

State of the Industry Report

Onshore and offshore wind: a progress update

November 2010





RenewableUK is the trade and professional body for the UK wind and marine renewables industries. Formed in 1978, and with 655 corporate members, RenewableUK is the leading renewable energy trade association in the UK. Wind is the world's fastest growing renewable energy source, and this trend is expected to continue with falling costs of wind energy and the urgent international need to tackle CO2 emissions to prevent climate change.

In 2004, RenewableUK expanded its mission to champion wave and tidal energy and use the Association's experience to guide these technologies along the same path to commercialisation.

Our primary purpose is to promote the use of wind, wave and tidal power in and around the UK. We act as a central point for information for our membership and as a lobbying group to promote wind energy and marine renewables to government, industry, the media and the public. We research and find solutions to current issues and generally act as the forum for the UK wind, wave and tidal industry, and have an annual turnover in excess of four million pounds.

2010 Deployment

The speed of wind energy deployment in the UK continues to accelerate, with the commissioning of Thanet in September 2010 taking us over 5GW of installed capacity, less than a year after reaching 4GW. The completion of the 180MW Robin Rigg and 173MW Gunfleet Sands wind farms in April marked 2010 as the year that offshore wind broke the 1GW barrier for total deployment. The 743MW newly built out in the 12 months to October 2010 has more than doubled UK offshore installed capacity, making this a record year for offshore deployment.

The previous year to October 2009 also proved a record year for onshore installation thanks to the completion in May of the 322MW Whitelee wind farm in Scotland. This figure sits in contrast to the current rate of installed capacity, with 538MW deployed over the subsequent 12 months of which 380MW were built out between January and September. A further 220MW of additional onshore capacity is scheduled to go operational by the end of 2010, giving an anticipated total onshore deployment figure of around 600MW for the calendar year. The deployment figures for the calendar year 2010 are likely to be around 30% down compared to 2009.

There are a number of possible reasons for the slowdown in the volume of projects and onshore capacity to have gone operational over the last 12 months. The availability of project finance may have been one such challenge, along with turbine supply agreements and ongoing grid, aviation and wider ecological and archaeological constraints proving an ongoing barrier to construction.

21 of the 36 onshore projects which have become operational in the last 12 months have an installed capacity of less than 10MW, but the overall figure has been helped by the 138MW Crystal Rig extension completed in September 2010. A further 13 medium-sized projects of between 14MW to 40MW have also significantly contributed to the total. The average turbine size for newly operational sites remains steady at 2MW.

Future Deployment – Onshore

Looking at the volume of onshore capacity currently under construction, the UK industry reached another milestone on the 30th September 2010, with 33 projects under construction, totalling 1,104MW. This takes the UK onshore wind construction pipeline over the 1GW mark for the first time. While the total number of projects under construction at the moment is slightly down on the 36 projects under construction at this time last year, SSE's 350MW Clyde wind farm has pushed the current capacity in Scotland up one third ahead of last year's figures, from 639MW to 954MW. England has also seen progress, returning to the levels of construction experienced in 2008, after experiencing a slowdown in 2007 and a collapse in 2009.

Looking further ahead, the UK currently has 3,616MW of consented capacity yet to break ground, up slightly from the 3,357MW recorded as awaiting construction this time last year. Average turbine size for outstanding consented projects remains consistent at 2.4MW.

Over the 12 months to October 2010, the UK saw 1,194MW consented from 71 schemes, with an average capacity of 16.8MW per project. This is a capacity increase of 13% and an increase of 3.5% in terms of average project size consented over the same period 2008–2009.

A detailed analysis of onshore consenting can be found on page 11.

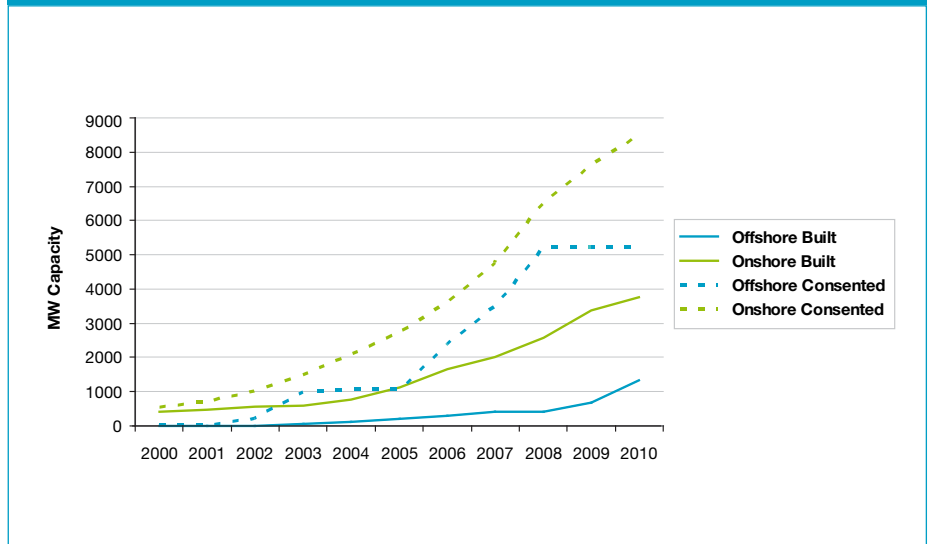
Future Deployment – Offshore

The beginning of 2010 saw the Crown Estate award its Round 3 licence agreements, which have a potential capacity of 32GW, while the agreement to lease new extensions to Rounds 1 and 2 announced in May added another 2GW. The announcement of four demonstration sites is also critical for testing new technology in the tough marine environment.

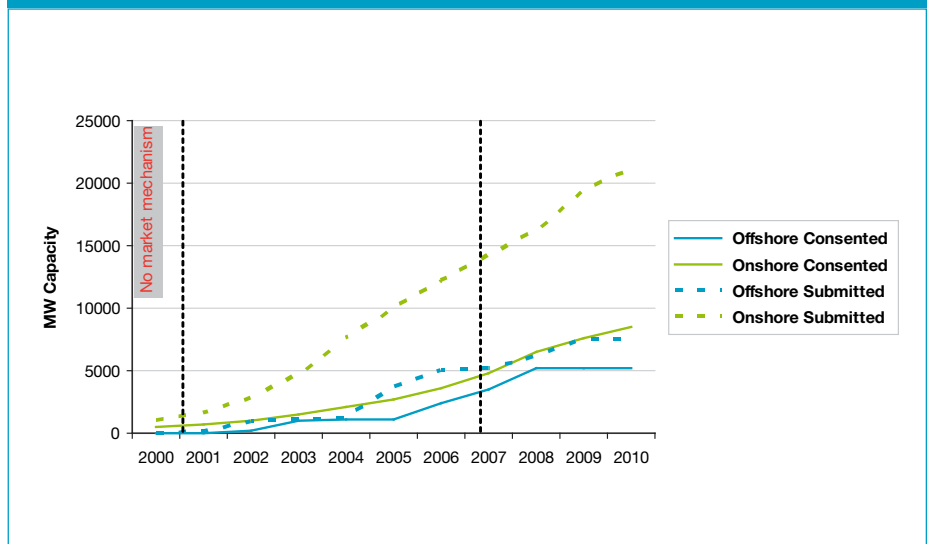
There are a further four offshore projects totalling 1,153MW currently under construction and due to complete by 2012 and eight projects totalling 2,728MW waiting to break seabed. Research is also under way to develop a UK-built offshore 10MW turbine, continuing the industry’s technological advancement.

Following the publication of the Government’s Spending Review on the 20th October this year, it is understood that £60 million of the £200 million fund for renewable and low carbon technologies will go toward ports funding. Retaining the Ports Fund will give the industry a huge boost and establish the UK as a major force in renewable energy manufacturing.

Graph 1. UK wind energy capacity consented and commissioned 2000 – 2010



Graph 2. UK wind energy capacity submitted and consented 2000 – 2010



The Rate of Deployment

The UK now has 258 onshore wind farms with an operational capacity of 3,753MW and 13 offshore developments totaling 1,341MW, with a collective capacity of 5,094MW. The 12 months to October 2010 saw a big jump in the number of offshore wind turbines in operation, with Rhyl Flats coming on line in December, followed by Robin Rigg and Gunfleet Sands I & II in April and Thanet commissioned in September, totaling 233 turbines ranging from 3MW to 3.6MW in size.

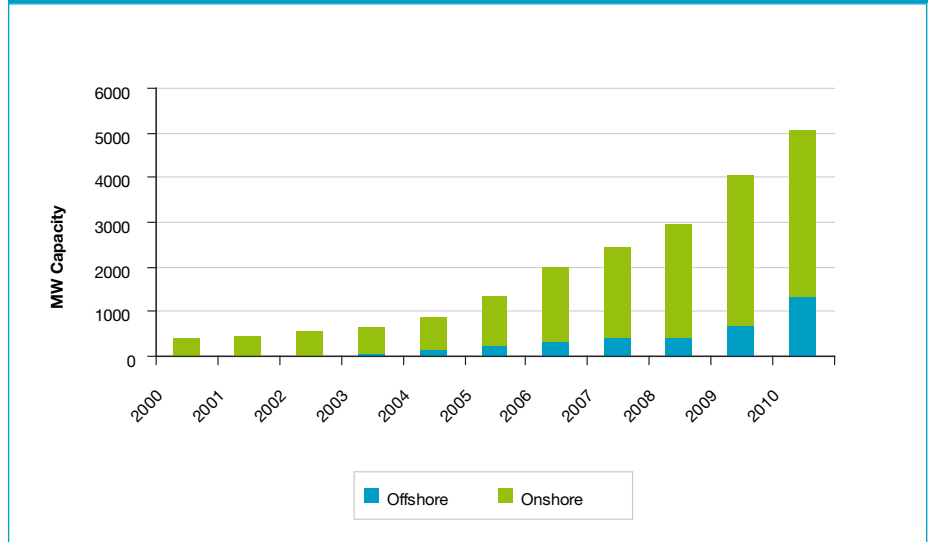
It took 14 years for the UK to reach 1GW of installed wind capacity, in 2005. The second and third gigawatts each took 20 months. The fourth GW quickly followed 12 months later in October 2009 and September this year saw the 5GW barrier being broken just 11 months on and 1 month ahead of predictions.

With an additional 1,104MW of onshore capacity under construction and a further 1,153MW currently being built out offshore, the UK has a record capacity of nearly 2.3GW in the construction pipeline.

Development forecasts for next year look very healthy, with between 1 and 1.5GW of onshore and offshore wind capacity scheduled to come online in 2011, bringing the 2010 target of 10% of electricity from renewables within reach.

As well as pushing UK wind energy over the 5GW mark, the 300MW Thanet site off the Kent coast now holds the title of the world's largest offshore wind farm, with the UK continuing to lead the world with 1,341MW installed.

Graph 3. UK operating capacity: reaching 5GW



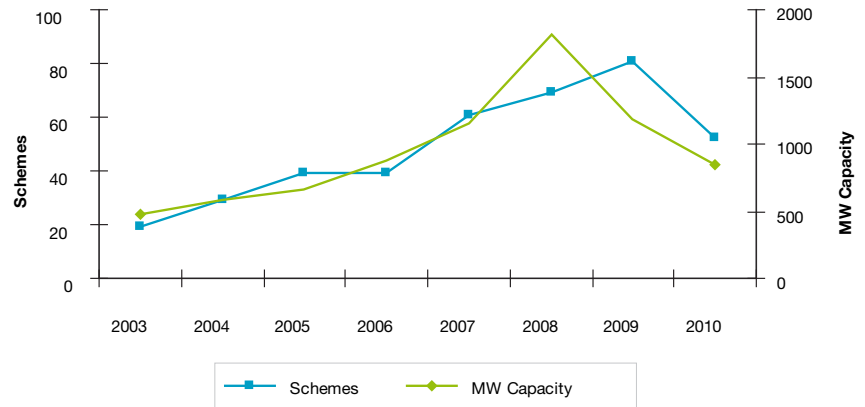
Consents

Onshore

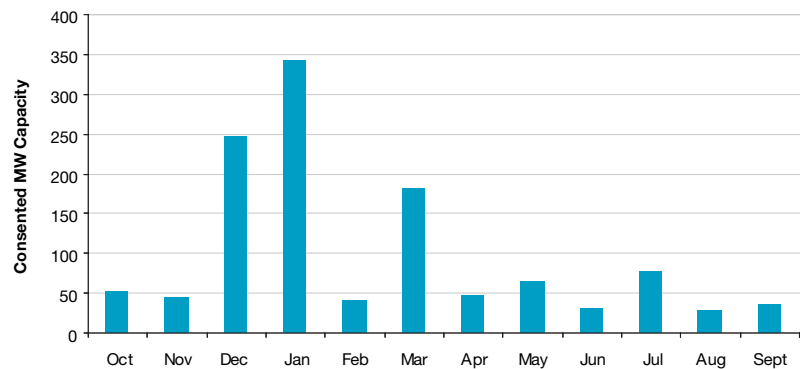
The last 12 months have seen steady growth in onshore developments with 1,194MW consented in the year to October; an increase of 157MW consented compared to the previous year. In total, 71 wind farms were consented in this period, the largest being the 118MW Muaitheabhal scheme on the Isle of Lewis and the 109MW Whitelee Phase II in East Ayrshire. Similar to previous years a significant proportion of progress in onshore wind has been driven by a relatively small number of larger sites, with 32% of total consented capacity coming from 5 projects totalling 385MW in the last 12 months. This compares to the same number of consents delivering 272MW over the previous year to October 2009.

The months of December, January and March saw the most capacity approved over the last 12 months, accounting for 772MW or 65% of consents. However, as Graph 5 shows, the capacity consented since April has remained stubbornly low at just 46MW per month on average; just 58% of the average capacity consented between April and September last year. This is against a rise in the number of decisions made over this period, up from 43 decisions over the summer of 2009 totalling 653MW to 52 decisions totalling 733MW this year.

Graph 4. UK onshore consented capacity 2004 – 2010



Graph 5. UK onshore consenting progress at the local level 2009 – 2010



This increase in determinations has therefore corresponded with a fall in consented capacity, and a lower rate of approval since April. It means that despite seeing a relatively high number of consents in January and March, the first nine months of 2010 have seen a slight fall in the volume of consented capacity.

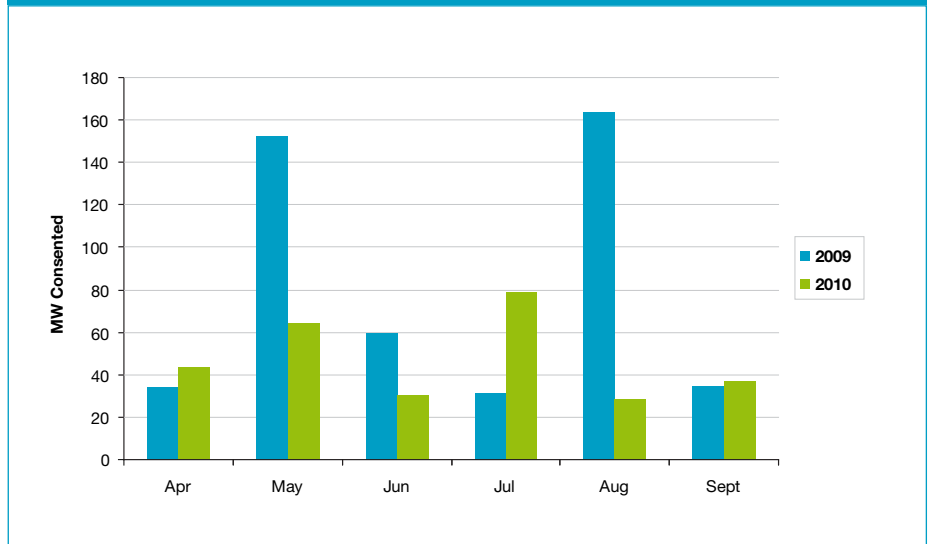
Assuming that projects progress through planning at a 2010 average rate of 94 MW per month, the industry will fall almost 80MW short of the capacity consented in 2009. However, if there is little improvement on the current rate of consents, we are likely to see a shortfall of almost 225MW against onshore consented capacity in 2009; an 18% reduction on 2009 consented capacity.

See the Review of Planning Performance on page 11 for further details on consenting across the different areas of the UK.

Offshore

There have been no offshore decisions for the second year in a row, meaning that the five projects totalling 2,260MW are still being held in the planning system. However as stated last year, the nature of the offshore licensing rounds naturally causes peaks and troughs.

Graph 6. UK onshore consents at the local level Apr – Sept 2010



Wind Energy in the UK: Current Status

Taking a snapshot look at the UK's wind energy development status on 30th September 2010, 5,094MW of wind capacity was operational in the UK, with 2,257MW under construction. A further 6,342MW was consented, awaiting construction with a total of 13,693MW consented, under construction or operational. A massive 9,699MW remain in the planning system awaiting determination. This figure continues to grow, up from 9,299MW in the system at the end of 2009 and 7,784MW at the end of 2008. This activity is broken down further in Tables 1 and 2 and Graph 7.

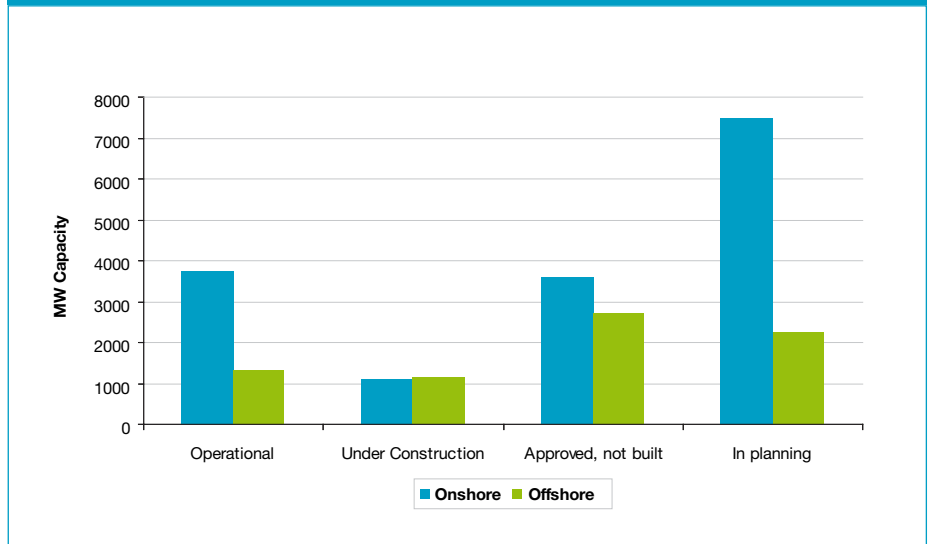
Offshore

As discussed on page 1, offshore operational capacity broke the 1GW barrier in the 12 months to October 2010, with 743MW of offshore wind coming on line over this period. Offshore installed capacity now stands at one third the level of onshore operational capacity and looks set to make inroads into onshore generation capacity year on year.

The volume of offshore wind capacity in planning also rose slightly from the 2,020MW recorded in planning at the end of September 2009. This is due to the formal submission of Westernmost Rough wind farm in the Greater Wash — expected to have an installed capacity of 240MW. The submission of Westernmost Rough brings the total offshore capacity currently awaiting determination to 2,260MW.

Following the completion of Thanet, Gunfleet Sands I & II, Robin Rigg and Rhyl Flats over the last 12 months, total offshore wind capacity under construction has fallen, with 649MW entering construction over the same period. Correspondingly, the quantity of offshore capacity awaiting construction has fallen slightly from 3,376MW at the end of September 2009, down

Graph 7. Current status of UK wind energy capacity



to 2,728MW at the end of the year to October 2010.

While there have not been any projects coming out of planning in the last couple of years, there has been much activity in terms of offshore leasing, supply chain development and manufacturing. The 32GW Round 3 announcement catapulted the sector into the limelight and sparked much development of the supply chain with Clipper, Siemens, Mitsubishi and GE all stating their intentions to invest in the UK's turbine manufacturing sector.

The Crown Estate issued an agreement to lease an additional 2GW of projects, as extensions to Round 1 and 2 sites in the Irish Sea, Thames Estuary and the Kentish Coast, in order to fill the potential slowdown in projects delivered between 2014 and 2016. Four demonstration sites off the North East and South East of England and East Coast of Scotland also obtained leases from The Crown Estate which will be critical for development of the research & development base which is so important for building a UK offshore industry.

Offshore construction has continued on Greater Gabbard, and has started at Sheringham Shoal, Walney I and Ormonde. When finished, these projects will add up to a further 1,153MW of offshore generation capacity. As such, although it took the industry a decade to hit our first gigawatt of offshore wind capacity, we should have the second within 14 months. Finally, the financial close on Gwynt y Mor off the North Welsh Coast was an important step for an industry where a consistent flow of approvals is critical to building confidence and attracting new sources of finance to the offshore market.

Onshore

Total capacity awaiting determination at the local level in England, Scotland and Wales has increased slightly over the previous figures taken at the end of September 2009. There is currently a total of 729MW awaiting determination at the local level in England, up from 690MW at the end of 2009 and 441MW in 2008. A further 656MW are currently sitting in planning in Wales, up from 567MW at the same time a year ago, while Scotland shows a 155MW rise, up from 1,064MW in 2009, to 1,219MW in 2010.

In contrast the number of projects awaiting decision in Northern Ireland has fallen in the last 12 months by 22MW, with 872MW currently in planning down from 894MW recorded in the system at the end of 2009 and 943MW at the close of 2008.

The number of projects awaiting decision at section 36 grew by 14% in the 12 months to October 2010, from 2,993MW on the 30 September 2009 up to 3,493MW at the end of September 2010. Over this period 6 projects (451MW) were decided while a further 9 projects (1,130MW) were submitted.

The volume of onshore wind capacity at appeal has fallen slightly across all jurisdictions, with only Scotland witnessing an increase in the number of projects at appeal. However, projects continue to be challenged in the courts, particularly in England, with two projects having faced Judicial Review in the 12 months to October 2010.

Submissions

Nine onshore Section 36 applications have been made in the last 12 months, with 4 having been submitted in the last 3 months of 2009. As a result, the submission rate for 2010 looks weak when compared with the 11 submissions made over the course of 2009. However,

	Schemes	MW
Operational	258	3753
Under construction	33	1104
Approved, not built	189	3545
In planning	263	7333

looking at historical records based on 12 month periods starting in October, the last 12 months shows the largest number of Section 36 submissions for four years, equal to the submission levels of 2005–2006. Overall, project submission rates at Section 36 have remained relatively consistent over the last five years, while the total capacity submitted continues to vary significantly from year to year. For example, the nine projects submitted in 2005–2006 totalled 737MW, while the 9 schemes submitted over the last 12 month period have an expected capacity of 1,130MW.

The last 12 months have also witnessed the most balanced spread of Section 36 submissions across the UK, with only 56% of new applications submitted in Scotland, down from 75% of submissions in 2008–2009 and 100% in 2006–2007. For the first time, almost half of total project submissions at Section 36 have been made in England and Wales, each having a 22% share.

The picture is mixed in terms of the submission rate at the local level. Submission rates across the UK as a whole show a substantial increase over the 12 months to October 2010, up 18% on project numbers in 2008–2009 and a 4% increase in submitted capacity with an all time record of 2,320MW submitted into the local planning system in the year to October 2010. However, looking at local submissions made in 2010 calendar year there appears to have been a significant slowdown with project submissions almost 40% down on 2009

	Schemes	MW
Operational	13	1341
Under construction	4	1153
Approved, not built	8	2728
In planning	5	2260
Crown Estate Agreements* comprising:	26	39738
Round 3 ZDA	9	32000
Rounds 1 & 2 extensions	4	2000
Scottish Territorial Waters	9	5738
Demonstration sites	4	tbc

*Crown Estate Exclusivity Agreement/Agreement to lease/Zone Development Agreements

levels and expected capacity down by as much as 53%.

This fall in submissions in England, currently at 71% of 2009 local submission levels, may be due to a number of issues, including planning uncertainty following the Government's proposed planning reforms and the removal of Regional Spatial Strategies. However, there also appears to have been a notable fall in the number of local submissions in Scotland, where submission levels are currently sitting at 65% of 2009 levels. While these figures do not provide a complete picture and there may be some delay in industry reporting, these figures, taken together with the rate of submissions in England, may point to other areas of current uncertainty including continued difficulties in obtaining bank finance and the forthcoming banding review of the Renewables Obligation.

A Year in Policy

General Election

The last 12 months have seen widespread policy activity, with May 2010 seeing a new party in Government for the first time in 13 years. While a change of Government is not a policy event in itself, with a high number of new MPs elected to parliament for the first time changes to policy positions are inevitable. The change of Government has brought with it some fresh thinking on a range of policy issues, and ambitions from the new Conservative-Liberal Democrat Coalition Government to be the “greenest Government ever”. The forthcoming 12 months will see Parliamentary Bills brought forward which will have wide-ranging impacts on energy and planning policy and some of these policy changes are addressed below.

Spending Review

Due to the large scale of Government borrowing, the new Coalition Government quickly instigated a process to seek out savings in Government spending with the aim of reducing the levels of debt. In response, RenewableUK submitted a document to Ministers and civil servants in early September in an attempt to detail all existing Government spending associated with the delivery of renewable energy and assess how essential this spending was for the delivery of the Government’s objectives for a clean and safe energy infrastructure.

Signals from Government are positive; £60 million funding for ports will be retained as part of the £200 million towards “the development of low carbon technologies including offshore wind technology manufacturing and ports sites” contained within Part 1.4 of the Spending Review published on October 20th. This is obviously a huge boon to the UK’s offshore wind industry, and

we look forward to hearing how the remaining £140 million will be invested in renewables deployment.

Industry is keen that any cuts in spending do not hold back the growth of the renewable energy sector, as investing in these technologies and the consenting and incentive mechanisms which support them will pay large dividends in the future. Not just in the clean energy that they will generate, but also in the jobs and manufacturing opportunities that they will create.

National Renewable Energy Action Plan

Building on the Renewable Energy Strategy published in 2009, the Government officially submitted a National Action Plan (NAP) for renewable energy to the European Commission in June 2010. This included a technology by technology breakdown of how the UK is seeking to meet the 2020 targets of 15% of all the UK’s energy to come from renewable sources. Industry was disappointed at the unambitious 2020 figure of 13GW of offshore wind deployment contained within the Action Plan. Industry believes that between 23GW and 32GW of offshore wind could be built and ambitions on this scale are needed to attract the jobs and investment that could come from a manufacturing industry.

Annual Energy Statement

The Government’s pledge within the Coalition Agreement to publish the UK’s first Annual Energy Statement was honoured in June 2010. This statement outlined 32 actions that the Government would take to deliver energy security, combat climate change and tackle fuel poverty. The statement included calls to raise the current EU target for emissions reductions from 20% to 30%

by 2020, plans to establish a Green Investment Bank following publication of the Spending Review, and proposals to re-consult on National Policy Statements for major infrastructure projects. There were also a number of actions regarding electricity market reform, marine and microgeneration.

Renewables Obligation (RO) Banding Review

A review of the RO level will commence in October 2010. This review has the potential to change fundamentally the amount of renewable energy built in the UK. Wind, wave and tidal do not have the same amount of experience as their conventional counterparts and therefore continue to require some level of support in order to become fully established. If the Government is serious about reducing carbon emissions and increasing security of supply, the Government should continue to support the technologies that will achieve this at the lowest cost.

Planning Act

The Planning Act passed into law in November 2008, enabling the creation of a new, streamlined determination process for major infrastructure projects on- and offshore. The implementation of the Act continued throughout 2009 and 2010, with the creation of the Infrastructure Planning Commission (IPC) and public consultation on draft National Policy Statements (NPSs).

In January 2010 and after the public consultation process, RenewableUK gave written and oral evidence to the Energy and Climate Change Select Committee working on the NPSs. Following the general election, these important statements of Government energy and infrastructure policy will now

go through further public consultation and Parliamentary scrutiny with formal adoption expected in late 2011.

The Infrastructure Planning Commission was formally inaugurated in April 2010. However, the publication of the new Coalition Government's Programme for Government on the 20th May 2010 confirmed the Government's intentions to abolish the IPC. Confirmation of this and other planning reforms are expected to be announced in the Decentralisation and Localism Bill.

The success of renewable energy development, and in fact any major infrastructure project, hinges on the confidence of the parties investing in that project. To create and abolish a planning authority in the same year does not give confidence that regulations are stable. RenewableUK is engaging closely with Government on these and other planning reforms.

Marine and Coastal Access Act

Implementation of the Marine and Coastal Access Act continued from its publication in 2009 through the whole of 2010 and is expected to influence marine planning and conservation for at least the next decade. The Marine Management Organisation (MMO) was also established, officially launching on the 1st April and taking on a wide range of powers including marine consenting, licensing, monitoring and enforcement. Secondary legislation governing its operation has been produced throughout 2010 and it will take on its full powers in April 2011.

Decentralisation and Localism Bill

Planned for November 2010, the Decentralisation and Localism Bill will affect the planning and consenting of renewable energy projects. It is likely that the Bill will consist of up to five key areas including Local Government Local Government Finance, Planning, Housing and London-specific issues. Forthcoming proposals contained within the Planning section of the Bill are likely to be of most interest to the industry, particularly the abolition of the Infrastructure Planning Commission for England and Wales, and the creation of a new Major Infrastructure Unit, to be contained within the existing Planning Inspectorate.

The formal revocation of Regional Spatial Strategies will be one among a number of proposals contained within the Bill which are likely to significantly change the local planning system in England. While there is little detail yet available, there are likely to be further proposed changes to the existing planning system, possibly including a shake up of both the national and local planning tiers. The creation of a new National Planning Framework for England, consolidation of existing National Planning Policy Statements into a single document and a shake up of the local development plans and appeal systems are all currently being considered by the Government.

Green Economy and Energy Security Bill

The Green Economy and Energy Security Bill is scheduled to enter Parliament in December 2010. This Bill may include provisions for the Green Investment Bank, as confirmed in the Spending Review

This body could support research and development as a grant giving organisation and could support or invest directly in projects to leverage more private funds into green initiatives.

Strategic Environmental Assessments

No less than three Strategic Environment Assessments (SEAs) were started or completed in the 12 months to October 2010. In March 2010 the Government launched an SEA for offshore energy, which would for the first time assess the environmental and socio-economic impacts of all marine energy technologies at the same time for English and Welsh waters and the continental shelf. Once complete, this work should inform the policies needed to allow wave and tidal energy projects in England and Wales. At about the same time the Scottish Government ran an SEA for offshore wind in Scottish Territorial Waters and the Northern Ireland Assembly assessed the potential for marine renewable energy in the waters off Northern Ireland.

Electricity Market Reform

A process of Electricity Market Reform was initiated in the autumn of 2010. This review seeks to examine the price of carbon, consider the implementation of emission performance standards and review the support mechanism for renewable energy. Similar to the RO banding review these policy changes have the potential to dramatically alter the way a low carbon economy is delivered. Maintaining the confidence of investors in current projects is crucial to ensuring the smooth delivery of any changes.

Wide-ranging Changes to the Regulation of the Electrical Grid

In the summer of 2010 numerous reviews and consultations were initiated to alter the way in which new grid infrastructure is regulated. The collective scope of these different consultations ranged across almost all parts of the grid system. Proposed changes include revisions to the Ofgem remit, changing the charges levied on generators to pay for their grid connection, the introduction of a new regulatory system for offshore grid connections, proposals for smart metering of individual electricity use, changes to the way generators gain access to the national grid and a review of the financial commitments required to establish a grid connection. All these changes create the perfect opportunity to review the entire grid system and ensure it is suitable for 21st century generation and the decarbonisation of the power sector.

Other Planning Reforms

Further changes to the terrestrial planning system continue to unfold across the different parts of the UK. The last 12 months has seen publication by the Scottish Government of consolidated Scottish Planning Policy, combining the previous series of Scottish Planning Policy Statements into a single, slimmed-down document. Consultation on revisions to Planning Advice Note 45 on renewable energy development, which supports this policy, has recently closed for consultation.

In Wales, the Welsh Assembly Government's proposed revisions to the renewable energy chapter contained within Planning Policy Wales closed for consultation in October and following discussions as to the potential for a more flexible approach to the implementation of Technical Advice Note

8 and development within the Strategic Search Areas. Meanwhile in Northern Ireland, the long awaited Supplementary Planning Guidance on Wind Energy development in Northern Ireland's Landscapes was finally published by the Northern Ireland Environment Agency (NIEA) after two years of industry discussions with Planning Service, NIEA, Ministers and officials in both the Department for Environment and the Department for Enterprise.

A Review of Planning Performance

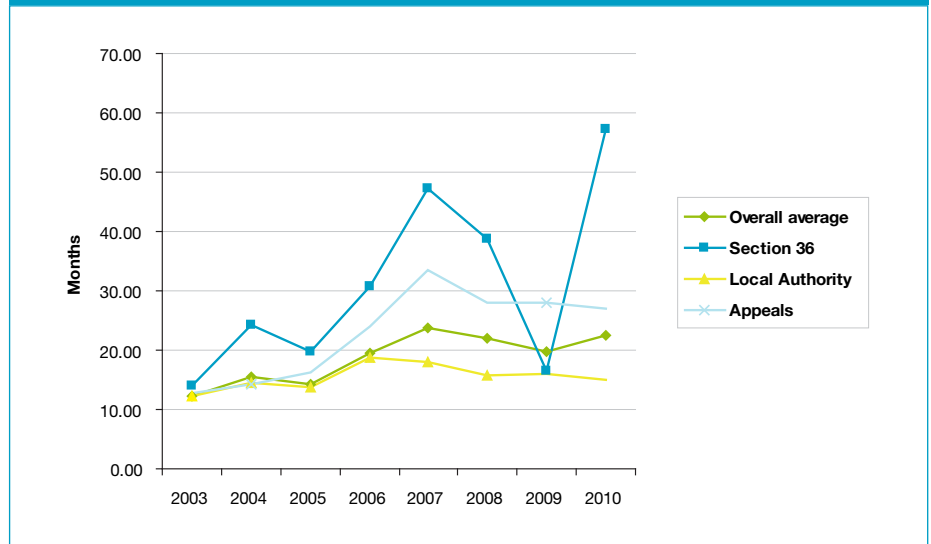
Offshore Wind Applications

No offshore planning consents have been granted this year, the second year in a row without a single consent. However, there have been positive developments from the Ministry of Defence (MoD) in the Wash with contracts signed on a new air defence radar allowing many MoD objections to be lifted in that area. There are also positive moves from National Air Traffic Services (NATS).

2010 has also seen big changes in the planning regime with the IPC opening its doors in April and lasting just five months before the Coalition confirmed that it would be merged with the Planning Inspectorate in 2012. A smooth transition is promised with the Decentralisation and Localism Bill key to ensuring this. While the Government has provided assurances that the fundamental principles of the single consenting regime will remain consistent with those established under the 2008 Planning Act and enabled through secondary legislation, much will rest on the content of the National Policy Statements, which are currently under further revision. Despite this turbulence a number of projects are currently at the pre-application phase (including two extension sites) with applications expected next year.

This year saw the MMO formally launched in April. Looking forward, a new marine licensing regime will replace the existing Food and Environment Protection Act (FEPA) and Coast Protection Act (CPA) licenses in April 2011. The Centre for Environment, Fisheries and Aquaculture Science (CEFAS) also released a strategic review of monitoring requirements associated with FEPA license conditions.

Graph 8. UK onshore average decision times



Onshore Decision Making

After falling between 2007 and 2009, the onshore overall decision time has risen slightly this year from just under 20 months to 22.5 months in 2010, looking at Graph 8. This figure, which covers Local Planning Authority decisions (LPA), Section 36 and appeal decision times, has remained fairly consistent throughout this period. However, a number of projects continue to have experienced significant delays, including the Pentland Road project in the Western Isles which was finally approved after 80 months.

Looking at the local level, average local authority decisions times across the UK have fallen, after industry data reported a slight increase in 2009. Current records show that UK average decision time at the local level now stands at just below 15 months, down from an average of 16 months reported at the end of 2009. The UK average time to decision at the local level now stands at its lowest level since 2005.

The industry may be further encouraged by findings that the time taken for projects to be determined in England has also dropped for the fourth year in a row and now sits at an average of approximately 9 months. Taken at face value this appears to be good news as 24 projects have already been decided so far this year, equal to the number determined in the whole of 2009 and nearly as many as the 25 determined at the local level in England during 2008.

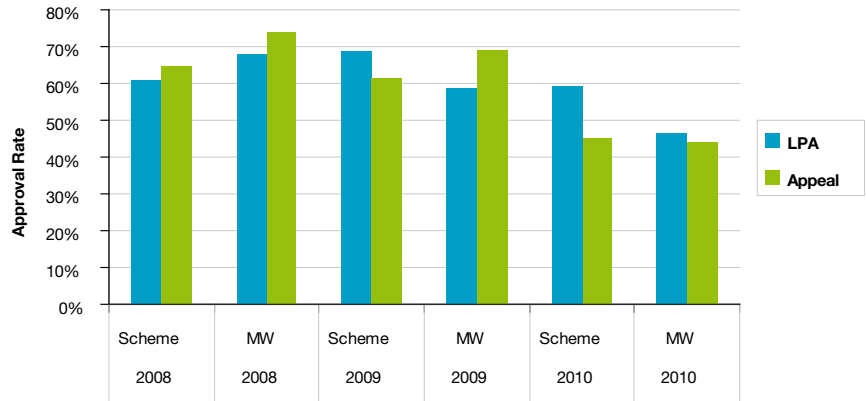
In Northern Ireland average decision times have almost halved so far this year, falling from just over 41 months in 2009 to 24 months in 2010. This is based on six projects decided in 2009 and four decided in 2010. In contrast, after falling for three years, the average Welsh decision time has shot up from 8.5 months last year to 21.5 months so far in 2010, due to the fact that Tirgwynt in Powys had been held in the planning system for 3 years.

Scottish average decision time has increased from 16 months in 2009 to just over 18 months in 2010 to date, but worryingly only 20 projects have been decided so far this year compared with 43 in 2009. Initial information suggests that this is not necessarily an indication that the planning system in itself is becoming more difficult, but that increasing site constraints may be causing additional delays to project determination. It is possible that we are beginning to see a slowdown in decisions coming forward in Scotland, as the larger sites become developed and applicants move into more difficult sites.

Average appeal decision time remains consistent at around 27 months and at the end of September there were 22 UK schemes awaiting a decision, compared to 56 in 2009. Around half of these schemes, totalling 159MW are in England.

The average Section 36 decision time for 2010 so far has increased to just over 57 months due to the original Muaitheabhal application finally being approved this year after spending over eight years (97 months) in the planning system and losing 100 turbines of the 133 originally submitted at the end of 2001. As with last year, too few projects have been decided at this level to provide any useful analysis. Five projects have been decided so far this year, two in England and three in Scotland, with 6 having been decided over the last 12 months.

Graph 9. UK onshore approval rates at the local level



Approval Rates: Section 36 Applications

Over the last 12 months there have been 6 decisions at section 36, with 2 projects determined in England and 4 in Scotland. Of these, one project has gained consent in England, while all 4 Scottish schemes have been approved, resulting in project approval rates of 50% and 100% respectively.

However, there has been just one section 36 approval in England over the past 9 months and three in Scotland. These figures sit in contrast to the 30

onshore projects currently awaiting decision under section 36, of which 23 schemes totalling 2,618MW are sitting with the Scottish Government. Around half of all these (13) were submitted prior to 2008, a sixth were submitted in 2005 and two projects date back to 2004. Given that installation of approximately 1GW of onshore wind capacity a year is needed to meet the UK's 2020 renewable energy targets, the lack of larger approvals may have serious consequences for delivery.

Approval Rates: Town and Country Planning Act (<50MW) Applications

Over the last 12 months, the UK has achieved an average local approval rate of 55% by scheme, and 44% by capacity. This demonstrates a significant fall against last year's approval rate, which experienced an average of 83% approved by project and 77% by capacity over the previous 12 months to October 2009. While it may be appropriate to treat these figures with some caution, as early concerns expressed in the 2009 State of the Industry Report regarding a fall in approval rates in the first 8 months of 2009 were largely alleviated by end of year results, current data shows a significant fall in the proportion of projects and total generation capacity approved across the UK in the last 12 months.

Looking at local approval rates by country, this downward trend in approvals is seen most markedly in England and Scotland while Northern Ireland has also seen a significant fall in the proportion of capacity consented over the course of 2009–2010.

England currently has a local approval rate of 41% by project and 34% by capacity. This equates to a fall of 29 percentage points in the rate of capacity approved at the local level in England, against a fall of 21 percent by project. While greater onshore wind capacity has been approved in England this year, relative to the last 12 months, this figure is dwarfed by the volume of capacity that has been refused over the same period.

Scottish local authority decision making over the last 12 months has also fallen significantly, with approval rates currently standing at a 63% by scheme and 56% by project; down from local approval rates of 95% by scheme and 76% by project over the previous 12 months. This fall in approval rates at the local level has coincided with a fall in decision-making in Scotland, based on a number of possible factors, as discussed on page 11 above.

Approval rates of 100% have been maintained in Wales at the local level, based on just 3 decisions totalling 40MW over the 12 months to October and 3 projects totalling 75MW over the previous 12 months. While the number

of decisions coming out of Welsh local authorities remain low, the industry is nonetheless encouraged by the fact that the local planning system is now making consistently positive decisions in line with national policy.

Northern Ireland Planning Service has approved just 29MW of a possible 80MW (6 projects) over the last 12 months, compared with 85MW consented of a possible 101MW over the previous year. As a result, Northern Ireland's approval rate has fallen by 47 percentage points over the last 12 months, down from 84% of capacity approved in 2008–2009 to just 37% of capacity approved in the 12 months to October this year.

Table 3. Breakdown of UK onshore wind approval rates by MW (Oct 2008–Sept 2009)

	England		Wales		Scotland		Northern Ireland		UK	
	MW approved	MW%	MW approved	MW%	MW approved	MW%	MW approved	MW%	MW approved	MW%
LPA	119	63%	75	100%	176	76%	85	84%	455	77%
Appeal	209	67%	39	46%	83	33%	–	–	331	53%
S36	–	–	–	–	272	52%	–	–	272	52%
JR	16	100%	–	–	–	–	–	–	16	100%

Table 4. Breakdown of UK onshore wind approval rates by MW (Oct 2009–Sept 2010)

	England		Wales		Scotland		Northern Ireland		UK	
	MW approved	MW%	MW approved	MW%	MW approved	MW%	MW approved	MW%	MW approved	MW%
LPA	142	34%	40	100%	192	56%	29	37%	403	44%
Appeal	329	59%	0	0%	103	58%	–	–	432	56%
S36	60	47%	–	–	325	100%	–	–	385	85%
JR	20	100%	–	–	–	–	–	–	20	100%

Approval Rates: Appeal

In contrast, the UK average approval rate at appeal has remained more stable, showing a slight upward trend over the last 12 months with 55% of projects which went to appeal being approved, against 47% approved last year. Capacity based approval rates also show a slight improvement, up to 56% this year, against an approval rate by capacity of 53% in 2008–2009. However, looking in more detail at the performance in England, Scotland and Wales only Scotland has experienced a rise in approval rates at appeal, based on a low rate of approval at appeal in the year to October 2009 and a historically high success rate at the local level which has limited the need for applicants to seek recourse through the appeal system in the past.

Approval rates at appeal in England have fallen slightly to 59% capacity approved over the last 12 months down from a capacity based approval rate of 67% in 2008–2009. This has resulted in a fall of 8 percentage points against the 12 months to October 2009 both in terms of the number of projects and the volume of generation capacity approved.

Graph 10. Onshore wind capacity in planning at the local level



It is currently too early to say whether the planning reforms proposed in England, including proposals to limit applicants' grounds of appeal and introduce third party rights of appeal, in addition to those changes currently underway across other parts of the UK will have a significant impact on the future patterns of decision making. However, given recently announced cutbacks on Government spending,

which are likely to fall particularly hard on local Government services across most parts of the UK, the industry has significant concerns for both the rate and consistency of local decision making on projects yet to come forward for determination.

Table 5. Breakdown of onshore wind projects & MW capacity in the planning system

	England		Wales		Scotland		Northern Ireland		UK	
	Scheme	MW	Scheme	MW	Scheme	MW	Scheme	MW	Scheme	MW
LPA	64	729	18	656	81	1219	47	872	210	3476
S36	2	124	5	671	23	2618	0	0	30	3413
Appeal	12	147	2	42	7	240	1	9	22	438
JR	1	6	0	0	0	0	0	0	1	6
Total	79	1007	25	1369	111	4076	48	881	263	7333

What Does the Future Hold?

Given the variety of factors influencing the rate of deployment, ranging from the state of the economy to adverse weather windows for construction, it is never easy to accurately forecast the speed of deployment. The availability of finance and the level of support from the Renewables Obligation will continue to play a significant role in how the industry unfolds.

The rate of progress towards delivering aviation radar solutions continues and the industry has made significant progress with a number of aviation stakeholders over the last 12 months. The Aviation Fund continues to make good progress in identifying new possible mitigation solutions and funding activities to progress radar solutions. Whilst some solutions are anticipated to come forward next year, other mitigation is likely to take a further 12–18 months.

Summer 2011 will see publication of the findings of a long awaited Raytheon study, which is currently nine months through its 18 month delivery programme. Implementation of the forthcoming solution will be reliant on industry support through the Aviation Fund. Given Government cutbacks in funding, whole industry support will become increasingly important in developing workable solutions.

With over 6GW currently awaiting construction and many held up due to planning and aviation related delays it is vital that suspensive aviation conditions and other forms of planning conditions are resolved and discharged quickly and do not unduly delay the delivery of the UK's consented wind energy capacity.

Table 6. Offshore consented projects – forecast timetable for delivery		
Wind farm	MW	Forecast completion
Ormonde	150	2011
Sheringham Shoal	315	2011
Walney I	183.6	2011
Lincs	270	2012
Teesside	90	2012
Walney II	183.6	2012
Greater Gabbard	504	2012
London Array I	630	2013
Gwynt y Mor	576	2014
West of Duddon Sands	500	2014
London Array II	370	TBC

The Role of Wind Energy by 2020

Industry forecasts indicate that we can expect up to a further 220MW of onshore capacity to be built out by the end of the year, totalling 600MW by the year's end and taking total onshore deployment within 30MW of the 4GW mark. By the end of this year the industry anticipates a total wind energy deployment figure of around 5.3GW.

Following on from the 653MW of offshore capacity delivered so far in 2010, we would expect to see Ormonde, Sheringham Shoal and Walney I completed in 2011 adding another 649MW, with a number of turbines at Greater Gabbard also being energised. Industry data suggests that we should also expect at least an additional 450MW of onshore wind deployment next year, bringing forecast wind energy deployment to around 1.1GW based on data known at the time of going to print. Due to delays in industry reporting we anticipate that installed capacity in 2011 may be as high as 1.5GW.

While total onshore deployment in 2010 will fall short of the 4,040MW anticipated in the National Action Plan published in June, the industry is confident that deployment rates between 2011 and 2013 will be in line with, or slightly higher than NAP projections. Any short term mis-alignment with NAP assumptions should therefore not be a cause for concern.

Looking ahead, industry sources are currently confident that 900–1,000MW per year can be deployed onshore in the UK over the years 2012, 2013, coming from 39 projects. Offshore delivery should remain at about 600–800MW each year until about 2014 at which point the industry should start ramping up as the supply chain comes on stream to help deliver the extension sites and the first Round 3 projects.

The industry continues to expect onshore wind to deploy 14–15GW by 2020. Offshore industry has committed to a pipeline of 48GW of offshore wind projects (32GW of which will come from Round 3). The delivery of 23GW of projects by 2020 would provide about a quarter of the UK's current electricity requirements. The industry believes that this growth in the offshore market alone would be enough to secure a healthy industry, approximately 60–70,000 jobs and secure three or four turbine manufacturing facilities in the UK. This should send a strong message of confidence to Government, as the wind industry both onshore and offshore demonstrates that the growth projections put forward in the National Action Plan are not only achievable, but are being delivered against at a time of economic austerity.

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