do not aim for the theoretical maximum we run the risk of a society that cannot afford to heat or power its</p>		

Organisation:	1.1. Do you agree with Locational Option 1?	1.1a. If so why?	1.1b. If not, why not?	1.1c. Please explain your answer to the previous question.
		homes, energy security issues, the social and economic implications of living in a society experiencing severe climate change the outrageous knock-on effects of that. The UK has 40% of the total European wind potential for energy and the North West is particularly fortunate in that it has the greatest potential of ALL English regions to harness this energy. The stagnation surrounding renewable energy in the North West is shameful and reflective of the lack of understanding and willingness of the region governance provide affordable and secure energy for its people.		
Cheshire West and Chester (comments represent informal officer views)	No	It doesn't seem sensible for RSS to set a target that will very likely not be achieved. We support Option 2 but this should be applied as a minimum and where proposals come forward that exceed the target figure, this should not be used as a reason, in itself, to hold back such development. In other words, the emphasis should be to optimise the provision of renewable energy generation facilities but with a pragmatic target.		
Haslington Parish Council	In part			
Merseyside Policy Unit	No	See our response to Renewable Energy Option 2.		
Stockport Metropolitan Borough Council	No			
CLP	In part	Although useful to understand the 'theoretical maximum', many renewable technologies are not yet financially viable and/or ready to meet our immediate needs to tackle climate change, improve the security of our supply and meet the stringent targets to reduce CO ₂ emissions. For example, greater encouragement and support is required to see 'home generation' grow.		
North West Environment Link	No	This option is not a 'real world' practical option and should not be treated as such. The "theoretical maximum" should only be a starting point for a realistic assessment of what is possible. Without factoring in the very real constraints arising on developments outside designated areas (e.g. potential landscape and biodiversity impacts, impacts on the visitor economy and the necessity to avoid damaging carbon sequestering peatlands) this option is, in practical terms, undeliverable. The Arup study recognises that there are 'real world' constraints, particularly in relation to peatlands and		

Organisation:	1.1. Do you agree with Locational Option 1?	1.1a. If so why?	1.1b. If not, why not?	1.1c. Please explain your answer to the previous question.
		biodiversity, on the development of renewable facilities outside formally designated sites. If the region is to achieve its maximum, as opposed to its theoretical, renewable energy potential, the partial review should not choose an option which, by ignoring valid social, economic and environmental concerns, will provoke damaging and time wasting opposition.		
Peel Energy	Yes	Note: Evidence base - this response is based on our review of the Draft Report (Version 1). We have not had time to fully evaluate the updated version of the report. In terms of the levels of renewable energy provision, national policy is clear. PPS1 Supplement (December 2007) requires that Regional Planning Bodies should "ensure opportunities for renewable and low-carbon sources of energy supply are maximised" (para 13), i.e. the more, the better. To inform decision makers as to the potential renewable energy provision from the Region, the Partial Review should therefore identify what the "theoretical maximum" level of generation from the differing technologies might be. Policy should then seek to achieve that "theoretical maximum" capacity and then, if feasible, exceed it. Any attempt to establish a "pragmatic potential level" brings with it the risk that this becomes a target that once achieved provides an excuse for not developing further capacity. The Government is very clear that there is no upper limit, all forms of renewable and low-carbon sources of energy should be maximised.		
Allerdale Borough Council	Don't know	We find it very difficult to comment in the absence of the accompanying evidence. The term "theoretical maximum" is already of some concern as it implies some degree of environmental detriment.		
Liverpool City Council	No	Option 1 looks at the region's maximum potential for each type of renewable energy technology and, while based in a rigorous technical appraisal, is unlikely to be a realistic assessment of how renewable energy will be developed.		
West Lancashire District Council	No	Although it is agreed that we should be seeking to maximise the opportunities for renewable energy within the North West, seeking a 'theoretical maximum' could place Policy EM17 in conflict with a number of other policies at both Regional and Local Level and have the potential to harm areas designated for their important habitats and landscapes.		

Organisation:	1.1. Do you agree with Locational Option 1?	1.1a. If so why?	1.1b. If not, why not?	1.1c. Please explain your answer to the previous question.
Ribble Valley Borough Council	No		Concerns that setting a policy approach that focuses on maximising the opportunity for renewables will lead to an approach which does not take account of the practicalities of providing renewables within a rural landscape with high value landscapes.	
Emerson Group	No		The technologies are as yet unproven for the most part and often depend on climatic factors. It would be wrong to produce suites of policies that require theoretical maximums until the technologies can be tested and guaranteed to produce a level of predicted output.	
Carlisle City Council	Don't know		Without having had sight of the research or the theoretical maximum information it is difficult to assess what the implications will be and therefore comment constructively on this consultation	
Lambert Smith Hampton	No		A theoretical maximum assessment does not take into account any constraints to delivering renewable energy and as such is unrealistic and the targets may be unachievable.	
GVA Grimley (on behalf of Goodman)	No		Targets promoted within RSS should be realistic and have the ability to be implemented. A 'theoretical maximum' may not be achievable and this is not a robust base upon which to set regional policy.	
Chorley Council	No		Option 1 is not as realistic as Option 2 taking into account the state of development of various technologies.	
AGMA (the Association of Greater Manchester Authorities)	No		See response to Option 2	
Wirral MBC	No		The theoretical maximum approach will need to be based on potential contributions that may not be deliverable. Option 2 is recommended in the accompanying sustainability appraisal.	
Congleton Borough Council	In part		Realistically, it will probably depend on what is wanted from the targets to find which approach is considered more appropriate. The 'theoretical maximum' may work well as an aspirational target that the Region could aim to achieve and would encourage renewable energy developments to come forward. However, as suggested by the name,	

Organisation:	1.1. Do you agree with Locational Option 1?	1.1a. If so why?	1.1b. If not, why not?	1.1c. Please explain your answer to the previous question.
		the 'pragmatic' approach would provide a more pragmatic consideration of provision, it is likely to be a more achievable target. Potentially it may be possible to follow the approach based on pragmatic provision within this RSS but with the stated intention of moving towards the theoretical maximum over time.		
Pendle Borough Council	No	The options presented in this paper are unclear and difficult to comment on, for two reasons. Firstly they are titled 'locational options', referring to a spatial focus, whereas the content of the two options provided refer to the quantitative provision of renewables (either 'theoretical maximum' or 'pragmatic'). It is not clear how this quantitative aspect will be integrated into existing RSS policy, or is related to the identification of broad locations? Secondly, both options refer to 'the accompanying evidence base' (the research report being undertaken by consultants) which is presently incomplete and therefore unavailable for consideration in this response. There is therefore no context for proper scrutiny of these options. However from a general point of view, the purpose of the existing Policy EM17 is to help ensure that new renewable capacity is installed to meet the targets set out within the policy (10% by 2010, 15% by 2015, 20% by 2020). Option 1 is not believed to be likely to help Local Authorities in meeting these targets. Although providing potentially useful contextual information, the presentation of the 'theoretical maximum' installation would not take account of realistic issues and constraints to development. Neither would it assist with the ability of Local Authorities in measuring the feasibility of providing sufficient renewable installations locally to help meet the RSS targets.		
Cheshire East Council	No	Pragmatic approach is required		
Chester City Council	No	The Council considers that a pragmatic assessment of the actual likelihood of renewable energy technologies coming forward is the best approach. Identifying broad locations based on a theoretical maximum risks creating uncertainty in the planning framework, if technology does not develop as predicted.		
Town and Country Planning Association	In part			
CPRE North West	No	The theoretical maximum is not in practice deliverable, as recognised by the Arup study. An approach based on the theoretical maximum would render this section of RSS		

Organisation:	1.1. Do you agree with Locational Option 1?	1.1a. If so why?	1.1b. If not, why not?	1.1c. Please explain your answer to the previous question.
		meaningless in practice, unimplementable and therefore unsound. See answers to Question 2 for further reasoning.		
English Heritage	No	English Heritage understands that climate change will have major adverse impacts upon cultural heritage and that renewable energy technologies will help limit damaging emissions but these technologies themselves will also have significant implications for the historic environment. English Heritage evaluates the benefits and impacts of renewable energy proposals on a case-by-case basis, assessing both direct impacts on the heritage asset itself, its setting and on wider historic landscape character. However an approach based upon a “theoretical maximum” (and this remains to be defined) appears to reflect a totally unconstrained approach to such development which would inevitably harm the historic environment. An option based upon a “theoretical maximum” would not reflect the Government’s four aims for sustainable development which should be pursued in an integrated way. It is not clear what this approach means for the different types of renewable energy technology, the scale of development and their spatial distributions and the associated infrastructure.		
Lake District National Park Authority	No	The study that forms part of the evidence base for the partial review of the North West Regional Spatial Strategy (RSS) has not been available for us to base our responses to the review options on. We understand that the study will identify how much renewable energy needs to be provided. It will provide a description or a diagram of the broad geographical areas where renewable energy development could take place at regional and subregional level. We do not support the option for an approach to follow the theoretical maximum assessment for wind energy as it provides an unrealistic basis for the Regional Assembly to set future targets. We understand that the study lists a number of constraints on the potential for wind development in Cumbria. These constraints include National Parks and AONBs, but not their settings. The settings of National Parks and AONBs are planning considerations for some types of renewable energy technology, particularly where there may be landscape or visual impact on these settings. We request that further consideration be given to this issue in order to develop a robust evidence base. A number of wind generation schemes have planning consent in Cumbria but have not yet been built or are not yet operational. These should be included in the study. The study should also fully recognise		

Organisation:	1.1. Do you agree with Locational Option 1?	1.1a. If so why?	1.1b. If not, why not?	1.1c. Please explain your answer to the previous question.
		cumulative effects of wind energy development in the region. The high quality of Cumbria's environment and the economic benefits that the landscape and environment bring to Cumbria need to be included and considered if any future targets or broad areas are to be part of the RSS. Any broad areas identified need to take the findings of the Cumbria Wind Energy SPD into account and its landscape capacity assessment. The landscape capacity assessment is a detailed sub-regional study that was carried out due to the pressure for wind energy generation developments in Cumbria. This additional piece of work and evidence must be considered in any targets that are set for the region in the RSS. Any maps in the RSS should be consistent with the adopted sub regional SPD, should provide a realistic basis for development by incorporating any additional constraints identified in the Cumbria landscape capacity assessment and meet the aims for Broad Areas as described in Planning Policy Statement 22.		
West Coast Energy Ltd	Yes	This approach will provide greater encouragement to industry and planning authorities for increasing renewable energy generation in the region than the pragmatic approach. The pragmatic approach is fundamentally flawed in that it cannot possibly take into account all relevant factors such as changes in technology, changes in market conditions and in investor confidence, global supply of materials etc.		
Forestry Commission	In part	The theoretical maximum for biomass can help create confidence for potential users of the resource. However, there will be many unquantifiable elements. For example, it is difficult to predict the amount of Energy crops schemes that will establish on farm land due to external influences e.g wheat prices. On the other hand, the timber resource from under-managed woodland can be estimated. We are currently working to a theoretical target with our Woodfuel Strategy for England. My concern is that people are made aware of the "health warnings" when dealing with Theoretical maximums. In short, theoretical maximums will suit some forms of biomass whilst pragmatic maximums will suit others.		
Wind Prospect	Yes	Using the 'theoretical maximum' as the starting point provides the greatest impetus for increasing renewable energy generation in the region.		
RSPB	No	The pragmatic assessment is more appropriate because the theoretical maximum is unlikely to be reached for a whole raft of reasons and will set up false expectations.		

Organisation:	1.1. Do you agree with Locational Option 1?	1.1a. If so why?	1.1b. If not, why not?	1.1c. Please explain your answer to the previous question.
Dalton Hall Business Centre	Yes	The north west could become a supplier / exporter of renewable energy		
Cumbria County Council / Cumbria Strategic Partnership	No	<p>It is considered that the draft results of the NWRA commissioned ARUP study on "Broad Areas for Renewable Energy Development in the North West" which show a 'theoretical maximum' renewable electricity capacity in the North West would provide an unrealistic and false basis for future target setting by the Regional Assembly.</p> <p>The draft study identified areas that are constrained from development: National Parks, Areas of Outstanding Natural Beauty, Ramsar sites, Special Protection Areas, World heritage Sites and their settings as defined by English Heritage, areas with an average wind speed of less than 6.5m/second at a hub height of 80m, a 500m buffer zone around each address in the region (as a proxy for noise), and existing wind farm developments. It is considered that the Study underplayed the settings of National Parks and AONBs.</p> <p>Other areas were considered to be 'variably constrained' where the following were found: SSSIs, Historic parks and gardens, Scheduled Ancient Monuments, historic battlefields, listed buildings, radar safeguard areas, MOD land ownership, airports deep peat areas, sensitive bird sites identified by the RSPB.</p> <p>Areas that were unaffected by any of the above constraints were considered by the draft Study to be relatively 'unconstrained' in terms of their potential to accommodate large scale wind energy development. Whilst the Study did recognise that site specific constraints could prevent development from going ahead, these were not included in the Study as they cannot be easily mapped at a regional level. These include matters such as archaeology and local landscape considerations and designations.</p> <p>The draft Study, which shows a 'theoretical maximum' for Cumbria of 256MW (outside MOD land), and 136MW (within MOD constrained land), does not take account of on site local landscape character and visual impacts, and is therefore considered unrealistic and not in accordance with paragraphs 2-3 and 19-21 in PPS22.</p> <p>Furthermore, the draft Study has not taken full account the findings of the recently adopted County-wide Wind Energy Supplementary Planning Document, and its landscape capacity assessment, or any detailed landscape sensitivity study.</p>		

1.2 What other policy changes are required to RSS to deliver this option and why?

The table below shows the verbatim comments received. We have removed 28 blank responses.

Organisation:	1.2. What other policy changes are required to RSS to deliver this option and why?
Northwest Regional Development Agency	RSS needs to indicate the preferred locations.
National Trust	Again it is difficult to comment on the detailed implications given the lack of availability of the evidence base. However, it will be necessary to re-check the consistency of a 'theoretical maximum' approach with a range of other RSS Policies, including Core Policies – it is unclear at present that the 'theoretical maximum' approach is compatible with the overall stance in RSS. It is unclear what the proposals will be for energy sources such as biomass, energy from waste and hydro, including whether or not broad locations will be diagrammatically represented. However, there are potentially wider implications in terms of whole catchment planning and the wider issues of landscape management, quantity/quality of water systems (including water storage/retention and flood considerations), soil systems and environmental limits.
West Midlands Regional Assembly	Whilst supporting the principle of increased energy supply from renewables, cross boundary impacts need to be taken into account when considering suitable locations for the siting of renewable energy facilities
CLP	If providing broad search areas (which PPS22 states must be undefined) the RSS must provide clear guidance, particularly stating that areas outside those identified should not be automatically discounted (as per PPS22). By their nature broad searches cannot take into account all the issues affecting certain technologies which can reduce an area's potential for development, meaning others will need to be found. For example, whether a landowner wants to have a certain development on their land or the findings of site specific ecological surveys. A degree of flexibility is needed as stringent requirements on things such as landscape and visual impact (unless they are within the appropriately designated areas) can remove any potential for development of certain types of renewable energy. It should be added that local plans and strategies should look to promote and encourage the use of renewable energy resources; giving significant weight to the wider environmental, social and economic benefits of these projects in mitigating against climate change and the reliance on fossil fuels.
North West Environment Link	n/a as NWEL's view is that option 1 is undeliverable
Peel Energy	Clarification that DP4 (i.e. sequential approach to site identification) do not apply to EM17.
Allerdale Borough	In the absence of the accompanying reports we feel we cannot comment.

Organisation:	1.2. What other policy changes are required to RSS to deliver this option and why?
Council	
Liverpool City Council	n/a
West Lancashire District Council	If such a policy be taken forward it may be more appropriate to encourage a 'theoretical maximum' for off-shore renewable energy, in the form of tidal and off-shore wind. Moving forward with a theoretical maximum for land based renewable energy would be much more difficult and would lead to more conflicts in policy.
Emerson Group	Should not be pursued
Lambert Smith Hampton	Amendments to Policy EM17 on renewable energy so that it relates to the theoretical maximum potential for renewable energy.
GVA Grimley (on behalf of Goodman)	No comments
AGMA (the Association of Greater Manchester Authorities)	AGMA's preference would in principle be for Option 2 since this appears more realistic. However more robust evidence is required to know how this option would work in practice. It is known, for example, that the current target for wind power generation in the region is at a level roughly half way between the pragmatic and the theoretical, so it is not clear what action would be required in GM to achieve the target; and it is known that the baseline figures for existing wind generation facilities in GM are inaccurate.
Town and Country Planning Association	Please see accompanying TCPA reference document on community energy which provides spatial guidance in policy and guidance terms of the appropriate of certain energy technologies at appropriate development scales. It will be a pivotal guide in guiding and co-ordinating development policies at the regional level to the LDF level.
Lake District National Park Authority	We do not support this option.
West Coast Energy Ltd	Specific, robust, criteria based policies designed to promote and not restrict renewable energy development. The starting point should be that renewable energy is supported unless there are specific impacts that cannot be overcome by mitigation which outweigh the benefits brought by renewable energy.
Forestry Commission	My concern is that one broad brush approach will not fit all potential sources of renewable energy. I would ideally like to see an approach that combines a "diagrammatic" ideal along with a "supporting text". Diagrams should represent the ideal location, but should be used to discriminate against developments in any location. E.g the text to support biomass diagrams would state that the diagrams represent ideal locations, but do not prejudice developments beyond those areas, whereas the supporting text for wind energy would state that developments are restricted to the areas identified. For both scenarios criteria need to be agreed and set which can be applied to individual cases.

Organisation:	1.2. What other policy changes are required to RSS to deliver this option and why?
Wind Prospect	No comment.
Cumbria County Council / Cumbria Strategic Partnership	<p>It is considered that policies in the Proposed Changes to RSS will need to be reviewed, in particular the environmental Policy EM1, given that it requires that</p> <p>“Plans, strategies, proposals and schemes should identify, protect, maintain and enhance natural, historic and other distinctive features that contribute to the character of landscapes and places within the North West. They should be informed by and recognise the importance of:</p> <ul style="list-style-type: none"> Detailed landscape character assessments and strategies, which local authorities should produce, set in the context of the North West Joint Character Area Map. These will be used to identify priority areas for the maintenance, enhancement and/or restoration of that character and will underpin and act as key components of criteria based policies in LDFs”.

1.3. In taking forward this option, what are the implications for:

The table below shows the verbatim comments received. We have removed 23 blank responses.

Organisation:	1.3. In taking forward this option, what are the implications for:
Individual	A) Delivery: -
	B) Infrastructure provision? -
	C) Community and social issues? -
	D) Environment? Peat should be an exclusionary factor for wind farms.
	E) Economy? -
Northwest Regional Development Agency	A) Delivery: These implications cannot be assessed without technical work and specific locational guidance.
	B) Infrastructure provision? These implications cannot be assessed without technical work and specific locational guidance.
	C) Community and social issues? These implications cannot be assessed without technical work and specific locational guidance.

Organisation:	1.3. In taking forward this option, what are the implications for:
	D) Environment? These implications cannot be assessed without technical work and specific locational guidance.
	E) Economy? These implications cannot be assessed without technical work and specific locational guidance.
National Trust	<p>A) Delivery: If broad locations are diagrammatically identified it will be necessary for sub-regional or local work to assess the more detailed implications. In some instances, especially for wind energy, detailed work at this level has been undertaken quite recently and can continue to provide the appropriate planning background for the assessment of individual proposals – however, this guidance needs to be acknowledged in the Partial Review RSS.</p> <p>B) Infrastructure provision? Difficult to comment in detail, but overall there is concern that “broad locations for renewables” will assume specific connotations in terms of the scale of proposals and thereby require greater consideration of transmission facilities. Grid connections have their own implications for wider environmental considerations, including the on-shore implications of off shore wind energy, which are not necessarily straightforward.</p> <p>C) Community and social issues? The Trust would support a more integrated approach to energy use and provision, e.g. community energy planning whereby steps are taken to reduce local energy use, including through greatly improved insulation measures; assessing the potential for, and implementing, micro-regeneration; and then meeting residual needs from larger scale renewable projects, e.g. use of hydro on nearby river systems; with surplus energy being sold into the national grid. There are several advantages in people having a direct interest in reducing and meeting their own energy needs locally, rather than having a major renewables proposal foist upon them and no direct connection seen with their energy needs/use. There are also potentially significant energy conservation benefits by greatly reducing transmission losses by utilising the energy close to where it is sourced.</p> <p>D) Environment? Difficult to gauge without knowing the assumptions behind the term ‘theoretical maximum’, but taken literally it suggests a ‘no environmental constraints’ approach. However, that would clearly be incompatible with national planning policy on renewables and with the overall approach adopted in RSS. Nonetheless there are specific considerations that require consideration in the context of potential outcomes. These include a) the impact upon the wider setting of designated assets, be they landscapes, nature conservation areas or cultural heritage; and b) consideration of cumulative impacts – this is especially important in terms of locations with coastal views given the significant amount of off-shore wind energy schemes currently agreed/in</p>

Organisation:	1.3. In taking forward this option, what are the implications for:
	place and coming forward.
	<p>E) Economy? It is disappointing that the economy of the north west has not responded more rapidly to the opportunities of renewable energy and that many of the large scale proposals coming forward are based upon foreign investment and technology. This is especially so in terms of wind energy (but also with hydro) and the under-utilised engineering skills in some parts of the Region, e.g. associated with ship building in Barrow. The policy should seek to ensure that such opportunities are recognised and their take up encouraged.</p>
BWEA	<p>A) Delivery: there will be greater pressure on development control departments to deliver increased approvals based on sound, defensible and pragmatic decision making . This pressure may require increased planning resources within the region.</p>
	<p>B) Infrastructure provision? -</p>
	<p>C) Community and social issues? In terms of social implications, there will be a need for greater acceptance of landscape change in areas not protected by the top tier of landscape designation (ie National Parks and AONBs). However, there is also greater potential for increased funds to made available for community use through community trust funds associated with individual developments. Similarly, there is significant potential for local job creation from construction and maintenance, more money flowing to local service providers from contractors, as well that additional income to local landowners.</p>
	<p>D) Environment? In terms of environmental implications, there will be greater development pressure on non- portected areas. The actual environmental impact could be neutral or positive through proper EIA of individual applications and associated environmental mitigation and enhancement.</p>
	<p>E) Economy? BWEA was established in 1978 and is the representative body for companies active in the UK wind, wave and tidal energy market. Its membership has grown rapidly over recent years and now stands at over 400 companies. In representing the wind industry, BWEA is in a unique position to comment on the circumstances which affect the future growth and development of the sector. BWEA welcomes this opportunity to provide a response to the North West Plan Partial Review and wishes to emphasise the important contribution that the region's policies can make in contributing to both the national and regional targets for renewable energy generation . The UK has a rich variety of newable energy resource, including 40% of Europe's wind resource. This resource will need to be utilised if the UK is to deliver its share of Europe's 20% renewable energy target by 2020. Given theUK's low base-line levels of renewable heat, the majority of this</p>

Organisation:	1.3. In taking forward this option, what are the implications for:
	target will need to be met through onshore wind. It is therefore important to support and encourage the growth of the sector if the UK is to meet its national and European renewable energy and carbon reduction targets. BWEA strongly recommends that the Partial Review of the RSS introduce specific policies designed to deliver greater production of renewable energy and increased levels of energy efficiency, in order to minimise the impacts of climate change.
Lancashire County Council	<p>A) Delivery: Using such figures may be counterproductive. They are likely to prolong debate and delay delivery.</p>
	<p>B) Infrastructure provision? -</p>
	<p>C) Community and social issues? -</p>
	<p>D) Environment? -</p>
	<p>E) Economy? -</p>
Haslington Parish Council	<p>A) Delivery: A lead may need to be taken by the public sector, incentives required to private sector.</p>
	<p>B) Infrastructure provision? -</p>
	<p>C) Community and social issues? Small scale generation needs to consider impact on neighbours (e.g. noisy small scale wind generation in urban areas).</p>
	<p>D) Environment? Need to ensure that landscape is preserved, open areas should not be visually blighted with tall wind generators etc.</p>
	<p>E) Economy? -</p>
CLP	<p>A) Delivery: Reliance on unfinancially viable technologies in the short-term could see the region fall short of their targets.</p>
	<p>B) Infrastructure provision? Dependent on technology, but can see improvements to infrastructure.</p>
	<p>C) Community and social issues? Will provide a better understanding of the opportunities to tackle climate change.</p>
	<p>D) Environment? The best technologies suited to the area can be deployed.</p>
	<p>E) Economy? Promote growth in improving technologies.</p>

Organisation:	1.3. In taking forward this option, what are the implications for:
North West Environment Link	A) Delivery: n/a see answer to 1.2
	B) Infrastructure provision? n/a see answer to 1.2
	C) Community and social issues? n/a see answer to 1.2
	D) Environment? n/a see answer to 1.2
	E) Economy? n/a see answer to 1.2
Peel Energy	<p>A) Delivery: A longer term strategy will encourage individuals, businesses, and regulatory bodies to develop the skills and supply chain within the region to manage this longer term issue. Without the skills and supply chain we will struggle to deliver the short term and longer term targets and lose out on the economic opportunities that come with developing, operating and maintaining renewable energy assets within the region, and nationally.</p>
	<p>B) Infrastructure provision? Electricity grid connections and capacity are two of the key factors in cost and timing of renewable energy (and economic) development in an area. Longer term thinking about the future requirements for energy generation and supply will encourage proactive investment in the infrastructure such as the National Grid and local electricity distribution networks.</p>
	<p>C) Community and social issues? Thinking of the longer term and the need to extract energy resources wherever they may be will help people to consider their behaviour and choices that drive our continuing energy demand. Our demand will not be satisfied by a few large generating assets but a combination of large, medium and small assets, each of which will contribute to the short term and longer term targets.</p>
	<p>D) Environment? The latest environmental thinking of 'Living landscapes', driven by the realisation that climate change will affect our natural resources, encourages the development of a network of nature areas. Many renewable energy sources and technologies can co-exist with this policy, however we need to be careful that the well intentioned development of the natural network doesn't unduly constrain the longer term requirement to exploit renewable energy resources, wherever they may be. We need to continue to develop the environmental thinking along with the renewable energy strategy to better understand the balance required between creating/maintaining the network and safeguarding/developing the social and economic wellbeing in the region.</p>
	<p>E) Economy? We, as well as the government (ref. Gordon Brown's "Green Revolution" 26 June</p>

Organisation:	1.3. In taking forward this option, what are the implications for:
	2008) and many stakeholders, recognise the potential opportunity for new jobs associated with the development, supply, operations and maintenance of renewable energy assets. We all also recognise the threat of these jobs being created abroad to supply the UK's renewable energy commitments if we don't act fast enough. The North West has a wealth of relevant skills and experience from previous decades of energy and manufacturing industries, as well as the academic institutions to supply new talent. A long term strategy will encourage investment in continuing those traditions in the region and encourage those who come to the region to study to remain and build our local economy rather than take their enthusiasm and potential elsewhere.
Allerdale Borough Council	<p>A) Delivery: Without knowing the implications of the current research we cannot comment on deliverability.</p> <p>B) Infrastructure provision? As above</p> <p>C) Community and social issues? As above</p> <p>D) Environment? As above</p> <p>E) Economy? As above</p>
West Lancashire District Council	<p>A) Delivery: A policy of 'Theoretical Maximum' could assist in speeding up the delivery of renewable energy projects, because it would imply that the creation of renewable energy projects has a significant priority over other policies within the RSS. However the potential for conflict with other policies, at a National and Local level could result in a greater potential for call-in and Public Inquiries, which ultimately would slow delivery down. The smaller, more local renewable energy projects may be delivered more easily but the larger, more controversial sites, delivered far slower. However it is not considered that Option 1 will help deliver this any better than the 'pragmatic' approach of Option 2.</p> <p>B) Infrastructure provision? Provision would be dependant on the delivery; a slow delivery of renewable energy projects will not boost infrastructure provision over the short to medium term.</p> <p>C) Community and social issues? An interpretation of this policy could infer that there would not be any sort of buffer zones provided between residential areas and potential sites for renewable energy, as a theoretical maximum is sought. This could result in significant effects on the amenity of residential properties in some areas; in some cases this could in fact cause blight. Greater encouragement to renewable energy projects will lead to better education of people to the need / benefit of renewable energy. However it is not considered that Option 1 will help deliver this any better than the 'pragmatic' approach of Option 2.</p>

Organisation:	1.3. In taking forward this option, what are the implications for:
	<p>D) Environment? The pursuit of a theoretical maximum could result in significant threats to wildlife, habitats and sites which hold specific designations for their importance. It is possible that, should a theoretical maximum be sought, then the need to provide areas for renewable energies will result in some environmentally important areas be highlighted for potential development of renewable energies.</p> <p>E) Economy? To develop a policy of providing the 'theoretical maximum' would assist in generating more power locally, and in some cases assist in developing local industries, particularly along the Cumbrian Coastline. However it is not considered that Option 1 will help deliver this any better than the 'pragmatic' approach of Option 2.</p>
Emerson Group	<p>A) Delivery: The potential and reliability of delivery is unknown and cannot be guaranteed.</p> <p>B) Infrastructure provision? Likely locations are remote for some forms. Transmission needs will have to be catered for.</p> <p>C) Community and social issues? Severe impact if the maximum option does not provide sufficient energy. Energy conservation is a better shorter term benefit. This should reduce demand.</p> <p>D) Environment? Potentially major impacts that would need close scrutiny and appropriate measures to protect vulnerable areas.</p> <p>E) Economy? Would need reliable sources of energy.</p>
Lambert Smith Hampton	<p>A) Delivery: If the targets are set too high without any consideration of the possibility of the constraints to providing the renewable energy then the deliverability of the renewable energy as set out in a theoretical maximum assessment may not be achieved.</p> <p>B) Infrastructure provision? Improved infrastructure will be required for renewable energy schemes to be put in place.</p> <p>C) Community and social issues? More sustainable development should be provided. Communities will be able to harness their own energy production, reducing the costs for such provision, and reducing the carbon emissions into the atmosphere.</p> <p>D) Environment? Carbon footprint should be reduced, less emissions will be released into the surrounding area, helping to mitigate against the effects of climate change.</p> <p>E) Economy? Investment will be encouraged into the area.</p>

Organisation:	1.3. In taking forward this option, what are the implications for:
GVA Grimley (<i>on behalf of Goodman</i>)	<p>A) Delivery: This option could prove very difficult to deliver and may create unnecessary pressure when resources could be better placed elsewhere.</p>
	<p>B) Infrastructure provision? If the renewables target is unrealistically high then local authorities/developers may be forced to focus on quantity over quality leading to an in-effective renewable energy campaign.</p>
	<p>C) Community and social issues? NA</p>
	<p>D) Environment? See response to B.</p>
	<p>E) Economy? Promotion of a 'theoretical maximum' may limit economic growth as developers and new businesses may locate in other regions where renewable policies are more realistic and achievable.</p>
AGMA	<p>A) Delivery: The Partial Review is intended to identify "broad locations" for renewable energy. As with waste, NWRA has commissioned work by consultants to provide the evidence base for this. A draft report has recently been produced on which AGMA officers have made significant comments. Changes to the draft report in response to these comments have not yet been circulated and the final document has not yet been published. In AGMA's view the draft does not provide the necessary evidence or certainty to support the identification of broad locations in the region, and raises a number of questions about the way forward, including whether identifying broad locations is a feasible prospect in the North West region and the significance to be given to a range of potential constraints such as deep peat. One specific element in the report is of particular concern: Greater Manchester's South Pennine fringe on the northern boundaries of Bolton, Bury and Rochdale is identified as the southernmost part of a much larger area described as a "potential area of concentration where cumulative effects are already starting to create wind farm landscapes" and hence by implication could be the location of significant further wind farm development. In the current situation it seems likely that more detailed assessment at a sub regional level would provide a more robust way forward based on understanding of resources, constraints, landscape sensitivity and cumulative effects. This would also enable synergies with work to be commissioned looking at decentralised energy generation potential in GM, which was not adequately dealt with in the draft regional report.</p>
	<p>B) Infrastructure provision? -</p>
	<p>C) Community and social issues? -</p>

Organisation:	1.3. In taking forward this option, what are the implications for:
	D) Environment? -
	E) Economy? -
Wirral MBC	A) Delivery: This is highly uncertain - some forms of provision are still highly controversial
	B) Infrastructure provision? Some forms of provision will require the construction of major facilities
	C) Community and social issues? -
	D) Environment? A maximum approach is unlikely to reflect an appropriate balance with the environmental impacts of some forms of provision
	E) Economy? -
CPRE North West	A) Delivery: this option is not deliverable.
	B) Infrastructure provision? -
	C) Community and social issues? -
	D) Environment? -
	E) Economy? -
English Heritage	A) Delivery: -
	B) Infrastructure provision? -
	C) Community and social issues? -
	D) Environment? The English Heritage publications Climate Change and the Historic Environment, Biomass Energy and the Historic Environment, Micro Wind Generation and Traditional Buildings and Wind Energy and the Historic Environment set out our position on these issues. It will, however, be essential to build an assessment of impacts upon the historic environment, their avoidance and mitigation into any definition of a "theoretical maximum". This cannot be defined as a no holds barred approach. This would be inconsistent with both national policy and that in RSS. We would expect the following issues to be covered: direct physical impacts on archaeological remains, historic structures and buildings, designed landscapes, wider historic landscape character, designated and significant undesignated sites and areas, impacts on settings and visual amenity, looking at visual dominance, scale, intervisibility, vista and sight

Organisation:	1.3. In taking forward this option, what are the implications for:
	lines, movement sound or light effects, unaltered settings.
	E) Economy? -
Lake District National Park Authority	A) Delivery: -
	B) Infrastructure provision? -
	C) Community and social issues? -
	D) Environment? Delivery of the option for a theoretical maximum for wind energy would mean significant impacts on the landscape and environment in Cumbria. The Cumbria Wind Energy SPD and the landscape capacity assessment have not been taken into account when developing the theoretical maximum target for wind energy. The landscape setting of the Lake District National Park and AONBs in Cumbria would be impacted by this option.
	E) Economy? Tourism is a significant sector of the Lake District National Park's economy. It is likely that this option would detract from the landscape setting and the environment of the National Park and adversely affect visitor perceptions and tourism numbers.
West Coast Energy Ltd	A) Delivery: There will be greater pressure on planning authorities to deliver increased approvals based on sound, defensible and pragmatic decision making. This pressure may require increased planning resources within the region.
	B) Infrastructure provision? -
	C) Community and social issues? There will be a need for greater acceptance by the public, elected Members and planners of landscape change in areas not protected by the top tier of landscape designation (i.e. National Parks and AONBs). There will greater potential for funding for community use through community trust funds associated with individual developments. Renewable energy will also provide greater diversity in the energy mix, is indigenous, independent of outside fuel sources and is undepletable, all which ensure security and continuity of supply as fossil fuels continue to deplete.
	D) Environment? Renewable energy will displace the emission of carbon dioxide and other greenhouse gases, thus helping to reduce climate change and global warming. It will make important contributions to the UK's and the region's renewable energy and climate change targets.
	E) Economy? There will be significant potential for local job creation from construction and maintenance of projects, with associated indirect expenditure in the local economy. Local

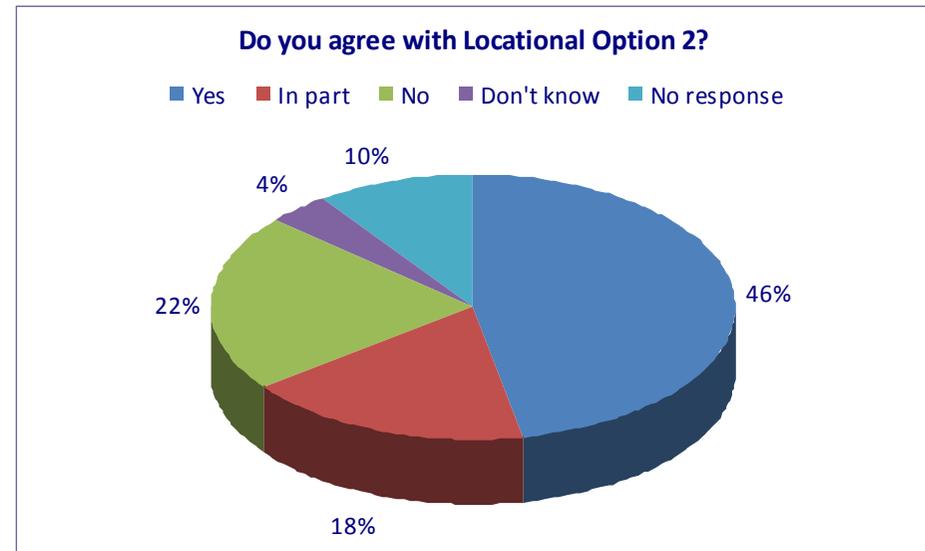
Organisation:	1.3. In taking forward this option, what are the implications for:
	economic benefits will arise from community benefits packages from developers.
Forestry Commission	<p>A) Delivery: There should not be a great emphasis on the location of fuel in relation to end user in the short term. The ideal scenario of fuel travelling the minimal distance is one that we should strive for. However, this should not as serve as a constraint in the early development of supply chains. In the short term, fuel should be allowed to travel further than ideal distances, to help market development and promote energy options that work. The more people who realise that biomass is a viable option, the shorter distances fuel will travel as uptake of supply and demand increases</p> <p>B) Infrastructure provision? As above, plus supply chains will need to grant aided and assisted to encourage development.</p> <p>C) Community and social issues? Education of the benefits of renewable fuels will be one of the greatest challenges. This will serve to address misconceptions over tree felling, timber haulage, wood smoke being "dirty", and loss of biodiversity. This education may also be need at a planning level. Fuel poverty will also be tackled provided there is grant aid to support high capital cost along with local authorities support and pragmatism with planning issues.</p> <p>D) Environment? As a carbon lean fuel, wood will provide biodiversity gains in previously under-managed and unmanaged woodland. The carbon gains will greatest in local, medium scale boiler applications although this should not prejudice the point made in 1.1c</p> <p>E) Economy? Creation of local employment, diversification of rural economy and addressing fuel poverty</p>
Wind Prospect	<p>A) Delivery: There will be greater pressure on development control departments to deliver increased approvals based on sound, defensible and pragmatic decision making.</p> <p>B) Infrastructure provision? No comment.</p> <p>C) Community and social issues? There will need to be a greater acceptance of landscape change in areas not protected by the top tier of landscape designation (ie National Parks and AONBs). However, there is also greater potential for increased funds being available for community use through community trust funds associated with individual developments.</p> <p>D) Environment? There will be greater development pressure on non-protected areas. The actual environmental impact could be neutral or positive through proper EIA of individual applications and associated environmental mitigation and enhancement, not to mention the</p>

Organisation:	1.3. In taking forward this option, what are the implications for:
	environmental benefits of reducing carbon emissions arising from increased renewable energy generation.
	E) Economy? Positive – more money available to local landowners, potential local job creation from construction and maintenance, more money flowing to local service providers from contractors, as well as that additional income available to local landowners.
Dalton Hall Business Centre	A) Delivery: -
	B) Infrastructure provision? National grid upgrade
	C) Community and social issues? -
	D) Environment? -
	E) Economy? Could boost the economy as the Nuclear industry has done for the Cumbrian coast or Gas has done for industries based around Morecambe Bay
Cumbria County Council / Cumbria Strategic Partnership	A) Delivery: It is not clear as to whether or not the proposed 'theoretical maximum' would necessarily assist or hinder the delivery of further renewable energy development. Consideration needs to be given to the likelihood of sufficient schemes coming forward in the plan period. Consideration needs to be given to exploring the potential for development in areas associated with MOD sites in Cumbria.
	B) Infrastructure provision? Consideration needs to be given to improvements to the grid and distribution network, particularly with regard to accommodating increasing amounts of microgeneration and community based renewable development.
	C) Community and social issues? Consideration needs to be given to the effects that could arise from significant amounts of onshore wind energy in remote and rural communities.
	D) Environment? It is considered that the 'theoretical maximum' scenario would be incompatible with the landscape character of Cumbria, and could lead to serious degradation of the special qualities of the Cumbrian landscape and wider countryside character.
	E) Economy? It is not clear as to whether or not the theoretical maximum scenario would hinder or support the economy in Cumbria. Particularly with regard to effects on the tourist sector. Studies have been carried out by the Scottish Assembly to assess the effects significant onshore wind development could have. Consideration should be given to carrying out a regional study.

2.1. Do you agree with Locational Option 2?

When asked, respondents said;

Do you agree with Locational Option 2?	
Yes	25
In part	9
No	11
Don't know	2
No response	5
Total Responses	52



The table below shows the verbatim comments received. We have removed 3 blank responses.

Organisation:	2.1. Do you agree with Locational Option 2?	2.1a. If so why?	2.1b. If not, why not?	2.1c. Please explain your answer to the previous question.
Macclesfield Borough Council	Yes	Development of an approach that follows the 'pragmatic' assessment set out in the evidence base is more likely to be realistically achievable, although perhaps lacks the vision needed to drive forward renewable energy provision in the region. Macclesfield BC considers that an acceptable solution would be to follow the approach based on pragmatic provision with the stated aim of moving towards the theoretical maximum over time.		
On behalf of WRG	No	The two main options being considered relate the locational approach for renewable energy facilities. The options relate to "theoretical maximum" or "pragmatic assessment" approaches as set out in the evidence base. Although pragmatism is generally to be		

Organisation:	2.1. Do you agree with Locational Option 2?	2.1a. If so why?	2.1b. If not, why not?	2.1c. Please explain your answer to the previous question.
		supported, the urgent need to develop all renewable sources of energy suggests that the RSS should identify all possible resources of, and locations for development of, renewable energy. In this context, paragraph 13 of the December 2007 supplement to PPS1 in relation to climate change makes it clear that the RSS should "ensure opportunities for renewable and low carbon sources of energy supply and supporting infrastructure, including decentralised energy supply systems, are maximised" and that the RSS should "set targets for renewable energy supply....(that).. fully reflect opportunities in the region." On this basis, Waste Recycling Group considers that the maximum renewable potential energy resource of the region should be recognised and encouraged. What may be considered pragmatic at present may be considered unduly pessimistic or restrictive in a few years time.		
Northwest Regional Development Agency	No	In our view the most important constraint is likely to be planning policy and in any event it is difficult to assess the likelihood of technological change.		
Countryside Properties.	Yes	As the final research is not yet available, this is difficult to properly assess. Both Options will assume a potential contribution from energy from waste. As the implication of the two Options is that the theoretical approach is unlikely to be deliverable, Option 2 can be preferred.		
Halton Borough Council	Yes	The pragmatic option attempts to temper the overall capacity with some realism as to how quickly the different technologies will be implemented, and as such is an approach that can be supported in principle.		
National Trust	No	With the continuing lack of the 'accompanying evidence base' it is not possible to reach an informed decision about either option as it is unclear what the option actually is, and therefore how appropriate it is to the NW's circumstances. On the face of it a 'pragmatic' approach is more likely to be compatible with the overall approach in RSS and provide for a more integrated response to sustainable development overall in accordance with the requirements of PPS1 and the duty in Section 39 of the Planning and Compulsory Purchase Act 2004.		
Sefton Metropolitan Borough Council	Yes	The initial view is that the second option should be supported since this will reflect what can realistically be achieved at the local level and not constrain local planning authorities by a potentially undeliverable 'theoretical maximum'.		

Organisation:	2.1. Do you agree with Locational Option 2?	2.1a. If so why?	2.1b. If not, why not?	2.1c. Please explain your answer to the previous question.
BWEA	No	BWEA disagrees with Locational Option 2: Development of an approach that follows the 'pragmatic' assessment set out in the accompanying evidence base, due to the reasons given above, in response to Question 1.		
South Lakeland District Council Development Plans Team	Yes	We do not think that the approach should be based on the theoretical maximum – other targets in the Regional Spatial Strategy aren't based on what is aspirational. In setting a relevant regional target, there is a need to consider achievability, whilst setting a challenging target that can make a real difference. Therefore it would seem logical to use the pragmatic potential level – which reflects an assessment of actual likelihood of various renewable technologies coming forward by 2020 – as a justifiable and logically starting point. One possible way forward would be to use this figure as a minimum target.		
the Ramblers' Association, Manchester and High Peak Area	Yes	This approach seems to imply a more restrained approach, which would involve less conflict with policy DP7 regarding Environmental Quality. 2 points in DP7 which are particularly relevant to us are: 'understanding and respecting the character and distinctiveness of places and landscapes' and 'maintaining the quantity and quality of biodiversity and habitat.' Adoption of the 'pragmatic' approach implies less conflict with these aspirations.		
Lancashire County Council	Yes	The "pragmatic" figures, set out in NWRA's research, are generally in line with those already contained within the draft RSS. they provide a more realistic assessment of what's achievable. Based on current levels of provision, they also provide an ambitious approach that represents a step change in delivery.		
Sustainable Neighbourhoods Pool Manchester	No	There is no room for pragmatism when dealing with sustainable renewable energy production and potential global environmental, social and economic catastrophe. Predictions for renewable energy production for the region by 2020 is approx 7 TWh about 3% of total energy production. National and European targets for renewable energy production is 20% by 2020.		
Cheshire West and Chester (comments represent informal officer views)	Yes	We support Option 2 but this should be applied as a minimum and where proposals come forward that exceed the target figure, this should not be used a reason, in itself, to hold back such development. In other words, the emphasis should be to optimise the provision of renewable energy generation facilities but with a pragmatic target.		
Haslington Parish	In part	More likely to be achieved, taking account of developments over period of plan.		

Organisation:	2.1. Do you agree with Locational Option 2?	2.1a. If so why?	2.1b. If not, why not?	2.1c. Please explain your answer to the previous question.
Council				
Merseyside Policy Unit	Yes	We support the second ('pragmatic') option; Option 1 looks at the region's maximum potential for each type of renewable energy technology and, while based in a rigorous technical appraisal, is unlikely to be a realistic assessment of how renewable energy will be developed in real life. This option attempts to temper the overall capacity with some realism as to how quickly the different technologies will be implemented, and as such is an approach which we support in principle.		
Stockport Metropolitan Borough Council	Yes	Stockport Council supports the submission made by AGMA and has a number of additional comments.		
CLP	Yes	At present proven technologies like wind are and will continue to be the major sources of renewable energy as we fight climate change and improve the security of our supply. Other technologies are not yet as advanced (but are options for the medium to long term), financially viable and/or can take many years to build (e.g. major tidal projects). Recently the government has again reiterated the need to install more wind turbines across the country to help the UK meet its emission targets.		
North West Environment Link	Yes	This option will concentrate minds on a pragmatic assessment of what are realistic and deliverable renewable targets and broad locations for various different types of renewable energy in the region. In giving due weight to adverse environmental impacts on proposed developments outside designated areas this option is more likely to produce targets and locations which are generally acceptable and therefore more likely to be delivered.		
Peel Energy	No	The implication of the 'pragmatic potential level' is that it may be used as a guide to sub-regional authorities as to the level of renewable energy that they should seek to achieve by 2020. The danger is that this potential level of generation becomes a target that, once achieved, removes the will to achieve even high levels of renewable energy generation. Policy on the matter is clear, PPS1 Supplement requires that Regional Planning Bodies should "ensure opportunities for renewable and low-carbon sources of energy supply ... are maximised" (para 13) and Policy EM17, Draft RSS, Secretary of State's Proposed Changes confirms that "In accordance with PPS22, meeting these targets is not a reason to refuse otherwise acceptable development proposals". Also, it should be noted that the 'pragmatic potential level' identified in the Report will not achieve the target of 20% electricity		

Organisation:	2.1. Do you agree with Locational Option 2?	2.1a. If so why?	2.1b. If not, why not?	2.1c. Please explain your answer to the previous question.
		generation from renewable sources by 2020: 5,774GWh pragmatic electricity output versus 7,185 GWh target, ref. Table 4.2 and 5.10. Also note the specific exclusion of current consumption by any off-mains generation and high voltage users (see paragraph 4.2.1) which will inflate the future demand figures, and hence target, once included. There is also a danger that sub-regions look at their short term performance rather than the lifecycle of their generating assets, as per our national concern over security of supply. With a policy focus on 'pragmatic potential' the ideas are likely to be restricted to short term thinking and won't take into account the timescales and investment required to renew and expand our generating assets.		
Allerdale Borough Council	Don't know	As with Locational Option One, without the accompanying research we feel we cannot comment. We understand why NWRA has been forced to go out to consultation on this before the publication of the relevant research, but without the research the consultation becomes pointless. We have grave concerns about the direction the Renewables issue is taking at regional level. In particular we fear that the apparent proposal to identify areas of search could completely undermine the recently adopted SPD "Wind Energy In Cumbria" which assesses wind energy proposals on a "landscape capacity" basis.		
Liverpool City Council	Yes	Option 2 attempts to temper the overall capacity with some realism as to how quickly the different technologies will be implemented, and as such is an approach which we can support in principle.		
West Lancashire District Council	Yes	This would be the preferred option out of the two, this approach would give the opportunity to 'maximise' the use of renewable energies whilst still paying due regard to other policies and land designations within the North West. The policies within the RSS must strike a balance between the need for growth in the Renewable Energy sector whilst seeking to protect key landscape areas, wildlife and residential amenity. The 'pragmatic' approach outlined in Option 2 ensures flexibility to consider all relevant issues to any renewable energy proposal.		
Ribble Valley Borough Council	Yes	This was favoured over option 2 as it sought to have regard to local circumstances when promoting Renewable energy schemes		
Emerson Group	Yes	Gives more flexibility to soundly assess all factors governing the location of renewable energy		

Organisation:	2.1. Do you agree with Locational Option 2?	2.1a. If so why?	2.1b. If not, why not?	2.1c. Please explain your answer to the previous question.
		sources and the opportunity to assess the technology improvements and act accordingly.		
Carlisle City Council	Don't know	Without having had sight of the research it is difficult to determine what the implications of a pragmatic approach will result in and what will be achieved. It is therefore difficult to comment constructively on this consultation		
Lambert Smith Hampton	Yes	In general, an approach that follows the 'pragmatic' assessment is more realistic and likely to be achieved by 2020. The Partial Review needs to demonstrate geographically where specific types of renewable energy may be appropriate. As such, the inclusion of broad areas, where appropriate, for a particular renewable energy technology, is supported, although no broad locations have been identified at this stage.		
GVA Grimley (on behalf of Goodman)	Yes	This will provide a more realistic target and will not deter new investment.		
Chorley Council	Yes	This option appears to be the more realistic taking into account the state of development of various technologies.		
AGMA (the Association of Greater Manchester Authorities)	In part	AGMA's preference would in principle be for Option 2 since this appears more realistic. However more robust evidence is required to know how this option would work in practice. It is known, for example, that the current target for wind power generation in the region is at a level roughly half way between the pragmatic and the theoretical, so it is not clear what action would be required in GM to achieve the target; and it is known that the baseline figures for existing wind generation facilities in GM are inaccurate.		
Wirral MBC	Yes	It is more realistic to base the approach on more feasible renewable energy technologies		
Congleton Borough Council	In part	Realistically, it will probably depend on what is wanted from the targets to find which approach is considered more appropriate. The 'theoretical maximum' may work well as an aspirational target that the Region could aim to achieve and would encourage renewable energy developments to come forward. However, as suggested by the name, the 'pragmatic' approach would provide a more pragmatic consideration of provision, it is likely to be a more achievable target. Potentially it may be possible to follow the approach based on pragmatic provision within this RSS but with the stated intention of moving towards the theoretical maximum over time.		

Organisation:	2.1. Do you agree with Locational Option 2?	2.1a. If so why?	2.1b. If not, why not?	2.1c. Please explain your answer to the previous question.
Pendle Borough Council	In part	Option 2 is a suitable approach in principle, however the assumptions behind the 'pragmatic' assessment (believed to be detailed in the forthcoming research report) would need to be understood prior to full agreement. The options paper states that this approach would reflect 'an assessment of the actual likelihood of various renewable energy technologies coming forward by 2020' but provides no further details. Presumably therefore, this approach would consider key landscape constraints such as SSSI, SPA and SAC (amongst other issues) which would result in a more realistic, achievable target. If so this would offer a more appropriate demonstration of possible (or likely) local provision, and therefore a better means of assessing or benchmarking individual applications for consideration.		
Cheshire East Council	No	See above response		
Chester City Council	Yes	See previous comments		
Town and Country Planning Association	In part	See comments on Option 1		
CPRE North West	In part	The theoretical maximum assessment is a useful, indeed necessary, part of the process required to develop realistic and deliverable renewables targets and identification of broad locations suitable for various different types of renewable energy in the region. However, this theoretical maximum is, in practice, not deliverable, as is recognised by the Arup study. It would not only undermine the principles of sustainable development and a range of national planning policies, but would be damaging to the visitor economy and the environment, and cause very significant community opposition. The Partial Review should focus on a pragmatic assessment of what is actually achievable in the region over the plan period, otherwise it will be meaningless in practical terms. It needs to take into account both the opportunities the region offers and the constraints that exist for delivering particular types of renewable energy. It must be noted that even the land identified by the study as "unconstrained" (or more accurately, "less constrained") will have constraints on some forms of development at a local level, eg because of landscape impacts or the presence of deep peat. The targets eventually arrived at should reflect this – not all 'less constrained' land will be capable of delivering renewables development within the plan period. It should be noted that it may not be appropriate to include diagrams showing broad locations for renewables, both due to the absence of many such broad locations in the region, and in response to		

Organisation:	2.1. Do you agree with Locational Option 2?	2.1a. If so why?	2.1b. If not, why not?	2.1c. Please explain your answer to the previous question.
		lessons learned from other regions where this approach has been followed (eg North East).		
English Heritage	In part	A "pragmatic approach" taking full account of any constraints founded in the historic environment for different types of renewable energy proposals would be supported.		
Lake District National Park Authority	In part	We support the option to adopt a pragmatic approach for renewable energy targets for the North West, particularly for sub regional wind energy targets. The evidence base for this option has not been available, and it has been difficult to comment on the options without a clear understanding of the Arup report. We would like to see the Cumbria Wind SPD and the landscape capacity assessment incorporated into the pragmatic approach option. We believe that peat mapping and the RSPB work will also give a more robust local evidence base if these are to be included as part of this option. The pragmatic approach for wind energy is 40% higher than the current target in the RSS, and attempts to develop a more robust evidence base. We support higher targets for renewable energy generation in the North West. We would like to see more detailed information about hydro potential in the region. We would like to have maps for broad areas for hydro generation included in the review. There is significant potential for hydro development in Cumbria, and maps or descriptions would be useful for developers and local authorities. The landscape setting of the Lake District National Park and the cumulative effects of additional must be considered when setting any revised subregional targets for wind energy generation. Revised targets should also be consistent with the Cumbria Wind Energy SPD.		
West Coast Energy Ltd	No	As per reasons set out in 1.1. A pragmatic approach will always be flawed as it cannot possibly take into account all the relevant factors such as technological changes/advancement, changes in global, Uk and regional economies, changes in investor confidence, etc. It will not encourage the deployment of renewable energy as much as the theoretical maximum approach to the detriment of the environment, the economy and Govn and regional targets.		
Forestry Commission	In part	As for Option 1 - Pragmatic assessment will suit some forms of biomass better than theoretical. The theoretical maximum for biomass can help create confidence for potential users of the resource. However, there will be many unquantifiable estimates. For example, it is difficult to predict the amount of Energy crops schemes that will establish on farm land due to external influences e.g wheat prices. On the other hand, the timber resource from under-		

Organisation:	2.1. Do you agree with Locational Option 2?	2.1a. If so why?	2.1b. If not, why not?	2.1c. Please explain your answer to the previous question.
		managed woodland can be estimated. We are currently working to a theoretical target with our Woodfuel Strategy for England. My concern is that people are aware of the "health warnings" when dealing with Theoretical maximums. In short, theoretical maximums will suit some forms of biomass whilst pragmatic maximums will suit others.		
Wind Prospect	No	The factors that lead to how much development comes forward in reality cannot be adequately investigated at regional level. Accordingly the basis of any pragmatic level and distribution of development will be flawed, sending the wrong signals to the development industry, stakeholders and decision makers.		
RSPB	Yes	The pragmatic assessment is more likely to be delivered.		
Dalton Hall Business Centre	Yes			
Cumbria County Council / Cumbria Strategic Partnership	Yes	<p>The 'pragmatic potential' scenario is based on a 50% reduction on the 'theoretical maximum'. The principle of setting a 'pragmatic potential' is supported. The 'pragmatic potential' was derived by taking into account the findings of Cumbria's landscape capacity study for wind, and by setting a separation distance of 5 km between any potential schemes. This is based on existing distances found throughout the region. This scenario also takes into account that some of the key areas within the region are variably constrained. For example, in Cumbria there are areas of land constrained by MOD policy around Spadeadam, areas where effects on deep peat would need to be considered, and other areas identified as meeting the criteria for national landscape designation. If a 'theoretical maximum' was only included in the study, it would provide an unrealistic and false basis for future target setting by the Regional Assembly. By developing a 'pragmatic potential', the study is attempting to develop a more robust evidence base.</p> <p>However, the draft ARUP study does not fully address the environmental circumstances of the region and, in particular, Cumbria. It needs to go beyond this to set an even more realistic scenario. The study should recognise more fully the high environmental quality of the region, and the role of landscape and visual effects when considering wind energy schemes at the application stage. These issues are currently underplayed in the study. This is demonstrated by an acknowledgement in the draft ARUP's study that there is a need to carry out further sensitivity studies in areas that appear to have greatest potential for wind. Due to</p>		

Organisation:	2.1. Do you agree with Locational Option 2?	2.1a. If so why?	2.1b. If not, why not?	2.1c. Please explain your answer to the previous question.
		<p>the high quality of Cumbria’s environment this is considered imperative if any future targets and broad areas are to be included with the RSS. Without such detailed studies, the evidence base would not be robust.</p> <p>The Regional Assembly should also consider carrying out an analysis of the benefits of renewable energy from onshore wind against the potential costs that might arise from the changes to the region’s and, in particular, Cumbria’s environment. This should be assessed in terms of both economic impact and a wider ecosystems approach. This work should be done before any final policy decisions are made with regard to renewable energy provision in the region.</p> <p>The draft ARUP study identifies ‘broad areas’ where significant wind energy development could take place. PPS22 supports the principle of identifying broad areas at the regional level. The aim of identifying broad areas is to provide a greater level of certainty to developers and a strong indication that wind energy development is acceptable in the area. Four broad areas are indicated for the region. These are all within Cumbria. However, importantly, the areas have been identified without taking into account the findings of the adopted Cumbria Wind Energy Supplementary Planning Document (SPD) and its landscape capacity assessment, or any detailed sensitivity study.</p> <p>Only one of these areas is considered to have potential to support significant levels of wind energy development in the SPD. A second area could have scope for a small wind energy scheme, but the SPD suggests that this could be limited due to sensitivities associated with the setting of the Lake District National Park. The other two areas that are identified in the draft ARUP study are considered to be inappropriate for any commercial scale wind energy development in the SPD.</p> <p>It is considered not appropriate for the draft ARUP study to include maps identifying broad areas for development when a detailed sub regional study such as the Cumbria SPD identifies that three out of the four areas are likely to be inappropriate on landscape character grounds. If these maps were to be included in the final ARUP study, they would provide an unrealistic basis for development, would be contrary to the adopted sub regional SPD, and wouldn’t meet the aims for Broad Areas as set out in Planning Policy Statement 22. It would not provide a robust evidence base for policy setting in the RSS Partial Review. These areas should be removed from the study maps.</p>		

Organisation:	2.1. Do you agree with Locational Option 2?	2.1a. If so why?	2.1b. If not, why not?	2.1c. Please explain your answer to the previous question.								
		<p>In addition, the maps identify significant parts of the northwest, west and south of the county as having potential to support more wind schemes, but acknowledge that cumulative effects are starting to create 'wind farm' landscapes. It is important that the final ARUP study fully recognises cumulative effects.</p> <p>In addition to this, the study expects that around a third of existing wind schemes would be re-powered with larger turbines that could generate more electricity.</p> <p>With regard to Offshore generation, the draft ARUP study recognises several of the schemes that have consent of Walney and Barrow, but omits a consented scheme, and two that are in the planning pipeline. Including this data could increase the overall potential for offshore wind to contribute towards the regional target. It currently considers that a pragmatic potential could be 928MW in the region.</p> <p>The draft ARUP study considers the potential for other offshore technologies such as tidal and wave power. It concludes that the potential is likely to be low as these technologies are unlikely to come forward during the plan period. This is broadly agreed with. Also certain technologies such as estuary barrages have potential to damage environmental assets of international importance. A full assessment of these impacts has not yet been undertaken.</p> <p>With regard to microgeneration, the study identifies that individual schemes are likely to come forward, but due to the size of them, they would not contribute significantly towards the overall targets. It considers that tens of thousands of schemes could come forward and could collectively provide 10MW of renewable energy.</p> <p>The draft ARUP study suggests approaches to policy development. It identifies a 3 tier approach providing broad policy guidance and detailed policy guidance in areas where significant development is likely. This principle is supported.</p> <p>The draft ARUP study recognises that the overall installed capacity target in the Proposed Changes to the RSS is broadly similar to the 'pragmatic' scenario. However, it also makes it clear that, for some technologies such as wind, the current proposed RSS targets are very ambitious and would be challenging to meet in the region. The table below sets out the differences and compares it to the current installed capacity of wind energy.</p> <table border="1" data-bbox="792 1302 1848 1385"> <thead> <tr> <th></th> <th>RSS target MW</th> <th>Arup Pragmatic MW</th> <th>Current MW</th> </tr> </thead> <tbody> <tr> <td>Offshore wind farms</td> <td>1,347</td> <td>929</td> <td>180</td> </tr> </tbody> </table>				RSS target MW	Arup Pragmatic MW	Current MW	Offshore wind farms	1,347	929	180
	RSS target MW	Arup Pragmatic MW	Current MW									
Offshore wind farms	1,347	929	180									

Organisation:	2.1. Do you agree with Locational Option 2?	2.1a. If so why?	2.1b. If not, why not?		2.1c. Please explain your answer to the previous question.	
			Onshore wind farms	720	416	95
			Onshore wind clusters	0	50	
			Single large wind turbines	75	0	
			Small stand-alone wind turbines	2.25	0	
			TOTAL	2,144	1,395	275
		<p>In particular, the draft ARUP study recognises that meeting the onshore wind target would require the region to install around 39% more than the 'pragmatic potential' scenario set out above. Although the draft ARUP study states that subject to network enhancements, it could be physically possible, it highlights that this would require the region to make some difficult decisions about landscape change, loss of deep peat resources. It would require a shift in the policy position on behalf of the MOD, which currently opposes wind farm proposals on its land in the far north of the region. It would also require the region to consider separation distances of less than 5km, and to overcome site-specific constraints. In effect this would involve the submission of more planning applications, and require a very much higher success rate for planning applications than is currently the case.</p> <p>This part of the draft ARUP study highlights that current targets are unrealistic without significant changes to the region's environment and MOD policy change. This part of the study is supported, subject to the comments made earlier on further detailed work being needed to set really pragmatic targets.</p> <p>In conclusion, the findings of the draft ARUP study begin to recognise that current wind energy targets in the RSS Proposed Changes could only be met through a significant change to Cumbria's environment. The Regional Assembly should be urged to reduce any future renewable energy targets for wind to better reflect the initial findings of the draft ARUP study. However, the initial findings are still considered to be too high and unrealistic. The Regional Assembly should be urged to carry out further detailed study work in the 'broad areas' of unconstrained land. This should take into account the findings of the Wind Energy SPD and further sensitivity studies. The Regional Assembly should also recognise at this stage that there could be far reaching effects on the economy of Cumbria if the scale of development suggested is to be accommodated. Much of Cumbria's economy is based on</p>				

Organisation:	2.1. Do you agree with Locational Option 2?	2.1a. If so why?	2.1b. If not, why not?	2.1c. Please explain your answer to the previous question.
		the high quality of the environment.		

2.2. What other policy changes are required to RSS to deliver this option and why?

The table below shows the verbatim comments received. We have removed 26 blank responses.

Organisation:	2.2. What other policy changes are required to RSS to deliver this option and why?
National Trust	The overall implications in terms of whole catchment planning and the wider issues of landscape management, quantity/quality of water systems (including water storage/retention and flood considerations), soil systems and environmental limits also need to be addressed in the context of how broad locations are identified and the overall planning policy approach to them.
the Ramblers' Association, Manchester and High Peak Area	We would like to see as little conflict as possible with DP7 and we would therefore NOT like to see any watering down of EM16 as this will relieve pressure on energy requirements. We think a change is required to policy EM17, however; we would like to see the word 'stringent' inserted before 'constraints' in the sentence: 'The following criteria should be taken into account but should not be used to rule out or place constraints on the development of all, or specific types, of renewable energy.' Without this addition, renewable energy projects could have NO constraints resulting in adverse environmental effects. Insertion of 'stringent' here would also match 'stringent' at the beginning of the second sentence in bullet point 2, and so achieve consistency.
Lancashire County Council	In order to bring about the increase in the delivery of renewable energy, Local Planning Authorities will need to approve significantly more applications than at present. RSS policies need to provide a positive and robust framework for this to take place. It is recommended that district allocations are provided for renewable energy. Without this in place there is a likelihood that rates of approvals will not increase as envisaged. NWRA's research identifies the need for further policy development at the sub regional level. Given the "policy gap" at the sub regional level within the statutory Development Plan, the RSS will need to provide a clear and robust framework to support this work.
Stockport Metropolitan	Renewable Heat needs to be examined at a regional level as well as Renewable Electricity - huge energy and

Organisation:	2.2. What other policy changes are required to RSS to deliver this option and why?
Borough Council	<p>cost savings can be achieved if this issue is tackled at this stage rather than later - there have been national calls for evidence but the North West region can move ahead on this agenda.</p> <p>http://www.berr.gov.uk/energy/sources/renewables/policy/renewable-heat/page15963.html In terms of Housing and Renewable Energy and the Code for Sustainable Homes (C4SH) there needs to be a strong link between housing allocation and phasing and the best options for achieving high levels of the Code. Phasing is a tool which can be used to persuade developers to take this agenda on board. With regards to Policy EM16 and mention of C4SH this would tackle only new build - refurbishment of existing housing stock is critical if we are to achieve targets on climate change - policy should specifically reference use of tools such as the EST Best Practice Guides on Housing:</p> <p>http://www.energysavingtrust.org.uk/uploads/documents/housingbuildings/CE83.GPG155%20-%20Energy%20efficient%20refurbishment%20of%20existing%20dwellings_4_01_08.pdf. A strengthening of this policy with regards to rebuilds, refurbishment or regeneration of existing buildings of all types and uses would be of most use to sub-regional planning professionals ensuring that it can be strengthened in their LDFs. In other regional strategies section the RES can be noted as this mentions promotion of a low carbon economy.</p>
CLP	<p>If providing broad search areas (which PPS22 states must be undefined) the RSS must provide clear guidance, particularly stating that areas outside those identified should not be automatically discounted (as per PPS22). By their nature broad searches cannot take into account all the issues affecting certain technologies which can reduce an area's potential for development, meaning others will need to be found. For example, whether a landowner wants to have a certain development on their land or the findings of site specific ecological surveys. A degree of flexibility is needed as stringent requirements on things such as landscape and visual impact (unless they are within the appropriately designated areas) can remove any potential for development of certain types of renewable energy. It should be added that local plans and strategies should look to promote and encourage the use of renewable energy resources; giving significant weight to the wider environmental, social and economic benefits of these projects in mitigating against climate change and the reliance on fossil fuels.</p>
North West Environment Link	<p>Given the potential impact of large scale wind farms, tourism policies W6 & W7 may have to be modified to reflect the need to balance the benefits of the visitor economy against the need to produce more renewable energy.</p>
Peel Energy	<p>Clarification that DP4 (i.e. sequential approach to site identification) do not apply to EM17.</p>
Allerdale Borough Council	<p>Not clear at this stage</p>
Liverpool City Council	<p>No comments</p>
West Lancashire District	<p>Changes as described in 1.2 could be applied to the 'pragmatic approach' as described in option 2. There would</p>

Organisation:	2.2. What other policy changes are required to RSS to deliver this option and why?
Council	be great benefit in providing within Policy EM17 threshold figures that could be applied at a local level through LDF's, particularly in relation to renewable energies in the new residential developments. At present with no thresholds any requirements made by local authorities will have no robust basis.
Emerson Group	Less than Option 1. Still a need to encourage energy conservation as a primary issue.
Lambert Smith Hampton	Amendments should be made to Policy EM17 on renewable energy so that it relates to the pragmatic assessment potential for renewable energy. This policy should indicate the broad locations for renewable energy and demonstrate geographically where specific types of renewable energy may be appropriate.
AGMA (the Association of Greater Manchester Authorities)	See 2.3 which follows The Partial Review is intended to identify "broad locations" for renewable energy. As with waste, NWRA has commissioned work by consultants to provide the evidence base for this. A draft report has recently been produced on which AGMA officers have made significant comments. Changes to the draft report in response to these comments have not yet been circulated and the final document has not yet been published. In AGMA's view the draft does not provide the necessary evidence or certainty to support the identification of broad locations in the region, and raises a number of questions about the way forward, including whether identifying broad locations is a feasible prospect in the North West region and the significance to be given to a range of potential constraints such as deep peat. One specific element in the report is of particular concern: Greater Manchester's South Pennine fringe on the northern boundaries of Bolton, Bury and Rochdale is identified as the southernmost part of a much larger area described as a "potential area of concentration where cumulative effects are already starting to create wind farm landscapes" and hence by implication could be the location of significant further wind farm development. In the current situation it seems likely that more detailed assessment at a sub regional level would provide a more robust way forward based on understanding of resources, constraints, landscape sensitivity and cumulative effects. This would also enable synergies with work to be commissioned looking at decentralised energy generation potential in GM, which was not adequately dealt with in the draft regional report.
Pendle Borough Council	The potential of renewable technologies in the 'pragmatic' assessment would be required at least at sub-regional level to have meaning, and practical benefit, for application at a local level. The replacement of figures in Tables 9.6 and 9.7a-c would be necessary to reflect the 'pragmatic' scenario.
Town and Country Planning Association	See previous comments and accompanying TCPA reference document
CPRE North West	Policies W6 & W7 may need to be reviewed given the likely impact that large scale onshore wind development may have on tourism. Offshore wind may also impact on tourism. The location of energy generators should

Organisation:	2.2. What other policy changes are required to RSS to deliver this option and why?
	be considered in relation to the location of energy consumers.
Lake District National Park Authority	A more significant emphasis on micro-renewable energy schemes.
Forestry Commission	As for option 1 - My concern is that one broad brush approach will not fit all potential sources of renewable energy. I would ideally like to see an approach that combines a "diagrammatic" ideal along with a "supporting text". Diagrams should represent the ideal location, but should be used to discriminate against developments in any location. E.g the text to support biomass diagrams would state that the diagrams represent ideal locations, but do not prejudice developments beyond those areas, whereas the supporting text for wind energy would state that developments are restricted to the areas identified. For both scenarios criteria need to be agreed and set which can be applied to individual cases.
Wind Prospect	No comment.
RSPB	The RSPB believed that, the planning system and the transmission network, alongside appropriate market incentives, must facilitate the required step change in renewables development to avoid dangerous climate change. Such a framework for renewable energy delivery must protect the natural environment. It is not acceptable in the current climate crisis, for local authorities with good potential for renewable generation to reject projects and stall delivery. Within the context of spatial planning, Government should develop appropriate quotas for local authorities for renewable energy delivery, including targets for onshore wind energy within 'green light areas'.
Cumbria County Council / Cumbria Strategic Partnership	<p>See above statement.</p> <p>It is considered that policies in the Proposed Changes to RSS will need to be reviewed, in particular the environmental Policy EM1, given that it requires that</p> <p>"Plans, strategies, proposals and schemes should identify, protect, maintain and enhance natural, historic and other distinctive features that contribute to the character of landscapes and places within the North West. They should be informed by and recognise the importance of:</p> <ul style="list-style-type: none"> • Detailed landscape character assessments and strategies, which local authorities should produce, set in the context of the North West Joint Character Area Map. These will be used to identify priority areas for the maintenance, enhancement and/or restoration of that character and will underpin and act as key components of criteria based policies in LDFs".

2.3. In taking forward this option, what are the implications for:

The table below shows the verbatim comments received. We have removed 24 blank responses.

Organisation:	2.3. In taking forward this option, what are the implications for:
Northwest Regional Development Agency	<p>A) Delivery: These implications cannot be assessed without technical work and specific locational guidance.</p>
	<p>B) Infrastructure provision? These implications cannot be assessed without technical work and specific locational guidance.</p>
	<p>C) Community and social issues? These implications cannot be assessed without technical work and specific locational guidance.</p>
	<p>D) Environment? These implications cannot be assessed without technical work and specific locational guidance.</p>
	<p>E) Economy? These implications cannot be assessed without technical work and specific locational guidance.</p>
National Trust	<p>A) Delivery: If broad locations are diagrammatically identified it will be necessary for sub-regional or local work to assess the more detailed implications. In some instances, especially for wind energy, detailed work at this level has been undertaken quite recently and can continue to provide the appropriate planning background for the assessment of individual proposals – however, this guidance needs to be acknowledged in the Partial Review RSS.</p>
	<p>B) Infrastructure provision? Difficult to comment in detail, but overall there is concern that “broad locations for renewables” will assume specific connotations in terms of the scale of proposals and thereby require greater consideration of transmission facilities. Grid connections have their own implications for wider environmental considerations, including the on-shore implications of off shore wind energy, which are not necessarily straightforward.</p>
	<p>C) Community and social issues? The Trust would support a more integrated approach to energy use and provision, e.g. community energy planning whereby steps are taken to reduce local energy use, including through greatly improved insulation measures; assessing the potential for, and implementing, micro-regeneration; and then meeting residual needs from larger scale renewable projects, e.g. use of hydro on nearby river systems; with surplus energy being sold into the national grid. There are several advantages in people having a direct interest in reducing and meeting their own energy needs locally, rather than having a major renewables proposal foist upon them and no direct connection seen with their energy needs/use. There are also potentially</p>

Organisation:	2.3. In taking forward this option, what are the implications for:
	significant energy conservation benefits by greatly reducing transmission losses by utilising the energy close to where it is sourced.
	D) Environment? Difficult to gauge without knowing the assumptions behind the term 'theoretical maximum', but taken literally it suggests a 'no environmental constraints' approach. However, that would clearly be incompatible with national planning policy on renewables and with the overall approach adopted in RSS. Nonetheless there are specific considerations that require consideration in the context of potential outcomes. These include a) the impact upon the wider setting of designated assets, be they landscapes, nature conservation areas or cultural heritage; and b) consideration of cumulative impacts – this is especially important in terms of locations with coastal views given the significant amount of off-shore wind energy schemes currently agreed/in place and coming forward.
	E) Economy? It is disappointing that the economy of the north west has not responded more rapidly to the opportunities of renewable energy and that many of the large scale proposals coming forward are based upon foreign investment and technology. This is especially so in terms of wind energy (but also with hydro) and the under-utilised engineering skills in some parts of the Region, e.g. associated with ship building in Barrow. The policy should seek to ensure that such opportunities are recognised and their take up encouraged.
The Ramblers' Association, Manchester and High Peak Area	A) Delivery: -
	B) Infrastructure provision? -
	C) Community and social issues? We would encourage and support local community energy schemes. However, large windfarms in, or adjacent to, areas of high landscape value, would not be welcomed by the Ramblers' Association, and would go against Government policies of encouraging people to take up recreational walking for health reasons.
	D) Environment? As stated, we have chosen the 'pragmatic' approach in order to minimise the environmental impact of renewable energy developments in the countryside. the Ramblers' Association has, as one of its charitable aims, "the preservation and enhancement, for the benefit of the public of the beauty of the countryside."
	E) Economy? Creation of jobs is important, but this should not be achieved at too great a sacrifice of environmental assets, particularly those that cannot be replaced. We regard adherence to Policy DP7, particularly "maintaining the quantity and quality of biodiversity and habitat"
Lancashire County	A) Delivery: There are implications in terms of delivering the onshore wind energy target based

Organisation:	2.3. In taking forward this option, what are the implications for:
Council	<p>on the "pragmatic" assessment. The research indicates that approximately 39% more than the "pragmatic" level of onshore wind energy will be required. Delivery at these levels will be difficult to achieve.</p> <p>B) Infrastructure provision? -</p> <p>C) Community and social issues? -</p> <p>D) Environment? n terms of cutting greenhouse gases and mitigating climate change, such an approach would make a major contribution. At the sub-regional level there will be implications, particularly in terms of landscape change. Consideration will need to be given to landscape sensitivity and reference is made to the work carried out by Lancashire County Council, "Landscape Sensitivity to Wind Energy development in Lancashire" published in 2005. The cumulative impacts of renewable wind energy will need to be carefully assessed. Consideration will also need to be given to the areas of "deep peat" in Lancashire, referred to in NWRA's research.</p> <p>E) Economy? -</p>
Sustainable Neighbourhoods Pool Manchester	<p>A) Delivery: -</p> <p>B) Infrastructure provision? -</p> <p>C) Community and social issues? This option has major implications of society including huge levels of fuel poverty, increased food costs, health risks and decreased life expectancy from Climate Change.</p> <p>D) Environment? This option has major implications for the environment, including increased flooding, decreased biodiversity, crop failure.</p> <p>E) Economy? This option has major implications for the economy, including soaring energy prices, burdens on the insurance industry, collapse of farming and fishing industries and cost to economy of dealing with the</p>
Haslington Parish Council	<p>A) Delivery: -</p> <p>B) Infrastructure provision? Local generation and local distribution should minimise visual impact on landscape.</p> <p>C) Community and social issues? Need to exclude Nuclear developments from this this area of consultation. Need to promote small scale hydro schemes, question why any opportunity is not being utilised e.g. overspill water on canals and rivers, small streams. Benefit of small scale hydro</p>

Organisation:	2.3. In taking forward this option, what are the implications for:
	is the low visual impact, low noise levels etc.
	D) Environment? -
	E) Economy? Need to expand potential benefits for rural community, reuse of farm land - impact on local employment levels and required skills.
CLP	A) Delivery: Bringing confidence to the renewable energy sector about the North West's commitment to the industry will see greater delivery.
	B) Infrastructure provision? See 1.3B
	C) Community and social issues? Will realise the targets, helping to reduce reliance on fossil fuels, not the quality of life. Community schemes are an important part of renewable projects, helping people understand the issues of climate and change and the opportunities to tackle it, often supported by financial benefits.
	D) Environment? Sensitive siting will bring with it the quickest way to protect us against the impacts of climate change, help secure our supply and meet UK and EU targets.
	E) Economy? Provide local jobs and community benefits.
North West Environment Link	A) Delivery: Achieving targets should not be at the expense RSS's spatial principles. The drive to maximise renewable energy should not obscure the importance of the energy hierarchy in combating climate change. The best available scientific evidence (eg from the Tyndall Centre) is that most carbon emissions reductions need to come from reduced energy consumption rather than changing the source of energy generation. There needs to be a holistic approach to implementation, avoiding over-reliance on any one source or form of generation. While recognising that certain technologies (ie wind) will be utilised rapidly to meet targets over the next few years, there needs to be fully integrated approach in the medium to long term, harnessing the full range of renewable technologies. Rapidly changing renewables technology may mean that the relative contributions of various types of renewable energy change significantly during the next decade. Indicative targets for each the different forms of renewable energy will therefore need to be reviewed regularly.
	B) Infrastructure provision? The environmental impacts of associated infrastructure as well as of the renewables development itself needs to be taken into account as a material consideration in all decisions. The drive for large scale renewable developments should be complemented by an equally urgent drive to increase de-centralised energy generation through localised schemes

Organisation:	2.3. In taking forward this option, what are the implications for:
	utilizing local sustainable municipal energy infrastructure.
	C) Community and social issues? Honest, effective and meaningful community engagement will be vital to the successful delivery of renewable energy facilities. Past evidence shows that developing effective stakeholder partnerships at the earliest possible stage dispels myths, reduces opposition and increases the likelihood of a locally accepted and successful development.
	D) Environment? Adverse environmental impacts should be a material consideration in all renewable energy development policies and decisions and should encompass potential ecological degradation (e.g impacts on sensitive wildlife habitats and valuable peatlands) landscape character, tranquillity or heritage.
	E) Economy? The development and deployment of renewable, low energy and energy efficient technologies is a key growth sector for the North West. Every effort should be made to establish the region as a leader in this field.
Peel Energy	A) Delivery: A short term strategy will discourage individuals, businesses, and regulatory bodies to develop the skills and supply chain within the region. Without the skills and supply chain we will struggle to deliver the short term and longer term targets and lose out on the economic opportunities that come with developing, operating and maintaining renewable energy assets within the region, and nationally.
	B) Infrastructure provision? Short term thinking about the future requirements for energy generation and supply will discourage investment in the infrastructure such as the National Grid and local electricity distribution networks. Small incremental investments will increase the overall costs and timescales for achieving targeted supply levels.
	C) Community and social issues? Refer to response to Option 1, 1.3 (C) above. Many communities are looking at ways of generating their own renewable energy in line with sustainability objectives. Policies should not unduly restrict such intentions.
	D) Environment? Refer to response to Option 1, 1.4 (D) above. Environmental policy is being defined looking at the longer term issues, including climate change. Renewable energy policy should look to the same timeframes and scenarios to secure a balanced policy framework.
	E) Economy? Restricting ambition for renewable energy in the region is likely to deter investment in associated skills and supply chain (including manufacturing) in the region. We have an opportunity to become one of the major centres of expertise and production to serve the national and global expansion of renewable energy at a time when our existing industries (e.g. car

Organisation:	2.3. In taking forward this option, what are the implications for:
	manufacturing/assembly, shipbuilding) are at risk.
Allerdale Borough Council	<p>A) Delivery: Not known at this stage. However, one point that we would like to raise, which could affect deliverability, concerns Robin Rigg Offshore Wind Turbines currently being erected in the Solway Firth. Because the power from these comes ashore in Allerdale, in line with PPS22, it should count towards Allerdale's delivered capacity, but the turbines are in Scottish Waters and were approved by the Scottish Executive. So...?</p> <p>B) Infrastructure provision? -NA</p> <p>C) Community and social issues? -NA</p> <p>D) Environment? -NA</p> <p>E) Economy? -NA</p>
West Lancashire District Council	<p>A) Delivery: Option 2 ensures that flexibility is given to decision makers to evaluate both the positive benefits and the negative impacts of the renewable energy proposal. It is important to encourage the development of renewable energies within the North West, but of equal importance in the ability of planners to balance all material considerations in making decisions on such projects.</p> <p>B) Infrastructure provision? Without any conflicts to other policies at a National, Regional, Sub – Regional and Local level, larger scale renewable energy projects could be approved more quickly.Option 2 can also ensure that more small-scale renewable energy projects can be encouraged.</p> <p>C) Community and social issues? A pragmatic approach to the potential for renewable energy will ensure that residential amenity can be protected sufficiently.The benefits in terms of education as outlined in 1.3c would still apply within Option 2.</p> <p>D) Environment? A pragmatic approach to EM17 will ensure that environmentally sensitive sites retain adequate protection from any negative impacts caused by renewable energy projects.</p> <p>E) Economy? Benefits outlined in 1.3e would still apply within the approach outlined in Option 2</p>
Emerson Group	<p>A) Delivery: More flexible stance allows for appropriate locations and responses to likely demand.</p> <p>B) Infrastructure provision? Can be located to minimise infrastructure requirements.</p> <p>C) Community and social issues? Avoids a potential hiatus of overdependence on renewable</p>

Organisation:	2.3. In taking forward this option, what are the implications for:
	sources that could fail to meet demand under certain climatic conditions.
	D) Environment? Policy can protect the environment better under this option.
	E) Economy? Will still want guaranteed supplies.
Lambert Smith Hampton	A) Delivery: This option is more likely to be delivered as it takes a more realistic approach in relation to the provision of renewable energy schemes.
	B) Infrastructure provision? Improved infrastructure will be required for renewable energy schemes to be put in place.
	C) Community and social issues? More sustainable development should be provided. Communities will be able to harness their own energy production, reducing the costs for such provision, and reducing the carbon emissions into the atmosphere.
	D) Environment? The carbon footprint should be reduced, less emissions will be released in to the surrounding area, helping to mitigate against the effects of climate change.
	E) Economy? Investment should be encouraged into the area.
GVA Grimley (<i>on behalf of Goodman</i>)	A) Delivery: This option offers a realistic approach to ensure that targets can be delivered without creating an unnecessarily high additional cost.
	B) Infrastructure provision? Sufficient renewable energy infrastructure will be provided to allow the region to prosper whilst achieving good levels of renewable energy.
	C) Community and social issues? NA
	D) Environment? This option allows for sufficient consideration for the environment and the provision of renewable resources.
	E) Economy? A realistic approach will not deter new investment, yet environmental objectives will be achieved.
AGMA	A) Delivery: The Partial Review is intended to identify "broad locations" for renewable energy. As with waste, NWRA has commissioned work by consultants to provide the evidence base for this. A draft report has recently been produced on which AGMA officers have made significant comments. Changes to the draft report in response to these comments have not yet been circulated and the final document has not yet been published. In AGMA's view the draft does not provide the necessary evidence or certainty to support the identification of broad locations in the region, and

Organisation:	2.3. In taking forward this option, what are the implications for:
	<p>raises a number of questions about the way forward, including whether identifying broad locations is a feasible prospect in the North West region and the significance to be given to a range of potential constraints such as deep peat. One specific element in the report is of particular concern: Greater Manchester's South Pennine fringe on the northern boundaries of Bolton, Bury and Rochdale is identified as the southernmost part of a much larger area described as a "potential area of concentration where cumulative effects are already starting to create wind farm landscapes" and hence by implication could be the location of significant further wind farm development. In the current situation it seems likely that more detailed assessment at a sub regional level would provide a more robust way forward based on understanding of resources, constraints, landscape sensitivity and cumulative effects. This would also enable synergies with work to be commissioned looking at decentralised energy generation potential in GM, which was not adequately dealt with in the draft regional report.</p> <p>B) Infrastructure provision? See a) above</p> <p>C) Community and social issues? See a) above</p> <p>D) Environment? See a) above</p> <p>E) Economy? See a) above</p>
Wirral MBC	<p>A) Delivery: Delivery is likely to be more realistic and therefore more achievable</p> <p>B) Infrastructure provision? The scale of provision is more likely to reflect the capacity of the areas identified to receive and accommodate them.</p> <p>C) Community and social issues? A pragmatic approach is likely to mean that more easily supportable projects will come forward and will prevent local communities being pressured into accepting larger more, controversial proposals.</p> <p>D) Environment? A pragmatic approach will enable more account to be taken of likely environmental impacts and constraints.</p> <p>E) Economy? -</p>
Pendle Borough Council	<p>A) Delivery: The potential of renewable technologies in the 'pragmatic' assessment would be required at least at sub-regional level to have meaning, and practical benefit, for application at a local level. The replacement of figures in Tables 9.6 and 9.7a-c would be necessary to reflect the 'pragmatic' scenario.</p>

Organisation:	2.3. In taking forward this option, what are the implications for:
	<p data-bbox="517 248 1850 448">B) Infrastructure provision? Option 2 should assist the delivery of renewables to meet the RSS targets better than Option 1. The 'theoretical maximum' scenario (exploiting of all opportunities) may encourage false optimism of the potential provision in an area, and lead to assumptions over potential provision elsewhere that will likely never occur. The 'pragmatic' scenario will provide a more realistic assessment of what is possible, and therefore potentially greater local accountability in decision making.</p> <p data-bbox="517 456 1032 496">C) Community and social issues? -</p> <p data-bbox="517 504 1850 647">D) Environment? With the assumption that a higher level of renewable capacity will be installed under the 'pragmatic' scenario than the 'theoretical maximum' (see comments under Delivery above), this option will lead to wider overall benefits to the general environment through reduced carbon emissions.</p> <p data-bbox="517 655 730 695">E) Economy? -</p>
CPRE North West	<p data-bbox="517 708 1850 1043">A) Delivery: Achieving targets should not be prioritised over other key aspects of RSS, eg the spatial principles which are intended to underpin RSS and all investment and planning decisions in the region. Indicative targets will need reviewing on a regular basis as a range of renewable technologies are developing very rapidly and the mix that is most appropriate may appear very different in 2020 compared to now. The best available evidence indicates that the majority of carbon emissions reductions required to hit UK targets will have to come from reduced energy consumption, not switching to other sources. Targets should also be reviewed in the light of the success or otherwise of the region in reducing its energy consumption. Even in the 'less constrained' and 'variably constrained' areas, careful consideration will have to be given to local impacts and each application judged on its merits.</p> <p data-bbox="517 1051 1850 1283">B) Infrastructure provision? There will need to be consideration of the distances between the potential sources of energy (in terms of onshore wind, mostly to the North of the region) and the location of consumption (mostly to the south of the region), and account taken of the impact in terms of energy, emissions and cost-efficiency of losses during transmission etc. Damaging environmental impacts, in particular with regards to landscape character, may be caused by associated infrastructure as much as by the renewables development itself, and such infrastructure should be kept to a minimum for financial as well as environmental reasons.</p> <p data-bbox="517 1291 1850 1394">C) Community and social issues? Early and meaningful community engagement will be important for the successful delivery of even the "pragmatic" level of development. Taking communities' and stakeholders' views into consideration early in the process will help to improve</p>

Organisation:	2.3. In taking forward this option, what are the implications for:
	<p>the suitability and acceptability of applications and should reduce opposition further down the line in many cases. Community engagement and involvement must be genuine and substantial; people must believe that they are able to have a real impact on decisions (and this belief must be true!); adequate consideration must be given to the views, knowledge and ideas of local communities.</p> <p>D) Environment? While there are substantial environmental gains to be had from renewable energy, there is also the potential for significant environmental harm. The conservation and enhancement of biodiversity and landscape character should remain key considerations in the delivery of renewables. This is particularly the case given that some of the locations likely to be considered suitable for onshore wind development are also some of the wildest areas with fine landscapes and valuable habitats. Serious consideration must be given to the carbon-negative impacts on large-scale windfarm development on deep peat in comparison with the carbon-positive impacts of such development.</p> <p>E) Economy? Large-scale onshore wind farms in particular have the potential to have a negative impact on the rural and visitor economy, particularly where the character of the landscape is significantly altered. If wild places become industrialised they will lose much of their appeal to visitors. The North West has the potential to establish itself as a leader in the development and deployment of renewable, low energy and energy efficient technologies, in line with the RES. This has the potential to be a key growth sector, building on sectoral innovation and high value-added businesses.</p>
English Heritage	<p>A) Delivery: -</p> <p>B) Infrastructure provision? -</p> <p>C) Community and social issues? -</p> <p>D) Environment? Similar issues as for the “theoretical approach” apply. We would expect the following issues to be covered: direct physical impacts on archaeological remains, historic structures and buildings, designed landscapes, impacts on wider historic landscape character, to cover designated and significant undesignated sites and areas, impacts on settings and visual amenity, looking at visual dominance, scale, intervisibility, vista and sight lines, movement sound or light effects and unaltered settings. These issues will need to be addressed at both a landscape scale and at a local level. Given the very place specific nature of some heritage assets, e.g. a particular listed building or scheduled monument, it is likely that within an identified “broad area” there will be specific constraints associated with safeguarding that heritage asset.</p>

Organisation:	2.3. In taking forward this option, what are the implications for:
	E) Economy? -
Lake District National Park Authority	A) Delivery: -
	B) Infrastructure provision? -
	C) Community and social issues? There is potential for linking energy generation schemes to local energy needs, this would give communities more ownership of the natural resources in their area. There are issues with public perception of some forms of renewable energy generation. Overcoming some of these perceptions will require education and working with communities.
	D) Environment? Wind energy developments can have significant landscape impacts. These are described in Cumbria's landscape capacity assessment that was done for the Cumbria Wind Energy SPD. The landscape setting of the National Park and the cumulative effects of wind energy developments are important factors and must be considered if this option is taken forward.
	E) Economy? There is potential for additional employment in Cumbria, through development of renewable energy industries. Development of biomass, wind, solar and hydro energy projects could provide employment and new business opportunities for the subregion. Tourism is a major sector in the Lake District National Park's economy. Where wind energy developments detract from the landscape setting of the National Park, there will be implications for visitor numbers, tourism and the local economy. Economic benefits from wind energy developments are not as obvious as those from biomass or other renewable energy projects. However, there is potential for firms in Cumbria to build and install turbines.
Forestry Commission	A) Delivery: There should not be a great emphasis on the location of fuel in relation to end user in the short term. The ideal scenario of fuel travelling the minimal distance is one that we should strive for. However, this should not serve as a constraint in the early development of supply chains. In the short term, fuel should be allowed to travel further than ideal distances, to help market development and promote energy options that work. The more people who realise that biomass is a viable option, the shorter distances fuel will travel as uptake of supply and demand increases
	B) Infrastructure provision? As above, plus supply chains will need to be grant aided and assisted to encourage development.
	C) Community and social issues? Education of the benefits of renewable fuels will be one of the greatest challenges. This will serve to address misconceptions over tree felling, timber haulage, wood smoke being "dirty", and loss of biodiversity. This education may also be needed at a planning

Organisation:	2.3. In taking forward this option, what are the implications for:
	<p>level. Fuel poverty will also be tackled provided there is grant aid to support high capital cost along with local authorities support and pragmatism with planning issues.</p> <p>D) Environment? As a carbon lean fuel, wood will provide biodiversity gains in previously under-managed and unmanaged woodland. The carbon gains will greatest in local, medium scale boiler applications although this should not prejudice the point made in 1.1c</p> <p>E) Economy? Creation of local employment, diversifying the rural economy and addressing fuel poverty</p>
RSPB	<p>A) Delivery: Delays in connection to the grid, and excessive costs of connection, are impeding the delivery of more renewable electricity in the UK. This problem should be addressed immediately, by implementing the option within existing EU law to provide preferential access to renewable energy projects when funding grid connections. This preferential access should go to projects which have either been through the planning system and achieved necessary provisions, or are located in areas which spatial planning has earmarked for presumed consent.</p> <p>B) Infrastructure provision? Ability of a range of renewable industries to deliver necessary infrastructure and availability of skilled contractors for on-going maintenance and repair. Supply chain problems are likely to become more acute as competition for renewable energy skills and infrastructure increases across Europe. Government must act to address this, working with the industry to establish the engineering and manufacturing capacities to support a vibrant UK renewables sector.</p> <p>C) Community and social issues? Communities are much more likely to accept and indeed promote renewable energy projects, if they receive benefits for doing so. Such a system of community incentives operates elsewhere in Europe, in countries with vibrant renewables sectors. There are a number of ways to ensure the transfer of benefits, including a levy on developers to deliver community projects, or schemes to facilitate the ownership (and therefore rewards) of renewable energy projects. The region should explore these options.</p> <p>D) Environment? The RSPB recognises the critical role that renewable energy will play in delivering a low carbon economy. It is important, however, that measures to address climate change do not create additional negative pressures on the environment, particularly biodiversity which the UK also has international obligations to protect. Humanity is dependent on a stable climate and a biodiverse environment which provides a range of essential ecosystem services. In addition to avoiding sites that have been designated for their national and international conservation value, it is also important to be aware of areas where "sensitive bird" species occur</p>

Organisation:	2.3. In taking forward this option, what are the implications for:
	<p>in “important populations”. Sensitive birds are ones that are at higher risk of direct collision with turbines, for example, or vulnerable to habitat disturbance or loss. The RSPB has provided the NWRA with data showing mapped areas that are functionally linked to SPA's because they support internationally important populations of birds which are qualifying features of an SPA and which may occur outwith the SPA boundary on a daily basis. This means that the Habitats Regulations are likely to come into play. Even though the outlying areas do not have statutory nature conservation designation, EU legislation is likely to affect them. The purpose of the alert maps is to flag with developers that the location for a proposed development may impact negatively on key species. This should trigger further investigation to inform the design of the proposed development. The alert maps do not necessarily aim to constrain development. Rather they provide an opportunity to assess impacts and design appropriate mitigation. Such an approach is important because it is likely to lead to less conflict over proposed developments. This could help underpin a more successful wind industry in the English regions which would in turn help to deliver the nation’s climate objectives. Deep peat There should be a presumption against development on deep peat in the NW because of its biodiversity value and because peat is a carbon store/sink. Development on peat risks release of carbon to the atmosphere. Any proposals on deep peat should be treated on a case-by-case basis with full carbon accounting incorporated as well as impact assessment on biodiversity.</p> <p>E) Economy? NW could benefit from first mover advantage by ramping up investment and demand for renewables, creating opportunities for manufacturing, supply and distribution and maintenance.</p>
Cumbria County Council / Cumbria Strategic Partnership	<p>A) Delivery: It is not clear as to whether or not the proposed ‘Pragmatic potential’ would necessarily assist or hinder the delivery of further renewable energy development.</p> <p>B) Infrastructure provision? As above in Section 2.1a.</p> <p>C) Community and social issues? It is not clear as to whether or not the proposed ‘Pragmatic potential’ would necessarily assist or hinder community and social issues, although is recognised that renewable energy development does generate a significant level of public attention. Consideration needs to be given to the effects that could arise from significant amounts of onshore wind energy in remote and rural communities.</p> <p>D) Environment? It is considered that the ‘pragmatic potential’ scenario would be incompatible with the landscape character of Cumbria, and could lead to serious degradation of the special qualities of the wider landscape and local countryside character.</p>

Organisation:	2.3. In taking forward this option, what are the implications for:
	E) Economy? It is not clear as to whether or not the 'pragmatic potential' scenario would hinder or support the economy in Cumbria. However, the Regional Assembly should also recognise at this stage that there could be far reaching effects on the economy of Cumbria if the scale of development suggested is to be accommodated. Much of Cumbria's economy is based on the high quality of the environment. Studies have been carried out by the Scottish Assembly to assess the effects significant onshore wind development could have on the tourist economy. Consideration should be given to carrying out a similar regional study.

3. Other comments

Organisation	Comments
Peel Holdings Ltd	<p>Introduction and Context</p> <p>Peel Energy Limited (Peel) is a developer of renewable energy projects with significant assets located in the Region.</p> <p>Peel currently has a pipeline of approximately 284MW of wind farm projects, including 80MW installed or under construction, 68MW in planning or pre-planning and a further 136MW subject to commercial negotiations or feasibility assessment. This includes the operational 3.6MW Seaforth Wind Farm, together with the 65MW Scout Moor Wind Farm and 10MW Port of Liverpool Wind Farm, both of which are currently in construction.</p> <p>Peel is developing projects across the wider renewables sector to produce a balanced portfolio of generation assets. The power generation business also seeks to exploit synergies, across the wider group, with the built development programme.</p> <p>A major initiative being progressed is the Mersey Tidal Power project. The Mersey Estuary has one of the largest tidal ranges in the UK and is considered to be one of the best locations in the UK for a tidal power scheme. A Pre-Feasibility Study, jointly funded by the North West Development Agency, has been undertaken and work has commenced on developing a more</p>

detailed assessment to progress a preferred scheme. The scheme has the potential to provide up to 700MW of electricity, a substantial part of the energy needs of the City of Liverpool and wider Merseyside.

Funding has also been secured from the Government's Waste and Resources Action Programme (WRAP) to undertake a trial of biomass crops on several marginal land sites. Sites include former dredging grounds and a landfill site. The partnership includes academic input from Liverpool University and Liverpool John Moores, and stakeholder support from Envirolink Northwest and the Mersey Forest. The trial project will establish if the use of green waste is beneficial in establishing biomass crops on a variety of marginal land sites.

Renewable Energy in the North West

Policy EM17 of the Secretary of State's Proposed Changes to RSS provides a firm policy basis for the development of renewable energy capacity within the Region.

This Partial Review considers two discrete issues, firstly, the broad location of where development may be appropriate (pursuant to para 7, PPS22) and, secondly, establishing the potential level of renewable energy production that may be achieved.

Both elements of the Partial Review have merit, but it is important that the context of these Studies are correctly understood and framed in policy, especially where any existing sub-regional studies are being utilised as baseline information.

The requirement to consider broad locations arises from the need "*..to identify broad areas at the regional/sub-regional level where development of particular types of renewable energy may be considered appropriate*" (PPS22, para 7). The objective is to provide a positive steer to developers and Local Authorities in identifying where the potential for renewable development may be appropriate. It is not, however, designed to create an "area of search" outside which proposals will not be considered.

In terms of the levels of renewable energy provision, national policy is clear. PPS1 Supplement (December 2007) requires that Regional Planning Bodies should "*ensure opportunities for renewable and low-carbon sources of energy supply are maximised*" (para 13), i.e. the more, the better.

To inform decision-makers as to the potential renewable energy provision from the Region,

	<p>the Partial Review should therefore identify what the “theoretical maximum” level of generation from the differing technologies might be. Policy should then seek to achieve that “theoretical maximum” capacity and then, if feasible, exceed it. Any attempt to establish a “pragmatic potential level” brings with it the risk that this becomes a target that once achieved provides an excuse for not developing further capacity. The Government is very clear that there is no upper limit, all forms of renewable and low-carbon sources of energy should be maximised.</p> <p>Two final issues requiring clarification within RSS are:</p> <ul style="list-style-type: none">• In delivering development opportunities in renewable and low-carbon energy generation, EM17 should be clear that the sequential approach, as provided by DP4, does not apply; and• The scope of the policy requires clarification to ensure compliance with national policy. Renewable and low-carbon energy is defined in the glossary to PPS1 Supplement and is not restricted to non-fossil fuel sources; it includes all energy from waste, waste heat that would otherwise be generated directly or indirectly from fossil fuel. Currently, the draft report, “Towards Broad Areas for Renewable Energy Development” provides a more restricted appreciation of renewable and low-carbon energy.
Individual	

Appendix One – Renewable Energy Options

Questions for the Options for Consultation on the Regional Spatial Strategy – Renewable Energy – Broad Locations/Criteria

Section 1: Issues to be addressed

What are the key issues that need to be considered for the Partial Review?

1.1. Issues within the topic area

European legislation, government targets, increasing energy demand, security of supply, the need for reductions in carbon emissions and rising public expectations are driving the need for rapid changes in the UK's approach to energy generation.

Existing European legislation is enshrined principally in the Directive on the Promotion of Electricity from Renewable Energy Sources in the Internal Electricity Market (2001/77/EC), also called the Renewables Directive, which requires each country to commit to specific targets for renewable energy.

The Government's Energy White Paper and subsequent Energy Bill, alongside the Climate Change Bill set out a framework to reduce carbon dioxide emissions and secure clean and affordable energy supplies.

The North West Sustainable Energy Strategy¹ sets out clearly that the energy challenge, which faces the North West (as a major producer and consumer of all forms of energy) is that if we keep using energy at the same rate our energy demand will continue to rise. More importantly, it demonstrates how different sectors across the region can act to address this challenge head on by adopting sustainable energy practices which include energy efficiency, deploying renewable energy technologies and advancing sustainable transport solutions.

Planning Policy Statement 22 (PPS22) sets out the need for Regional Spatial Strategies to contain three elements to its policy framework for renewable energy:

¹ North West Sustainable Energy Strategy, NWRA, NWDA, GONW & Environment Agency (July 2006)



Targets (regional which may be disaggregated to sub-regional levels) based on a region's assessment of its renewable energy resource;
Criteria based policies relating to the identification of types of location or technologies and the scale of development;
Locational considerations including the use of criteria to identify broad areas at the regional/sub-regional level where development of particular types of renewable energy may be appropriate.

Draft RSS policy EM17 sets out a criteria-based approach and targets for the region for renewable energy development. However, RSS may need to include a diagrammatical representation of broad areas where the development of particular types of renewable energy may be appropriate, in line with the EiP Panel recommendations².

The Assembly commissioned research in December 2007 to inform the further development of policy in the Partial Review. The specific renewable energy technologies under consideration are:

- Wind (offshore and onshore)
- Solar (photovoltaic, passive solar design and water heating)
- Water (wave, tidal and hydro)
- Biomass (co-firing, waste, crops and wood)
- Geothermal (hot rock and heat pumps)

The research will provide an assessment of future energy demand and the progress against renewable energy targets; recommendations for any changes to the criteria currently contained within RSS; and identification of potential broad areas for various renewable energy technologies.

1.2. Links with other policy areas and any cross-cutting themes that should be considered.

Links with other policy areas being reviewed in the Partial Review

The consideration of housing provision will require a significant input from renewable energy sources to assist in achieving targets for zero carbon rated new dwellings by 2016. The Partial Review will need to respond to the recent publication by Government of the updated Code for Sustainable Homes³ which will provide a national impetus towards meeting the 2016 target.

There are also links with the waste policy issues being dealt with in the Partial Review including the potential contribution from energy from waste as part of the renewable energy mix. The current draft RSS includes indicative targets (see Table 9.6 in the Proposed Changes to RSS (March 2008)) for the contribution from energy from waste schemes.

² See Panel Recommendation R8.15

³ The Code for Sustainable Homes: Setting the standard in sustainability for new homes, DCLG (February 2008)

In terms of the energy policies contained in the current draft RSS, policy EM17 sets out the framework for targets, sub-regional studies, and criteria to be applied in assessing proposals and schemes for renewable energy development. It is expected that some amendment to this policy may be required.

Links with other policy areas not covered in the Partial Review.

The Proposed Changes to RSS (March 2008) include the following policies that are linked to the renewable energy broad locations options:

- EM15 – A Framework for Sustainable Energy in the North West: the policy provides the wider framework for considering energy issues within the region.
- EM16 – Energy Conservation & Efficiency: the policy seeks reduce energy consumption and improve energy efficiency including specific reference to the Code for Sustainable Homes.
- EM18 – Decentralised Energy Supply: Although no specific targets are included in the policy in terms of renewable energy requirements, the proposed policy does advocate the setting of targets for renewable energy supply to be used in new development in future plans and strategies where appropriate evidence and/or viability studies have been produced.

Links to cross cutting themes which are the key spatial principles set out in the Panel Report (i.e. policies DP1 to DP8)

- DP7 - Promote Environmental Quality: the development of renewable energy will impact on almost all of the aspects of environmental quality specified in this policy
- DP9 – Reduce Emissions and Adapt to Climate Change: the policy includes direct reference to renewable energy.

Links to other regional strategies.

The North West Climate Change Action Plan (2006) includes commitments to increase the uptake of renewable energy generation within the 27 Actions identified in the plan.

The North West Sustainable Energy Strategy (2006) includes an annex that deals with renewable energy and sets out the targets for 2010, 2015 and 2020 that have been incorporated in policy EM17 of the Proposed Changes to RSS.

Section 2: What has been decided

What parts of the policy/policies do we propose to keep unchanged in the Partial Review?

The bulk of the policy framework for renewable energy contained in the proposed changes will remain unchanged in the Partial Review. The intention is to supplement policy which may be through the introduction of a diagram(s) that will set out broad



locations for various renewable energy technologies. It may be necessary to amend policy EM17 in the Proposed Changes to RSS dependent on the recommendations for criteria that emerge from the current regional study on broad locations.

Any national, other regional or sub-regional issues where decisions have been taken or are expected soon that need to be flagged up in the options consultation?

Parts of the region have already undertaken considerable work on assessing the potential for various aspects of renewable energy. The current regional level research being undertaken on broad locations is drawing upon existing studies whilst considering them within the context of relevant planning guidance that has emerged since their publication (e.g. PPS1 Climate Change supplement). The research will also supplement existing studies that can assist in the consideration of the broad locations particularly in parts of the region where information has not been produced.

Section 3: Options for Consultation

What are the options that need to be consulted upon in the Partial Review?

The central theme to any of the options that come forward is the need for a policy approach that sets out broad locations or areas for various renewable energy technologies including a diagrammatic representation, where appropriate, of the locations/areas selected (see paragraph 7 of PPS22 and paragraphs 3.37 and 3.38 of the Companion Guide to PPS22).

The research currently being conducted for the Assembly is developing an assessment of the 'theoretical maximum' potential for renewable energy and heat generation by 2020. An alternative 'pragmatic' potential level of renewable energy generation has also been developed, reflecting an assessment of the actual likelihood of various renewable energy technologies coming forward by 2020.

The research also provides recommendations for the types of policy that may need to be considered in the Partial Review.

- Region wide policies building on Policy EM17;
- Sub-regional policies which could set out the potential appropriate technologies by sub-region and highlight specific matters that would need to be considered within each sub-region. The degree of spatial detail that can be provided needs to be considered (i.e. what level of detail will be included in any policy framework given that the Proposed Changes focuses at the moment at county level, save for a column covering Warrington and Halton); and
- The inclusion of broad areas where appropriate for a particular renewable energy technology. There needs to be careful consideration of which types of renewable energy can be included within a criteria/broad locations diagram format. PPS22 states that RSSs should contain an indication of the output that offshore renewables might be expected to achieve, based on where the electricity comes



ashore (the actual location of offshore facilities falls outside the remit of an RSS). The draft RSS does contain an indication of the output from offshore wind, tidal and wave in Tables 11.6 and 11.7 a-c.

The two main options that sit around that central theme can be summarised as follows:

Locational Option 1:

Development of an approach that follows the 'theoretical maximum' assessment set out in the accompanying evidence base.

Question 1

1.1. Do you agree with the above option?

Yes (go to 1a)

No (go to 1b)

1.1a. If so why?

1.1b. If not, why not?

1.2. What other policy changes are required to RSS to deliver this option and why?

1.3. In taking forward this option, what are the implications for:

A) Delivery?

B) Infrastructure provision?

C) Community and social issues?

D) Environment?

E) Economy?

Locational Option 2:

Development of an approach that follows the 'pragmatic' assessment set out in the accompanying evidence base.

Question 2

2.1. Do you agree with the above option?

Yes (go to 1a)

No (go to 1b)

2.1a. If so why?



2.1b. If not, why not?

2.2. What other policy changes are required to RSS to deliver this option and why?

2.3. In taking forward this option, what are the implications for:

- A) Delivery?
- B) Infrastructure provision?
- C) Community and social issues?
- D) Environment?
- E) Economy?

Section 4: Sustainability Appraisal/ Habitats Regulations Assessment/ Equalities Impact Assessment/ Health Impact Assessment/ Rural Proofing considerations

In addition to broad locations for renewables, the RSS should produce targets for regions using resource assessments and criteria-based policies in line with PPS22. Variability will exist between regions based upon feasibility and suitability of each renewable.

The location of renewable facilities, e.g. wind farms or biomass crops, could have environmental impacts on local biodiversity and ecosystem function and also cause a visual impact.

Decentralised energy generation may reduce the need for centralised energy generation, both from fossil fuels and renewables.

Renewables should reduce carbon dioxide emissions and secure clean and affordable energy supplies. The emissions-saving and affordability credentials of renewables could be lost if careful consideration is not given to location in relation to how the energy from the renewables option will be transported to where it is needed. Consideration needs to be given to both onsite generation, e.g. for local community energy schemes, or offsite generation that will need grid connection? Will there be transmission losses? If biomass is an option the sourcing of feedstock will be a significant aspect to its sustainability.

Consideration needs to be given as to the multiple strands of energy policy and the implications of divergent policy on the energy demand of the RSS as a whole.

In doing so the Partial Review will need to take consider specific aspects of the following documents.



Key Objectives Relevant to Partial Review	Implications for Plan
EU Biofuels Directive	RSS may consider biofuel production as part of its renewable obligations. Careful thought will be need to establish the true impacts of using biofuels as a 'renewable' given the implications on SCP, biodiversity and climate change (through energy balance).
EU Directive on the energy performance of buildings.	Revisions to the Building Regulations will create additional energy savings not anticipated in the original RSS which may have implications for Energy Demand and extent of Renewable Energy capacity needed.
Energy white paper: meeting the energy challenge (May 2007)⁴	Renewable options will need to reflect the aims of the energy white paper in particular ensuring that the targets are contributed to through the North West region's provision of renewable energy.
The Energy Challenge, Energy Review Report (July 2006)⁵	Options generated in the Partial Review regarding renewables will need to reflect Government targets and integrate holistically with the other RSS policies and other demands of the energy strategy.
Planning White Paper	Sets out a series of 'challenges' faced by the planning system including: <ul style="list-style-type: none"> ~ Meeting the challenge of climate change; ~ Supporting sustainable economic development; ~ Increasing the supply of housing; ~ Protecting and enhancing the environment and natural resources; ~ Improving local and national infrastructure; and ~ Maintaining security of energy supply.
PPS1 Supplement: Planning and Climate Change (2007)	Need to consider the likely performance of the RSS on mitigating climate change and in adapting to the impacts of likely changes to the climate.
PPS9: Biodiversity and Geological Conservation (August 2005)	The increased spatial scope of the Partial Review means that there will be increased accuracy as to where impacts will be felt for waste, renewables and housing.
Our Energy Challenge: power from the people. Microgeneration Strategy (March 2006)	Increased renewables through microgeneration may reduce the overall energy burden in the North West thus reducing the overall requirement for Renewables
Nuclear Decommissioning Agency Strategy – Draft for Consultation, Nuclear Decommissioning Agency, August 2005	With these facilities being decommissioned within the lifetime of the RSS there will be greater need for other energy resources to ensure energy security.
The Agenda for Growth – The	Renewable energy production may utilise biomass. If the

⁴ DTI (2007) *Energy white paper: meeting the energy challenge*. Available from: <http://www.dti.gov.uk/energy/whitepaper/page39534.html>

⁵ DTI (2006) *The Energy Challenge: Energy Review*. Available from: <http://www.berr.gov.uk/files/file31890.pdf>

Regional Forestry Framework for the North West (2005)	biomass is to be source locally to avoid transport CO ₂ emissions then this will have implications for options and policy.
Rising to the Challenge: A Climate Change Action Plan for England's Northwest 2007 – 09 (November 2006)⁶	Need to consider how address the priorities for action, the vision for the region, outcomes and monitoring indicators for reducing the impacts of the region on climate change.
North West Sustainable Energy Strategy (July 2006)⁷	Need to support implementation of strategy

⁶ NWRDA (2006) *Rising to the Challenge: A Climate Change Action Plan for England's Northwest*. Available from: <http://www.nwda.co.uk/areas-of-work/business/sustainable-consumption/climate-change.aspx>

⁷ NWRA (2006) *North West Sustainable Energy Strategy*. Available from: http://www.nwra.gov.uk/downloads/documents/aug_06/nwra_1156410969_North_West_Sustainable_Energy_.pdf

