AGENDA

SELECT COMMITTEE - RENEWABLE ENERGY

Wednesday, 26 May 2010 at 1.30 pm Ask for: **Christine Singh/Sue Frampton**

Wantsum Room, Sessions House, County Hall, Maidstone Telephone: **(01622) 694334 or 694993**

Tea/coffee will be available before the meeting

Membership

Conservative (11): Mr K A Ferrin, MBE (Chairman), Mr C Hibberd, Mr D A Hirst, Mr R E King, Mr C P Smith, Mrs P A V Stockell and Mrs E M Tweed

Liberal Democrat (1): Mr T Prater

UNRESTRICTED ITEMS

(During these items the meeting is likely to be open to the public)

Item No		Timings*
1	Howard Johns and Chris Rowlands, Directors, OVESCO (Pages 1 - 2)	1.30 pm
2	Jane Ollis - Head of Sustainable Business, Business Support Kent (Pages 3 - 4)	2.30 pm
3	Paul Reynolds, Offshore Wind Development Manager, RenewableUK (Pages 5 - 6)	3.15 pm
4	Additional Documents are included as background reading for the meeting (Pages 7 - 66)	

EXEMPT ITEMS

(At the time of preparing the agenda there were no exempt items. During any such items which may arise the meeting is likely NOT to be open to the public)

Peter Sass
Head of Democratic Services and Local Leadership
(01622) 694002

Tuesday, 18 May 2010

This page is intentionally left blank

Howard Johns and Chris Rowland – Directors, OVESCo (Ouse Valley Energy Services Company Limited

OVESCo was set up in 2007 and is an Industrial & Provident Society for Community Benefit. The organisation works closely with Lewes District Council. (Further information about OVESCo is attached.)

Both Howard and Chris are members of Transition Town Lewes (Energy Group) and in addition, Howard is a chair of the Solar Trade Association and a director of Southern Solar. (Further biogs requested)

Suggested Themes and Questions (these have been sent to Chris for approval 7.5.10

1. Could you please tell us about OVESCo, how it was set up, its financial arrangements and the way in which you work with Lewes District Council.

2. Grants have been available under the Low Carbon Buildings Programme to help with financing energy efficiency and renewable energy technologies – now that these schemes are being phased out what, in your view, is the effect on consumers? Are any measures in place nationally or locally which specifically target the fuel poor?

3. Has this change in funding arrangements also affected suppliers? If so what is being done, or could be done to ensure that businesses remain strong and are able to thrive?

4. What alternative methods of funding might be available to organisations and householders to help with the capital costs of installing both energy efficiency and renewable energy systems?

5. Please could you tell us about your scheme to seek industrial roofspace on which to install community PV systems; how does this scheme work, what are the criteria and the financial arrangements for the scheme?

6. Could you tell us how your work with the Transition Towns Energy Group integrates with the carbon reduction aims of your District and County Councils?

7. In your view, what could be done to raise awareness of energy efficiency and renewable energy issues – and who should information/ training/awareness-raising be aimed at (e.g. planners?, householders?,) What form could this awareness-raising take?

8. In your view, what are the key areas that the public sector need to focus on in order to promote local resilience in terms of reducing reliance on fossil fuels and achieving carbon reduction aims in Kent?

This page is intentionally left blank

Jane Ollis - Sustainable Business Manager, Business Support Kent

Suggested themes and questions

1. Could you please tell us about BSK and the ways in which you seek to support Kent businesses.

2. Could you tell us about Energy Grant £500, its take up and whether there are any data on the way in which the grant has been used by businesses. Are there any measures of success in terms of increased energy efficiency or benefits arising from increased awareness?

3. Could you gauge from your dealings with Kent businesspeople how they perceive the pressure on businesses to respond to the demands of carbon reduction and sustainability, and how seriously companies are taking this challenge. What new practices are being (or could be) implemented to deal with these demands.

4. Are any of the businesses you work with themselves providers of services in relation to energy efficiency or renewable energy – and if so what are the issues pertinent to them? For example, according to the Department for Energy and Climate Change (DECC) "The demand for electrical microgeneration has been unprecedented" – are you aware of the impact on suppliers of the closure of the Low Carbon Buildings Programme scheme to electrical technologies in February, and the switch to Feed-in Tariffs?

5. KCC are leading on the SE Business Carbon Hub Online project with yourselves, the Environment Agency, Fire and Police Services – could you kindly tell us more about this project and its aims.

    - How is this project funded?
    - What will be the benefits to business of the Hub in terms of best practice, accreditation and so on?
    - How could KCC and its partners support businesses who achieve measures of sustainable practice as evidenced by any accreditation?
    - Could the public sector make use of the Hub in order to achieve financial and energy savings while meeting carbon reduction aims e.g. schools? What are the criteria for its use? Could, for example, GP practices benefit from it?

6. Could you tell us about the Kent Excellence in Business Awards. Currently there would seem to be no category linked directly to the county's aims to make the transition towards a low carbon economy – would there be any value in encouraging businesses to strive for greater energy efficiency, for example, in order to raise awareness and promote best practice in this area?

Paul Reynolds – Offshore Wind Development Manager, RenewableUK

Paul began his career as a buyer in the construction industry, following which he undertook an MSc in Environmental Technology at Imperial College, specialising in Energy Policy. Following research into past energy transitions at Imperial College, he joined RenewableUK early this year as the Offshore Wind Development Manager.

Suggested themes and questions

1. Please could you give us a brief overview of your organisation?

2. What are the implications of EU and National targets in relation to wind energy.

3. Can you provide us with an overview of wind development in the UK (on and offshore) with a focus on current and planned developments around/in Kent?

4. What is the current installed capacity and what contribution is wind energy making to current electricity demand in the UK? Can you highlight any issues specific to Kent?

5. Given the scale and capacity of offshore developments, and the constraints to onshore wind development in Kent – how significant do you believe the role of onshore wind and other renewables will be to the county and the country's future energy supply?

6. Various types of storage device are under consideration to mitigate the intermittency of wind power – how important is it in relation to future energy supplies, that these issues are resolved?

7. How can the business and employment opportunities resulting from, particularly offshore wind, developments be maximised for Kent?

8. Can you comment on the potential for wave/tidal energy around the Kent coast?

This page is intentionally left blank

OVESCo
OUSE VALLEY ENERGY SERVICES COMPANY LTD

Localising energy generation for Lewes District

Our Vision: To improve energy efficiency and generate local sustainable power in the Lewes District region.

Our current successes:

- **Running the Ri/REG domestic renewable grant scheme** on behalf of Lewes District Council since 2007. Assisting home owners with advice and issuing of grants for technology such as solar thermal, PV, GSHP's and wood fuel. Almost 200 grants have been issued to date many going to the fuel poor and those who could not normally afford micro generation for their homes. Applications include home surveys for the Council to calculate CO2 reduction.

- **Offering local energy efficiency advice** on behalf of Lewes District Council and sign posting the public to schemes for reduced cost insulation for cavity walls and lofts. Directing the fuel poor and elderly to help with boiler repair and home improvements.

- **Supporting Transition Towns Energy Groups** with events such as the Lewes and Brighton/Hove Energy Fairs held in 2008 and 2009. Helping organise the Transition Town Lewes 'Open Eco Houses Weekend' held in June 2009 - see. In addition OVESCo is in contact with other Transition Towns such as Totnes's TRESCO to share good practice and information.

- **Supporting Lewes District Council** at local events such as 'Isn't it Bonkers' in Peace haven in 2008 and Newhaven in 2009. These events raised the public awareness about climate change and positive actions individuals can take to reduce carbon emissions and their effect on the local environment. OVESCo is also working with the council on ways to generate local sustainable power.

- **Supporting the Town Partnership at events** such as 'ENGAGE' at Priory School in 2008 and 2008. This event allowed 1200 secondary school children to meet with local organisations with an emphasis on sustainability and education. To demonstrate the need to cut energy consumption OVESCo takes the TTL energy bike along for pupils to cycle and understand the importance of energy conservation at home.

- **Supporting local business** by encouraging the use of local accredited installers and suppliers. In doing so this strengthens the local green economy for the benefit of the community.

Our future aims:

OVESCo has converted to and Industrial and Provident Society for Community Benefit from a Limited Company by Garuntee. This will allow the company to access grant funding and raise a share issue where by the public can invest in local susainable power generation. The company is not for profit. Investment will allow OVESCo to progress one or more of the following projects:

- **Install a local community PV array:** OVESCo is now working with local business to install a large commnunity owned PV array in Lewes. The aim is to install a show case scheme and repeat the instalation on additional builds throurgout the district.

- **Build a local wind farm:** OVESCo is in talks with a local land owner to install one or more medium size wind turbines in the district.

- **Set up and run a water power project on the River Ouse:** Ovesco has undertaken fesability studies and initial site surveys to source one or more locations for water power on the River Ouse.

- **Support a local CHP plant:** OVESCo is supporting the Town Partnership with talks to engage with local business and discuss the potential for CHP in Lewes.

- **Setting up a Private Wire scheme:** OVESCo is working on ways to set up scheme to generate heat and power for a group of buildings on a Private Wire.

In addition OVESCo seeks to:

- **Purchase and sell local sustainable power:** OVESCo is working with a number of groups and in discussion with the local Council on ways to manage the buying and resale of localy generated electrictity.

- **Setting up a PAYES scheme for retrofitting homes:** OVESCo is working with Lewes District Council and an existing finance cheme to explore the potential for low cost loans to support home owners with costs retro fitting homes to reduce energy consumption.

- **Supporting a sustainable wood fuel industry:** OVESCo continues to work with conatcts at the Woodland Enterprise Centre to seek ways to promote the growth of sustainable woodland management as a fuel supply for rural areas.

- **Build strong relationships with other groups:** OVESCo is now part of the Ouse Valley Partnership, which includes Acation in Rural Sussex, Lewes District Council, East Sussex County Council, East Sussex Healthy Homes Partnership, University of Brighton, Plumpton College, Villages/Towns in the Ouse Valley. In addition OVESCo aims to support others working to the same goal.

- **Acting as a central hub for community energy projects:** OVESCo's links with the council, Transition Towns and others, allow the company manage projects to generate local sustainable power.

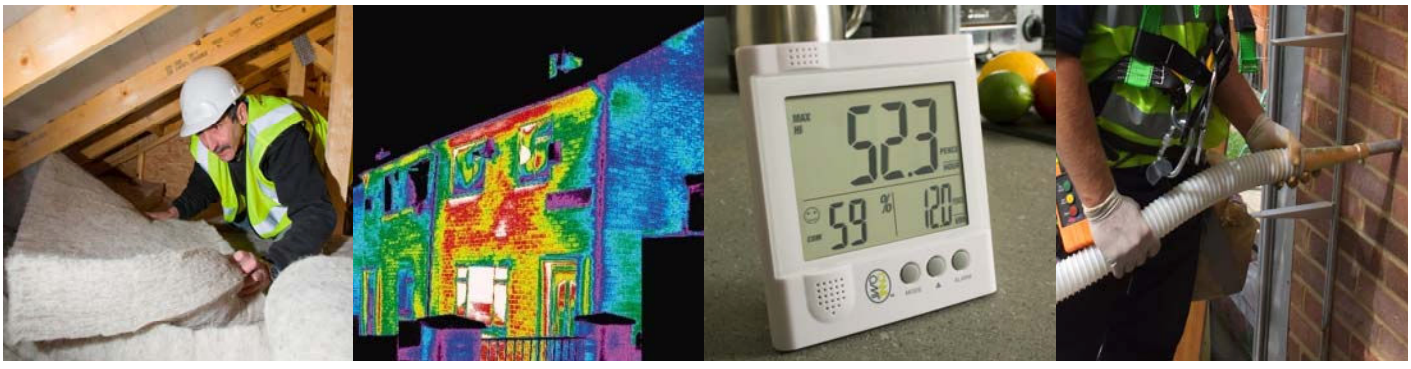
Further information on OVESCo:

The Ouse Valley Energy Services Company was set up in 2007 and has five company directors all members of the Transition Town Lewes Energy Group. The directors are: Chris Rowland, Howard Johns, Liz Mandeville, Dirk Campbell and Nick Rouse. More information on the company can be found at www.ovesco.co.uk . The company has and aims to maintain a good relationship with Lewes District Council, Transition Town Lewes and groups who seek to:

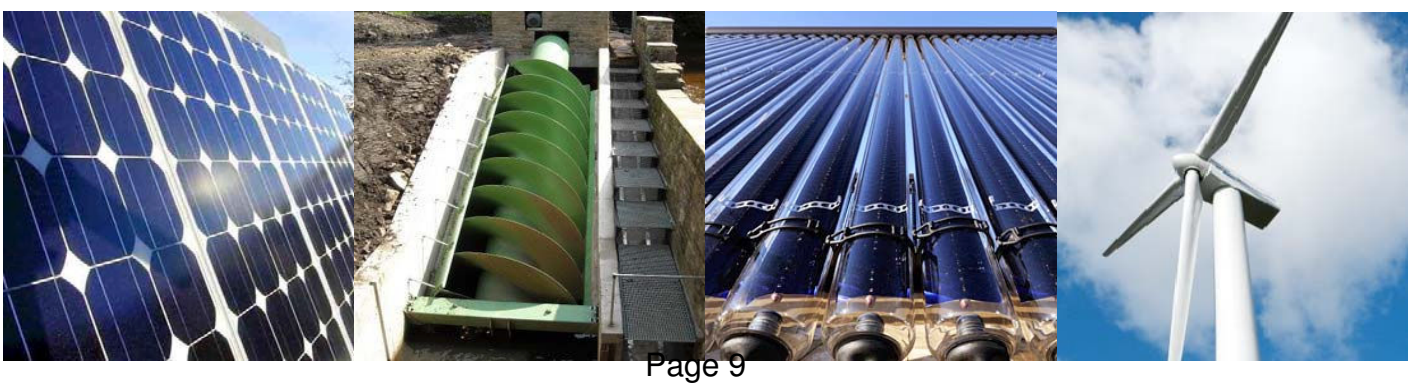
- Move away from reliance on fossil fuels.
- Generate sustainable power.
- Cut carbon and other dangerous green house emissions.
- Assist the fuel poor in reducing their energy bills and achieve a healthy standard of living.
- Engage with and seek to support the local public and the community.
- Seek to fund/support OVESCo achieve OUR VISION for a low carbon future.

For more information please contact OVESCo at the following:

OVESCo
2 Station Street
Lewes
East Sussex
BN7 2DA
Tel: 01273 472405
hello@ovesco.co.uk
www.ovesco.co.uk



OVESCo – Energy Efficiency & Sustainable Power



This page is intentionally left blank

Hot Topic Flashlight

Green opportunities for SMEs to cut costs and win business

June 2009

Key Messages

- The recession and the increasing focus on environmental issues such as climate change mean that now is a good time for SMEs to introduce environmental practices to help them cut costs and reduce their carbon footprint.
- SMEs recognise the value of green credentials in winning new business However, only 27% of SMEs have promoted the measures they have taken to customers, despite the potential business benefits of doing so
- Just over a third (36%) of SMEs in the South East have taken new measures specifically to cut energy, water or waste costs. 58% of SMEs have changed the way they use IT over the past 12 months.
- Over half of SMEs in the region would like their business to take more account of green issues. Perceived barriers are the cost of implementing changes and the knowledge of how to apply them

About this research

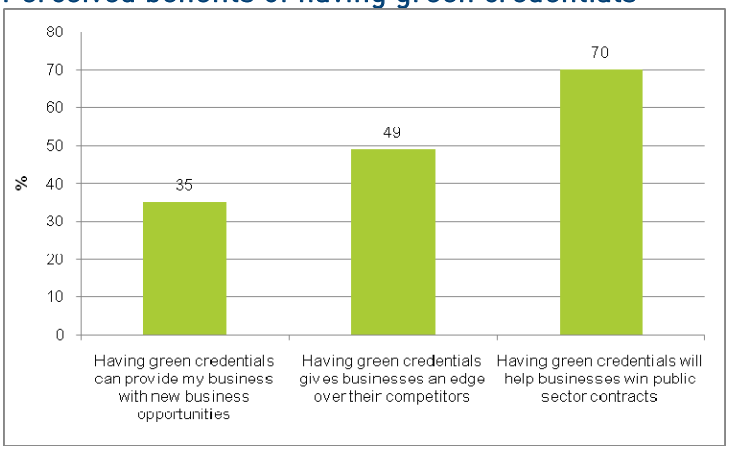
This Hot Topic Flashlight report explores sustainability from the different perspectives of:

- benefits of green credentials for business development
- measures taken by SMEs to cut costs
- use of ICT to reduce travelling
- appetite for introducing more sustainable practices.

Benefits of green credentials

Customer influence on sustainable behaviour should not be underestimated. 34% of SMEs report that customers in their industry *expect* them to have green credentials, especially those 36% who have recently made changes. However, only 27% have promoted their "green" measures to customers. This could represent a missed marketing opportunity among SMEs.

Perceived benefits of having green credentials



Source: South East Business Monitor, February /March, 2009. Unweighted base = 1,206

Those expected to have green credentials are most likely to be:

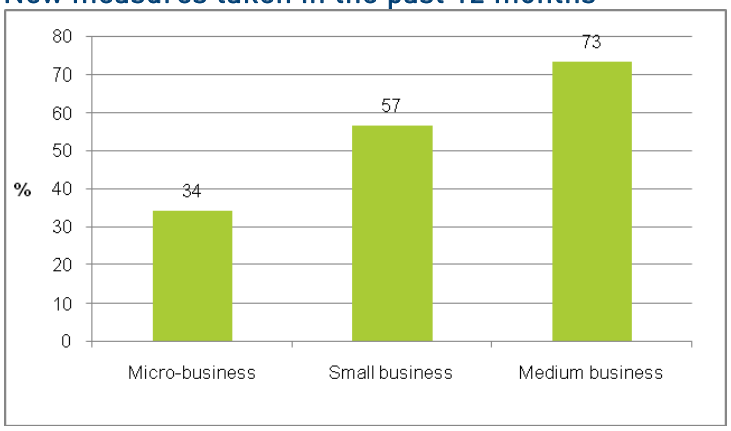
- Medium sized businesses
- Land based
- Manufacturing

For the full Hot Topic Spotlight report, email siobhan.smith@businesslinksurrey.co.uk

Cutting energy, waste and water costs

Just over a third (36%) of SMEs in the South East have taken new measures specifically to cut energy, water or waste costs in the past 12 months. Medium sized businesses are much more likely to have taken measures than their smaller counterparts.

New measures taken in the past 12 months



Source: South East Business Monitor, February & March 2009. Bases: Micro-businesses = 791, Small businesses = 292, Medium businesses = 123.

- Retail/ tourism more likely (42%).
- Manufacturing less so (29%).

Reasons for inaction

Almost two thirds of SMEs in the South East (62%) have not taken any measures in the past 12 months to cut energy, water or waste costs.

- 40% say that they have done all they can
- 11% think that it wouldn't save enough money

What green measures have SMEs taken?

The more usual actions are "quick wins" as they do not involve much cost outlay or forward planning.

However, it is worth noting that there are several actions that would be relatively easy to implement but have only been taken by a small proportion of SMEs, for example increasing recycling (5%) and reducing heating usage (1%).

Measures taken to cut energy, water and waste costs

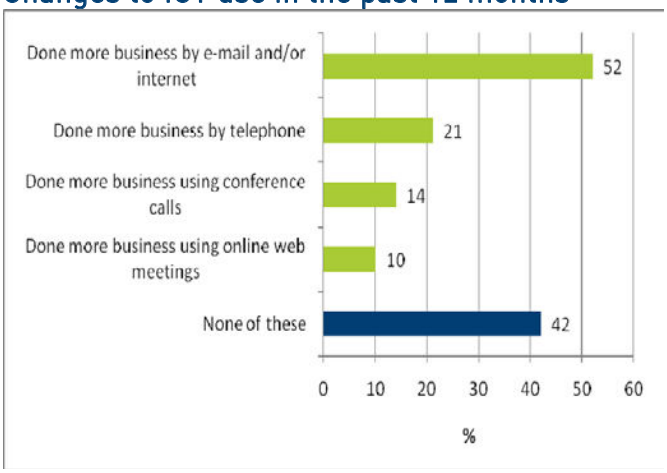
	%
Tried/Reminded staff to switch off lights	69
Used resources more efficiently, e.g. paper, printer ink	67
Monitored bills more closely	65
Changed to low energy light bulbs	64
Tried/Reminded staff to use less water	49
Less travelling	39
Changed to energy saving equipment	38
Changed waste, water or energy suppliers to get a better deal	35
Set up energy monitoring equipment	14
Recycling measures (e.g. more recycling)	5

Source: South East Business Monitor, February & March 2009. Bases:

More effective use of ICT

58% of SMEs have increased the amount of business they do using ICT, enabling a reduction in carbon emissions and travel related costs.

Changes to ICT use in the past 12 months



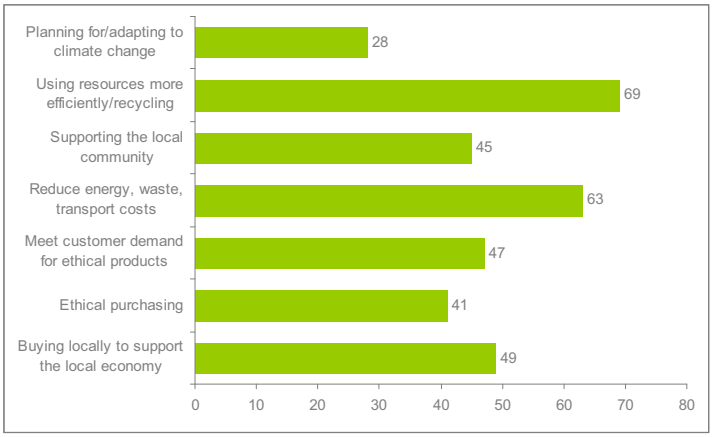
Source: South East Business Monitor, February & March, 2009. Unweighted base = 1,206

- 58% have increased their activities in at least one of these areas.
- 14% are making more conference calls and 10%, more online meetings, especially
    - Business/Financial services companies (25% and 18%).
- Medium sized business are much more likely to have changed the way they use IT.

Sustainability – environment and people

In a separate telephone survey of SME owners, also carried out in February 2009 for the South East Development Agency (SEEDA), Business Link explored changes which SMEs are making across a range of issues.

Measures taken for ethical reasons in the past 12 months (Annual Sustainability Survey 2009)



Source: Annual Sustainability Survey Feb 2009 (Business Link/SEEDA). Base = 422

The prime motivations for business sustainability still remain around reducing costs/carbon emissions and using resources better.

However, even in these difficult times, the importance of supporting the community and reflecting customers' increasing ethical sensitivities is shown. These are at similar levels to the 2007 Annual Sustainability Survey, while cost reduction activities have, not surprisingly, seen a large rise in take-up.

Those businesses taking the most action include:

- SMEs expecting to grow
- businesses with 11-49 employees,
- land-based businesses.

Sustainability and low carbon incentives

Further SEEDA/Business Link research into Low Carbon Incentive Schemes concluded that there is no single solution, and that knowledge is the key to action for SMEs.

SMEs' ability to implement measures

The survey asked SME owners how important different activities are to them, and looked at whether these activities have been implemented in the past 12 months. This indicates the changes which businesses are acting on. It also shows where SMEs have found it harder to make change in areas which they feel are important.

Important and achievable:

- Cost reductions and efficient use of resources score highly for both importance and implementation

Important but less achievable:

- Buying locally and supporting the local economy are aspirations which SMEs have not fulfilled as successfully as they would like.

Achievable but less important:

- Sustainable behaviour regarding staff recruitment and retention is outstripping its importance to SME owners, probably driven by legal requirements.

Business Link's Sustainability expert, Erica Russell says:

"This report shows just how much companies in the South East are already doing. However, it also highlights that there are still some major hurdles to overcome on sustainable transport, understanding the impacts of climate change on their business, and for many the move from simple, no-cost measures to more investment-based change"

This Annual Sustainability report is available from siobhan.smith@businesslinksurrey.co.uk

Business Link

These are highlights of the findings from the South East Business monitor. Every four months, at least 1,200 telephone interviews are conducted with business owners and senior decision makers of small and medium –sized enterprises (SMEs), based in the South East. This allows an ongoing "temperature check" of business issues and concerns. The survey results are weighted to reflect the size and structure of the region's SME population.

For the full Hot Topic Spotlight report (no. 25) on Green Opportunities for SMEs, email: siobhan.smith@businesslinksurrey.co.uk

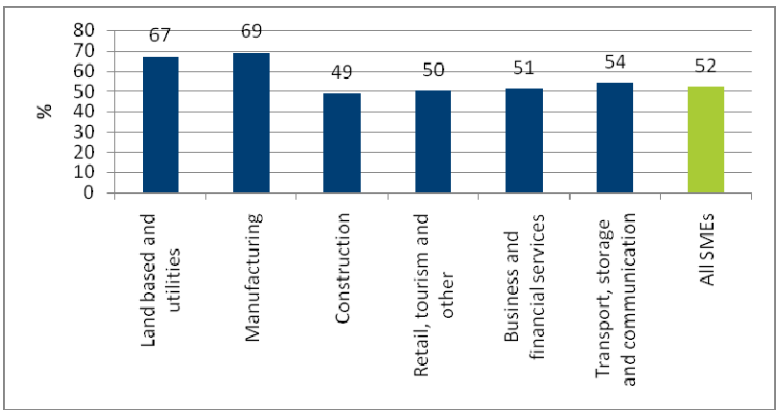
Other recent research reports include:

- Credit & Cash Flow in the Recession
- Stress in the Workplace
- Public Procurement
- Enterprise among the Over 55s
- Responding to the Economic Downturn
- Women's Enterprise

Future intentions

Over half of SMEs in the South East (52%) would like their company to take more account of green issues and sustainable development , equal to around 201,200 businesses in the region.

Would like company to take more account of green issues



Source: South East Business Monitor, Wave 13. Bases: Land based = 92, Manufacturing = 156, Construction = 171, Retail, tourism and other = 355, Business and financial services = 329, Transport, storage and communication = 95.

This was more marked among:

- medium and small SMEs (61% of each vs with 50% of micro businesses).
- Land based sector (67%)
- Manufacturing sector (69%)

The barriers which were identified included:

- cost involved in implementing the changes (30%)
- knowing how to apply measures (11%)
- knowing which measures would be best to take (8%)

Suggestions of support which Business Link could give to overcome these barriers included:

"They could provide us information as to what things my business does that would be considered not green. … They could email us this information."

"Make us aware of things that are around. What types of things are available? Small everyday items not big things like solar panels."

"They could provide more advice on these issues and how they can affect our business. What are the rewards to being more green?"

"Make businesses aware of what they mean and what other people have done. What does the context of green mean?"

"… give us more information on grants available to help us."

Business Link

Renewable Energy Select Committee – Supplementary Information for Members – Low Carbon Futures[1]

The Low Carbon Futures Project

KCC are leading on this project, which is funded by the South East Regional Development Fund Competitiveness Programme and runs from 2007 - 2013. The project promotes sustainable business operations, focussing on reducing carbon emissions. KCC is delivering the project with support from Business Support Kent, the Environment Agency, Kent Fire and Rescue, Kent Police and The Carbon Hub.

The four elements of the project are:

1. The South East Business Carbon Hub
2. Sustainable Transport
3. Accreditation
4. Providing a service which could be replicated elsewhere

The South East Business Carbon Hub

The website was created by The Carbon Hub Ltd and has been developed and tailored in conjunction with KCC.

What – An online resource for businesses that allows them to measure their carbon footprint (including energy, water, waste, and transport); create action plans to reduce carbon emissions and costs; work towards implementing an environmental management system (EMS); communicate with other businesses and access resources in relation to sustainable business.

Website https://southeastbusiness.carbon-hub.com

How - Businesses can apply or be invited to the hub. Following checks for eligibility (SME, <250 employees, turnover <50m Euro, based in the South East) the organisation can feature on the site. Service support will be provided via online seminars and businesses will be supported to use the site to its full potential by the Carbon Hub Advisor.

When – The site is now live with more than 70 businesses registered on a trial basis. It will undergo further development in June, following which there will be a push for more businesses to sign up.

Why - Businesses seeking to implement an EMS will find useful tools on the website. A sophisticated but simple reporting mechanism will be available in June to enable businesses to monitor their own progress.

[1] Information provided by Viviane Walker, Carbon Hub Advisor and Jennie Colville – Low Carbon Futures Project Manager

Through the Hub, businesses will be enabled to respond to increased pressure from clients, stakeholders and legislation to take effective, practical action to measure and reduce their carbon emission. They will also benefit from lower operational costs from improved efficiencies.

Sustainable Transport

This part of the programme will involve engaging with 150 businesses to help them develop sustainable mobility strategies. A Sustainable Transport Advisor will offer onsite travel audits to help businesses achieve reductions in carbon emissions by reducing travel. He will be working with the Travel Planning Team Leader to assist businesses to put together travel plans. Key to achieving sustainable transport aims are smarter working options such as teleconferencing, car sharing, flexible hours, working at home and teleworking.

Accreditation

By promoting an accreditation scheme (BS 8555 EMS), the Hub will enable businesses to be recognised for the environmental work they have undertaken and having better environmental credentials could give them a competitive edge and lead to new business.

The Future

The Hub intends to engage with 1,000 businesses in the South East over the 3 years of the project, enabling them to adapt to a low carbon economy; minimising negative impacts and maximising positive outcomes.

With further funding from the private or public sector, the hub will be able to continue to influence businesses beyond the lifetime of the project ensuring that reductions in carbon are achieved throughout the South East.

Relevance to National Targets

The project relates to National Indicators on carbon emissions reduction NI185 (KCC's own estate) and NI186 (Kent-wide) and to the strategic aims of adopting resource-efficient business practices as well as sustainable consumption practices. Extending the reach of the project could further help to achieve these aims.

Renewable Energy Select Committee – Written Evidence - Ross Gill - KCC Economic Strategy and Policy Manager

Subject: Low Carbon Opportunities for Growth

Summary:

This report introduces the final draft of *Low Carbon Opportunities for Growth*, a strategy for low carbon economic development for Kent. This was prepared in 2009/10 by KCC to sets out an overview of the economic opportunities presented by the need to reduce carbon consumption and by increasing demand for 'green' goods and services.

This report presents for the Select Committee the background to the development of the report together with a summary of its contents and sets out the anticipated next steps in taking it forward.

---

1. Introduction: the strategic context

1.1. Two key strategic documents produced in 2009 set the context for a greater focus on environmental economic opportunities. Firstly, *Unlocking Kent's Potential*, KCC's Regeneration Framework, recognised the need for a better understanding of the changing potential of Kent's economic sectors, and committed to the development of a Kent Sectors Strategy. Secondly, the draft Kent Environment Strategy sets out a vision for a low carbon economy, in which the county is seen as a preferred location for green technology companies and in which greenhouse gas emissions are consistently reduced.

1.2. At the same time, Kent Economic Board established a private sector led task and finish group in autumn 2009 focused on how the county can maximise the economic opportunities arising from the need to reduce carbon emissions.

1.3. Following the Regeneration Framework and the Kent Environment Strategy, *Low Carbon Opportunities for Growth*, attached with this report, was prepared in September 2009 as a discussion document contributing to the overall Sectors Strategy and supporting the work of the KEB task and finish group.

2. The need to focus on 'green' economic opportunities

2.1. *Low Carbon Opportunities for Growth* recognises that the impact of climate change, and the measures needed to mitigate it, will fundamentally change the way in which the economy works. For example, to meet Britain's targets for the reduction of greenhouse gas emissions, by 2050, we will need to produce each unit of economic output with just 10% of the carbon dioxide emitted today. At the same time, the need to protect the environment means an increasing regulatory burden on economic activity (which is likely to increase over time) and greater pressure on oil reserves will lead to higher energy and transport costs. Environmental pressures on business are therefore here, rising and unlikely to diminish.

2.2. However, these costs are accompanied by significant opportunities. For example, higher prices for conventional energy increases the commercial viability of renewables, greater fuel efficiency presents long term competitive advantages, and increased demand for measures to reduce carbon use creates opportunities for new products and services.

2.3. These opportunities and challenges are of course global, rather than Kent-specific, and local and national governments around the world are developing approaches to enable their areas to gain competitive advantage. It is therefore important to understand where Kent's likely advantage really lies and where we (as the County Council directly and with partner organisations) can usefully direct our efforts to make a positive difference.

3. Opportunities for Kent

3.1. *Low Carbon Opportunities for Growth* sets out the potential in a number of key sectors in Kent, focused on:

- Offshore wind
- Nuclear energy
- Carbon capture and storage
- Community heating systems and biomass
- Low carbon buildings and construction
- Clean technologies
- Electronics, ICT and remote working
- Business, consultancy and financial services
- Agriculture and land-based activities

3.2. In addition, the increasing pressure of environmental regulation and changing consumer demand mean that other parts of the economy not directly associated with environmental goods and services will need to reduce carbon emissions. The potential gains from the need for increased environmental sustainability are therefore broader than those captured by environmental technologies alone.

3.3. The report sets out a 'menu' of potential actions that KCC and its partners could take in support of the development of a lower carbon economy (see pages 23-27 of the report). These fall into four broad categories:

- **Increasing demand:** Actions through which public sector intervention can help to create low carbon markets in Kent
- **Support to business:** Actions through which the public sector can assist Kent businesses in developing innovative low carbon products and services
- **Developing skills:** Actions through which the public sector can ensure provision of the skills that a lower carbon economy will need
- **Increasing market knowledge:** Actions through which we can ensure that we have an informed awareness of the market for low carbon goods and services

3.4. The potential actions listed are intended to prompt discussion and debate at this stage, rather than being prescriptive. However, the draft of *Low Carbon Opportunities for Growth* has been subject to considerable discussion at KCC's Regeneration and Economic Development Policy Overview and Scrutiny Committee, the Regeneration Board and KEB's Maximising Green Market Opportunities task and finish group.

4. Next steps

4.1. Although a number of businesses and business support organisations have been engaged in the preparation of *Low Carbon Opportunities for Growth*, there is a need for wider private sector input. It is intended that an event bringing together a larger number of businesses will be organised for later in 2010, enabling fuller consultation to inform KCC's (and our partners') future support for sector development.

Background documents
Low Carbon Opportunities for Growth: A strategy for low carbon economic development in Kent (Version 6: Final draft), January 2010

Author contact details:
Ross Gill
Economic Strategy and Policy Manager
Research, Strategy and International Division
01622 221312 (7000 1312)
Ross.gill@kent.gov.uk

This page is intentionally left blank

Towards a Kent Sectors Strategy

Supporting Growth in the Low Carbon Technologies and Renewable Energy Sector

October 2009 (Draft)

Contents

1. Introduction

1.1 Low carbon technologies and renewable energy are recognised as a growing business sector and one in which Kent has tremendous scope to develop new markets and business opportunities linked to addressing environmental issues. It has been widely acknowledged by politicians and business leaders that investment supporting the development of a low carbon economy will be one of the key elements in a return to economic stability.

1.2 Moving to a low-carbon economy will involve a technological revolution. Traditionally this sector has included solutions for problems such as air, noise, pollution and contamination, as well as activities such as environmental analysis, waste management and recycling. More recently, the definition of the sector has been enlarged to reflect the drive to reduce greenhouse gas emissions and move towards a low carbon economy. It now includes renewable energy technologies as well as low carbon goods and services designed to reduce emissions.

1.3 The Regional Economic Strategy for the South East has recognised the potential of the sector in the region and has adopted progressive targets for renewable energy generation to support growth. Similarly, Kent Prospects, the economic strategy of the Kent Partnership, identifies as one of its priorities increasing sustainable enterprise capacity. The contribution that the sector can make to regeneration has also been recognised by the County Council in its own framework for delivering regeneration[1].

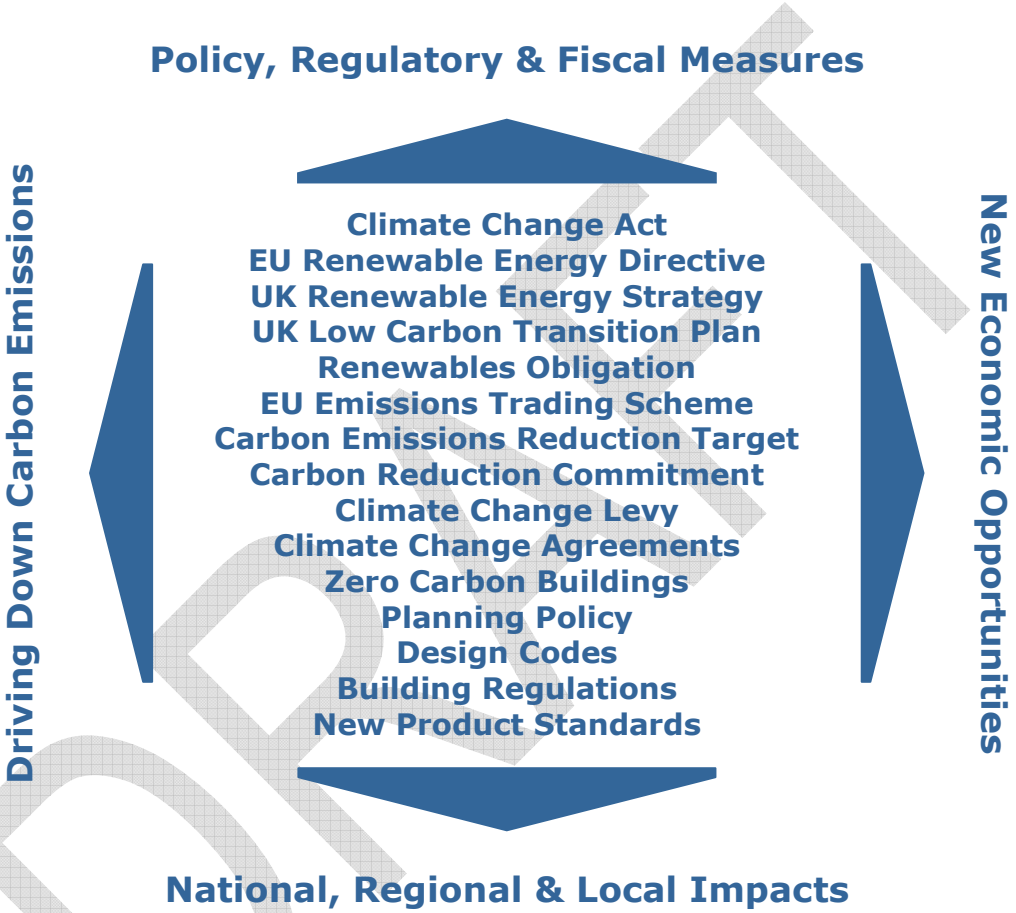
1.4 Kent has an established and growing eco-enterprise community of over 600 firms[2] and the county is well placed to grow green supply chains and benefit from new market opportunities. However, the capacity of eco-enterprises and supply chains needs further support and development reflecting that many businesses fall into the SME category. Nevertheless, there is strong potential to grow in areas such low carbon and renewable energy, water and energy efficiency, sustainable construction, waste management and allied to these areas manufacturing opportunities. The County's strategic position in relation to both London and Europe suggest Kent businesses can also capitalise on significant nearby markets for sector goods and services.

1.5 The County Council is keen to promote Kent as a great place for the sector to develop and back Kent business. Through this piece of work the County Council has identified seven key actions that it can take to assist growth and support new investment.

[1] Unlocking Kent's Potential KCC's Framework for Regeneration 2009-2020
[2] Kent Prospects 2007-2012

2. Growing a new technology based sector

2.1 Lord Stern's landmark Review in 2006 set out the economic case for action on climate change and for investment in a low carbon economy. The Government has acted on the advice by putting in place policy, regulatory and fiscal measures to reduce carbon produced by households, business, transport and power generation. A number of the measures are designed to incentivise change and give business the confidence to invest in low carbon technologies and bring new products and services to market. The key measures are highlighted in the diagram below and summarised in appendix 1.



2.2 The transformation in the way we manage carbon emissions offers the potential for new businesses to be created, for existing businesses to exploit new opportunities and for this to both create new jobs and support existing ones. The Government has said that reaching the 15 per cent renewable energy target by 2020 will require new investment of around £100bn. The UK low carbon and environmental goods and services sector was worth £107 billion in 2007/08 representing 7.4% of GDP. The sector is now growing fast employing over 881,000 people with renewables and low carbon industries accounting for 78% of this number. The sector is forecast to grow at 4-5% per annum over the next 8 years and create 400,000 new jobs over that period, many of these in renewable energy and emerging low carbon industries[3].

[3] Figures from The UK Low Carbon Industrial Strategy – Dept for Business Innovation & Skills/Dept of Energy & Climate Change, July 2009

Defining the low carbon technologies and renewable energy sector

2.3 The sector covers a diverse range of products, services and processes which broadly aim to provide superior performance at lower costs, reduce or eliminate negative ecological impact, and, improve the productive and responsible use of natural resources. Sector activity can be categorised under the following three classes:

Low carbon:

- Building technologies
- Alternative fuels
- Additional energy sources e.g. nuclear
- Carbon Capture and Storage
- Carbon finance
- Energy management

Renewable energy:

- Wind
- Biomass
- Solar
- Ground and air source
- Wave and tidal
- Hydro
- Renewable consulting

Environmental:

- Air pollution control
- Environmental consultancy
- Environmental monitoring
- Noise and vibration
- Contaminated land remediation
- Waste management
- Water supply and wastewater treatment
- Marine pollution control
- Recovery and recycling

2.4 In the South East the sector is represented by 6600 companies employing 113,000 persons and generating total sales of £13 billion in 2007/08. The largest sector industries in the South East are renewable energy, alternative fuels and building technologies. Renewable energy is the highest growth area based on employees and market value with wind, biomass, ground source and solar performing strongly. Overall the sector grew in the South East by 5% in 2007/8 with exports accounting for 11.6% of total regional sales[4].

2.5 There is a strong local dimension to the sector that reflects the characteristics of individual regions. Geographical location, natural resources, infrastructure, industrial base, supply chain and proximity of demand will influence development and provide a competitive advantage. A key challenge for Kent is to identify the potential it has to build confidence amongst investors.

[4] Figures from Low Carbon and Environmental Goods and Services: An Industry Analysis – Innovas for Dept of Business, Enterprise & Regulatory Reform, March 2009

Local knowledge about the energy efficiency of housing stock, information on sustainable building plans and the opportunities for low carbon and renewable energy generation can play an important role in influencing the sectors growth.

2.6 Reducing our dependency on high carbon fossil fuels, maintaining security of supply and affordability together with the need to replace redundant plant are putting the sector at the forefront of the UK's transition to a low carbon economy. In the future a far greater proportion of the our energy will come from low carbon sources with the mainstay of supply coming from renewable energy, new nuclear power and carbon capture and storage. Kent is uniquely linked to all three of these sources with major developments under construction or in planning. This offers the County good prospects for new businesses and jobs linked to sustainable energy technologies (*see section 3*).

2.7 The buildings we live, work and socialise in account for high proportion of the UK's carbon emissions, 27% in the case of our homes. Taking action on energy efficiency will create demand for low carbon goods and services. Increasing the energy efficiency of our buildings will reduce exposure to volatile fossil fuel prices, address fuel poverty issues and help meet carbon reduction targets. It will also benefit households and businesses alike by increasing disposable income and profit respectively to the advantage of local economies.

Case Study 1: West of England Carbon Challenge

The West of England Carbon Challenge aims to help organisations reduce their CO2 emissions in line with national targets. It challenges public, private and third sector organisations across the region to commit to making annual cuts in emissions to reduce their carbon footprint by at least 10% over the next four years.

The Carbon Challenge aims to help organisations reach this target and put them on track to comply with regulatory requirements like the CRC, prepare themselves for a low-carbon future, and play their part in addressing climate change. Signing up to the Carbon Challenge offers organisations:

1. Access to cutting edge, strategic thinking and practical advice on approaches to carbon reduction, making members well-placed to manage long term risks and respond to upcoming legislation;

2. The opportunity to make savings in energy, waste and money, based on rigorous assessment of their own carbon usage; and

3. The opportunity to position themselves at the forefront of an emerging low-carbon economy.

Any organisation can join the Carbon Challenge for free, provided they commit to making 10% CO2 reductions over four years and have one or more sites in the region. Members record monthly data on their site energy usage in a secure account on the Carbon Challenge website.

Launched on 1st May 2009, the Carbon Challenge is being delivered by Forum for the Future in partnership with the Centre for Sustainable Energy, GWE Business West and Business in the Community.

See www.westofenglandcarbonchallenge.org for further information.

3. Sector opportunities in Kent

3.1 The global market for low carbon goods and services is worth £3 trillion, and this is projected to grow to over £4.3 trillion by 2015[5]. The Government has committed £10.4 billion of investment over the next three years designed to support the low carbon economy and provide the foundations for strong growth of the sector in the future[6].

3.2 Kent has good potential to capitalise on this projected growth and is uniquely placed to offer businesses a wide range of opportunities and markets. These opportunities reflect the County's strategic location, the availability of natural resources such as wind and biomass, its designation as a growth point for housing and employment, connecting infrastructure and its network of well developed communities. The opportunities can be categorised by scale into national and regional development, community infrastructure and solutions for buildings.

National and Regional Development

- Offshore Wind Farms

3.3 The UK has Europe's largest offshore wind resource and one of the largest markets for development in the world. The Thames Estuary is one of three initial areas where projects are being developed around the UK coast and where the Crown Estates have issued licences to developers. The scale of development underway in this area (2GW) is significant and indicates that there is real potential to establish a focal point for the offshore wind industry. On average, 10 full-time jobs are sustained per MW installed[7]. The Thames Estuary is at the forefront of UK growth plans, which have recently been extended to include development in deeper waters off the eastern and southern coasts of England.

3.4 Kent's strategic position alongside the southern half of the Thames Estuary means that it is well placed to benefit from project development and the growth of a new technology led industry. The County has a well developed electricity grid for power connections and has been able to meet the need for port services to support construction. Kent ports are also able to provide bases for new operations and maintenance facilities representing a long term investment in the County and the creation of more than 100 new jobs. The value of this investment to Kent has been estimated at £544 million over the next 20 years[8] From this starting point there could be potential to grow related business and services particular around new skills and training but also component manufacturing to support the industry's growth in the UK.

3.5 There are three key developments that are beginning to give Kent an important link with the industry and from which the County could build up its credibility with the industry.

[5] Figures from The UK Low Carbon Industrial Strategy – Dept for Business Innovation & Skills/Dept of Energy & Climate Change, July 2009
[6] Building Britain's Future: Investing in a Low Carbon Britain – Dept Business, Enterprise & Regulatory Reform, April 2009
[7] Dept of Energy & Climate Change press release 30th March 2009
[8] Rationale for Kent County Council investment in the Port Ramsgate and the Offshore Wind Farm Industry – BBP Regeneration Ltd, April 2008

Kentish Flats Wind Farm – A completed development of 30 turbines serviced from Whitstable Harbour.

Thanet Offshore Wind Farm – A development of 100 turbines now under construction and using the Port of Ramsgate as its construction base and site for operations and maintenance.

London Array – A development of 271 turbines now proceeding with construction having started on major new substation at Graveney. They also plan to use Port of Ramsgate in conjunction with construction and as a base for operations and maintenance.

3.6 The scale of development, both offshore and onshore has made wind the fastest growing of the renewable energy industries in the UK. Capacity is a real issue for the supply side of the sector with turbines and key components almost wholly supplied from mainland Europe. The UK Government is keen to redress this situation and stimulate the growth of a UK industry to meet future demand. The role of the Thames Estuary as a lead growth point for offshore wind has created opportunities for Kent to host new industries. This potential has been recognised in a study for SEEDA looking at the impact of the London Array and other wind farms on the South East[9]. Locate in Kent has been working to promote the sector opportunities in Kent to European and International turbine supply companies.

- Nuclear Power

3.7 Kent hosts one of the UK's nuclear power stations at Dungeness. The existing station is expected to continue operating until 2018 and is one of 11 sites nominated for the construction of a new station. If selected the construction of Dungeness C power station is expected to take in the region of 5 years. Depending on the design selected between 1350 and 2500 jobs will be created during the construction phase. The power station would be expected to operate for 60 years with a workforce of 400-600 staff. The total number on the site is likely to be in the region of 1000 taking into account the operation and decommissioning of the A and B Stations. EDF currently run four year apprenticeships at Dungeness with 20 persons on the scheme. The estimated value of Dungeness to Kent is currently put at £30 million per annum[10] but this could increase with a new station and bring new business opportunities to the County.

- Carbon Capture and Storage (CCS)

3.8 The energy company E.on has proposed the replacement of their existing coal fired power station at Kingsnorth on the Isle of Grain with a new one designed to utilise CCS. This is a new technology to mitigate the contribution of fossil fuel emissions to global warming by capturing carbon dioxide at point of source and then permanently storing it away from the atmosphere. A study by E.ON has identified the potential for a cluster network connecting major emitters of carbon dioxide in the Thames Estuary. A central pipeline would carry the carbon dioxide to old North Sea gas fields where it would be stored.

[9] London Array: The Big Picture – Briefing paper to SEEDA on the potential for the development of the offshore wind energy in the UK and South East region by BBP Regeneration Ltd with Douglas Westwood and MDS Transmodal, November 2007

[10] British Energy

3.9 CCS technology is in the very early stages of development but if utilised and proven could lead to new sector businesses being started in the area. A recent study estimated that CCS technology could bring between £2 and 4 billion a year into the UK economy by 2030, and support between 30,000 and 60,000 jobs[11]. A decision on whether to proceed with a CCS enabled power station at Kingsnorth has been deferred for up to 3 years as a result of the economic downturn and a reduction in the demand for electricity. Current thinking is that the power station would be needed by 2016.

Community Infrastructure

- Combined Heat and Power/District Heating

3.10 Developing community scale heat and power plant is a way of reducing the emissions associated with fossil fuels. It typically involves generating or utilising an existing source of energy locally and supplying it to homes and businesses via a heat main and/or private wire network. This may involve developing purpose built plant to run on low carbon or renewable fuel sources, or it could involve making use of waste heat from power stations, industrial processes or incineration plant.

3.11 Schemes of this kind are widespread in countries such as Denmark and Sweden. Community heating technologies can be more reliable than conventional household boiler systems and can offer lower bills as well as cutting carbon emissions. The Government has already put in place incentive structures to encourage partnerships between compatible heat generators and users and to encourage the roll out of community heating infrastructure to support new housing development. This technology is likely to create new business opportunities for companies involved in the supply and servicing of heat networks.

3.12 The planned level of new housing and employment development in Kent over the period 2006-26 (137,000 homes and 125,000 new jobs) suggest that there is good potential to develop local community energy infrastructure. The major growth points at Kent Thameside and Ashford are the most obvious locations but other regeneration projects at Queenborough and Rushenden on the Isle of Sheppey and Sittingbourne town centre also offer good prospects. Work to evaluate the potential for this solution to be applied in connection with these development areas is already being undertaken. In addition there is the potential to roll out smaller projects for campus style developments or large buildings in multiple occupation. For example, the NHS has recently committed to heating its new hospital development at Pembury in Tunbridge Wells using a biomass fuelled plant.

3.13 Renewable biomass resources are available throughout Kent, which is one of the most wooded counties in the UK. Biomass resources can include coppiced wood, sawdust, arboricultural trimmings, energy crops, gas from landfills, sewage treatment and biodegradable wastes. Wood based resources are often processed into wood chips or pellets to increase flexibility and the range of potential applications. The County Council is currently developing a wood based biomass project to supply locally sourced wood fuels to schools and public

[11] AEA Group: Future of Coal Carbon Abatement Technologies to UK Industry 2009

buildings. Through this initiative it is hoped to support the development of local supply chains and stimulate the market for renewable heat in Kent.

Solutions for buildings

- Energy efficiency retrofit

3.14 As well as making changes to national, regional and local infrastructure to develop more sustainable and secure energy supply solutions, we also need to make changes to the buildings we live in and work from. Improving energy efficiency is one of the quickest ways to improve the performance of buildings, reduce emissions and cut energy bills. It is estimated that if all UK businesses undertook cost effective energy efficiency measures a collective saving of £6.4 billion could be made, equivalent to 2% of UK profits. Significant resources are now being devoted to delivering energy efficiency. For example, the CERT energy efficiency programme is expected to lever in total investment of some £3.2 billion for home improvement in the period 2008-11[12].

3.15 The action being taken in the UK and across the globe to increase energy efficiency is creating a significant demand for low carbon goods and services. There are 10 million homes in the UK without cavity wall and full loft insulation and a further 7m homes that require solid wall insulation. The cost of upgrading these properties is estimated at in excess of £5bn. In the region of 490,000 homes in Kent are in need of insulation improvements. Factor in business premises as well together with the demand for energy efficiency goods from the new build market and it is easy to understand the potential for growth in the sector. The demand for goods and services in Kent alone will be considerable but the County's strategic location with easy access to London and Europe suggest businesses in Kent are well placed to exploit other significant markets.

Case Study 2: Kirklees warm zone

Kirklees Council's Warm Zone offers help to every household in Kirklees to improve the energy efficiency of their home, including free loft and cavity wall insulation, regardless of household income.

The initiative aims to visit and assess 170,000 houses and it is anticipated that insulation will be installed in 53,000 lofts and 35,000 cavity walls.

The programme has financial support of over £20m confirmed over the next three years from Kirklees council, Scottish Power, National Grid, the Regional Housing Board, Scottish Power Energy People Trust and British Gas Energy Trust through the CERT programme. The scheme has economic, environmental and social objectives.

To date, Kirklees Council's Warm Zone has created 80 full-time jobs and saved approximately £1m a year on household energy bills. The overall economic benefit to the area is calculated at over £50m. It has helped to contribute to the Council's target of a 30 per cent reduction in community carbon emissions per capita relative to a 2005 baseline by 2020 and reduces fuel poverty in the area.

[12] Figures from The UK Low Carbon Transition Plan – Dept of Energy & Climate Change, July 2009

- Micro renewables

3.16 The market for micro renewables continues to grow driven by generation targets, new planning policy expectations and the application of design code standards in new development. There is also a growing demand from the occupiers of existing buildings seeking to further reduce their carbon footprint and reliance on fossil fuel sources. Kent is well placed to exploit this demand having a good range of renewable energy sources. The principle technologies where demand is growing are as follows:

Solar thermal
Solar photovoltaics
Wind
Biomass heating
Ground source heating and cooling
Air source heating and cooling

Future demand for micro renewables is likely to be further stimulated by the continued availability of financial incentives to prospective purchasers and the mainstreaming of technologies. The planned introduction of the Renewable Heat Incentive and 'Feed-in Tariffs' will be of particular benefit to smaller generators of renewable heat and electricity Providing a local environment in Kent that promotes the opportunities for investment, innovation, creativity and entrepreneurship will be crucial in taking advantage of the growing demand for renewables.

4. An action plan for supporting sector growth

4.1 The role of the County Council in providing leadership and direction for Kent can support the growth of the low carbon technologies and renewable energy sector. Taking action to set and influence strategic thinking, working on planning and regeneration initiatives, changing approach to procurement and engaging with partner organisations can all support sector growth. There are further opportunities for the County Council to make savings on the £xxx it spends each year on energy through energy efficiency measures and in doing so lead the way by example. It can also boost the demand for low carbon products and services as part of the £xxx billion it spends annually on delivering public services. Working jointly with other public sector partners in the County could multiply this effect.

4.2 In order to promote the growth and competitiveness of the sector in Kent, the County Council has identified seven key areas where it can take positive action. These action areas are set out in the table below.

	Taking Action to Support Low Carbon Technologies and Renewable Energy Sector Growth in Kent
1.	**Promote low carbon development** ▪ Work to make low carbon solutions the mainstay of growth and regeneration programmes in Kent and the County Council's own capital investment programme. ▪ Support the development of the sector in Kent through the County Council's own strategies, plans and community documents. ▪ Work alongside local councils in Kent to ensure that key local planning documents signpost the opportunities for low carbon development to private sector investors. ▪ Work alongside the developers of low carbon and renewable energy projects to maximise the economic and carbon reduction benefits for Kent. ▪ Through existing and new partnerships with Kent stakeholders work jointly on the delivery of projects which grow the market for low carbon technologies and renewable energy solutions.
2.	**Exercise powerful leadership and demonstration effect** ▪ Lead the way in Kent by developing and reshaping the County Council's services, buildings and facilities to become low carbon and resilient to climate change. ▪ Introduce a low carbon culture into the organisation that ensures the County Council's business is carried out in a way consistent with the aims of a low carbon economy.
3.	**Shape innovation and markets through procurement** ▪ Utilise the County Council's procurement power to influence

	supply chains and stimulate the demand for low carbon goods and services in Kent. ▪ Bring further weight to the above by facilitating a consortia of Kent councils and public sector organisations.
4.	**Work with employers and training providers to address skills gaps** ▪ Identify skill gaps and new training opportunities to support Kent people and businesses to meet the skills needs of the low carbon technologies and renewable energy sector.
5.	**Support innovation** ▪ Work with those who hold intellectual assets in Kent and are leading sector innovation to provide a stimulus for growth and to raise the profile of Kent as a preferred location for low carbon industries.
6.	**Stimulate the growth of low carbon businesses in Kent through community initiatives to reduce carbon emissions** ▪ Investigate the potential for the County Council to deliver a stock wide improvement programme designed to improve the energy efficiency of Kent homes and increase the take up of micro renewable energy technologies. ▪ Open the County Council's loan fund for energy and water saving projects (currently limited to its own business units) to other public sector organisations in Kent. ▪ Work more closely with organisations responsible for providing advice on carbon reduction to business, community organisations and the public to increase effectiveness and take up in Kent. ▪ Identify and bid for funding streams to support the reduction of carbon emissions in Kent including Central Government, Regional and EU initiatives.
7.	**Research and promotion** ▪ Build business confidence through targeted research and the publication of data that supports the case for sector investment in Kent. As a starting point profile the number and range of low carbon businesses currently operating in Kent including their specialism and location as well as their capacity and capability to meet the growth in demand for low carbon goods and services. ▪ Work with organisations responsible for inward investment and business advice in Kent to ensure that there is an evidence base of up to date information and to promote the opportunities in Kent.

5. Summary

5.1 The forecast growth levels for the UK over the next eight years indicate that the sector can make an important contribution to the Kent economy in a time of financial and economic uncertainty. Low carbon and renewable energy generation, energy efficiency and sustainable growth provide significant opportunities for investment and sector development in Kent. They also support the drive towards carbon emission reduction and help the UK meet its targets.

5.2 The County Council recognises that it can play a key role in supporting the growth of the sector which in turn can assist Kent's transition to a low carbon economy. By exercising its powers of leadership and influence, by utilising its financial resources and by joining together with others the County Council believes it can help to achieve this goal.

NPH/Draft/October 2009

6. Appendix – Key Policy, Regulatory and Fiscal Measures

Climate Change Act

The Act requires a 26% cut in carbon emissions by 2020 and an 80% cut by 2050. These targets are legally binding and will be supported by a carbon budgeting system which caps emissions over five year periods.

EU Renewable Energy Directive

The Directive requires 20% of the EU's energy requirement to come from renewable sources by 2020, and sets each European country a specific target. The UK target is 15% of total energy requirement which in delivery terms will mean that 30% of our electricity will need to be generated renewably.

UK Renewable Energy Strategy

The strategy sets out how the UK will meet its legally binding target to ensure 15% of our energy comes from renewable sources by 2020. Key to the strategy is putting in place mechanisms providing financial support including a new Renewable Heat Incentive and 'Feed-in Tariffs' to benefit smaller generators of renewable heat and electricity. Other measures will seek to clear away barriers to development, increase investment in emerging technologies and create new opportunities for individuals, communities and business to harness renewable energy.

UK Low Carbon Transition Plan

The plan sets out how the UK will become a low carbon country through reducing emissions, maintaining secure energy supplies, maximising economic opportunities and protecting the most vulnerable. Helping to make the UK a centre of green industry by supporting the development and use of clean technologies is a key part of the plan. Many of the measures such those linked to new power generation supplies, making our homes greener and our cars less polluting will support the economic transformation.

Renewables Obligation

The Obligation requires suppliers to source an annually increasing percentage of the electricity they supply from renewables. For each megawatt hour of renewable energy generated, a tradable certificate called a Renewables Obligation Certificate (ROC) is issued.

EU Emissions Trading Scheme (EU ETS)

EU ETS is a Europe wide scheme which aims to reduce emissions of carbon dioxide in heavy industries including electricity generation. The scheme is based on allowances and a price for the carbon that can be traded.

Climate Change Levy (CCL) and Climate Change Agreements (CCA)

The CCL encourages business and the public sector to improve energy efficiency and reduce emissions through a levy on the use of non-renewably sourced energy. A CCA is a negotiated agreement with the Government for additional

CO2 reduction targets. In return, businesses meeting these targets receive an 80% discount on CCL.

Carbon Emissions Reduction Target (CERT)

The Carbon Emissions Reduction Target places an obligation on energy companies to take steps to ensure that the amount of CO2 emitted from homes is reduced.

Carbon Reduction Commitment (CRC)

The CRC is designed to deliver carbon emissions reduction and cost savings in the service sector, public sector and other less energy-intensive industries. The CRC is a mandatory cap and trade scheme, targeting emissions not covered by EU ETS or a CCA and includes supermarket chains, hotel chains, office-based corporations, government departments and large local authorities.

Zero Carbon Buildings

The Government wants all new homes built from 2016 to be zero carbon (zero net energy consumption and zero carbon emissions annually) with all new public buildings to follow from 2018 and non-domestic buildings from 2019.

Planning Policy

Planning policies requiring new buildings to adhere to design codes and meet a proportion of their energy demand from on site renewable energy generation are now an integral part of Local Development Frameworks.

Design Codes

Design codes such as the Code for Sustainable Homes and the Building Research Establishment's Environmental Assessment Method for non domestic buildings, have been accepted nationally as the standards to guide the design and construction of sustainable buildings.

Building Regulations

Revisions to the Building Regulations are driving the adoption of new low carbon technologies and construction methods. Planned revisions at 2010 and 2013 will put the UK on the pathway towards zero carbon development.

New Product Standards

Higher product standards are being introduced. For example, incandescent light bulbs are to be phased out by 2012.

The Kent Prospectus

A Place to Grow the Offshore Wind Farm Industry in the UK

Locate in Kent
Perfect for Europe. Perfect for Business

thanet district council

Kent County Council

Foreword

The UK has one of the largest offshore wind resources in the world and an estimated 33% of the total European offshore wind resource. Projects having an installed capacity of 8GW are already planned with the first developments complete and others now under construction. The UK Government has also confirmed that it wants to develop a further 25GW of capacity by 2030.

The Thames Estuary is a key development area for the UK where more than £5 billion is being invested in projects over the next 5-10 years. These projects need local support to succeed. Kent County Council, Thanet District Council and Locate in Kent have joined together to offer the offshore wind industry that support and establish Kent as an important centre in the UK's expansion plans.

We recognise that for the UK to successfully grow its own offshore wind industry the supporting infrastructure and development opportunities must be available. Our region is well placed to meet these demands and occupies a strategic location in the South East of England close to wind farm development areas and with a high degree of national and international connectivity. We believe Kent has the potential to grow into a leading UK centre and we invite you to share in that growth.

January 2010

Cover photos from the left:

Port of Ramsgate
Kentish Flats © Vattenfall
Service vessel at Whitstable Harbour
Kentish Flats © Vattenfall

Contents

1. Introduction

The UK Government has very ambitious plans for the development of offshore wind farms in its coastal waters involving up to 33GW of new installed capacity by 2030. The plans reflect the need to provide secure and sustainable solutions for future UK energy supply and to meet the expectation set by the European Union that 20% of all energy should be renewably sourced by 2020. Member states have been set their own targets as part of achieving this expectation with the UK target set at 15%. More than 30% of UK electricity will need to be generated from renewable sources to meet this target with a significant proportion of that coming from offshore wind.

The Government is committed to supporting large-scale investment in the renewables sector and providing direct financial support for development of the offshore wind industry. This support extends to helping the establishment of a UK based supply chain and manufacturing sector, support to stimulate investment in UK ports, and, support for next generation technology development and demonstration.

In 2008 the UK overtook Denmark as the world number one for installed offshore capacity. The Thames Estuary is one of the three areas leading the first wave of UK development with 2GW of installed capacity. The significant scale of development within this area suggests that there is real potential to establish a focal point for the offshore wind industry.

Kent enjoys a prominent position in South East England with an extensive coastline extending alongside the southern half of the Thames Estuary and around into the English Channel. The areas connectivity and multi modal transport options offer real development advantages. We believe Kent is best placed to meet the needs of a growing technology led industry and recognise that these centre on port services, construction and assembly facilities, manufacturing plant, and, operations and maintenance bases. This prospectus seeks to highlight what Kent can offer together with the strengths of the region that make it an exceptional place in which to invest. Overleaf you will find the commitments we are making to support the growth and make Kent a county of choice for the offshore wind industry.

Our Commitments to the Offshore Wind Industry in Kent

1. **A joined up approach**

We will work together and with others to support the development of the offshore wind farm industry in Kent

2. **Help for developers**

We will work to better understand developers requirements and provide help to ensure we mutually benefit from the development process

3. **Inward investment**

We will work to raise awareness of the opportunities for development in Kent particularly those linked to the growth of a UK supply chain and provide support to investors

4. **Skills & training**

We will work to skill local people and ensure the Kent workforce is capable of meeting the requirements of a growing new industry

5. **Enabling infrastructure**

We will work to enable the provision of infrastructure required to support or progress development where this is practical

2. A strategic location for wind power growth and development

The eastern seaboard of England enjoys shallow waters and strong wind resources extending far into the North Sea making it a very suitable location for the development of offshore wind farms. The Crown Estate, which owns the UK seabed, has identified strategic locations along the eastern seaboard where development can take place. The Thames Estuary and the Greater Wash, which are around 140 nautical miles apart, are two of the first areas to be developed with leases awarded by the Crown Estates following successive bidding rounds. In the first bidding round in 2001 projects were limited to 30 turbines. One of the very first schemes to be built under this round and become operational was the Kentish Flats project in the Thames Estuary.

The Kentish Flats Offshore Wind Farm

Project Description:	Kentish Flats consists of 30 x 3MW Vestas V90 Wind turbines and is located 8km off the North Kent Coast at Herne Bay & Whitstable. The main export cables come ashore at Hampton Pier, Herne Bay and run 2.5km inland to an existing substation where connection to the National Grid distribution network is made.
Construction:	Construction of the Kentish Flats Offshore Wind Farm commenced in August 2004 and was completed at the end of August 2005. The wind farm became operational in September 2005.
Cost:	Overall project cost: £105,000,000
Ownership	The project was initially developed by Grep Marine UK but is now owned by the Swedish utility company Vattenfall.
Operation & Maintenance	Kentish Flats is operated for Vattenfall by Vestas Offshore. A service centre has been established at Whitstable Harbour from which operation of the wind farm can also be remotely monitored.

VATTENFALL

Kentish Flats is a very important project which has helped to highlight Kent's potential to host wind farm support services and in the longer term play a role in the growth of a UK based offshore wind industry.

In 2003 the Crown Estates awarded leases to much larger projects following a second round of bidding by developers. Details of the Thames Estuary projects, which have all now entered the construction phase, are set out in the table below (*see also map 1*).

Wind Farm	Location	Turbines	MW	Status	Developer
Thanet Offshore	Thames Estuary	100 Vestas 3MW	300	Under construction / completion 2010	Vattenfall
London Array	Thames Estuary	271 Siemens 3.6MW	1000	Phase 1 (175 turbines) under construction / completion 2011	DONG Energy / E.on / Masdar
Greater Gabbard	Thames Estuary	140 Siemens 3.6MW	504	Under construction / completion 2011	Scottish and Southern Energy / RWE npower
Gunfleet Sands I	Thames Estuary	30 Siemens 3.6 MW	108	Under construction / completion 2010	DONG Energy
Gunfleet Sands II	Thames Estuary	18 Siemens 3.6MW	64	Under construction / completion 2010	DONG Energy

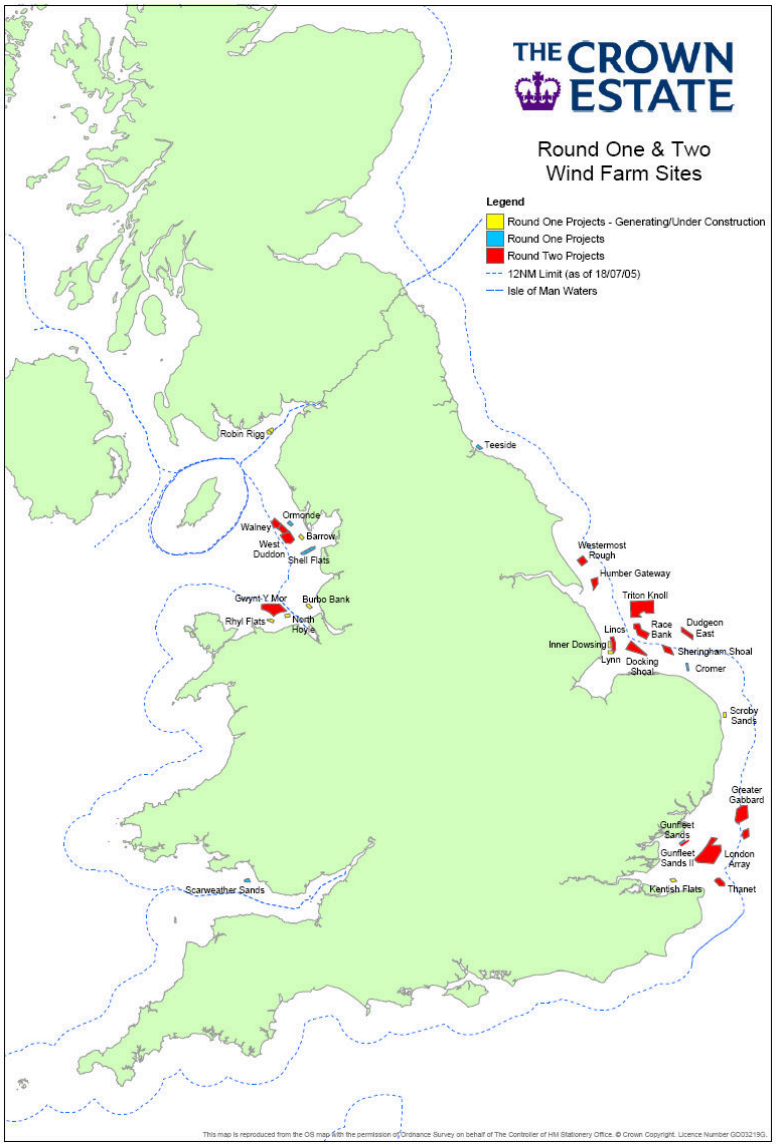
Both the Thanet Offshore Wind Farm and the London Array have chosen to use the Port of Ramsgate in East Kent as a base during the construction phase and the location for their future operations and maintenance facilities. This commitment is bringing new long term investment and jobs to the port and the construction of state of the art facilities from which to maintain and operate two of the UK's largest offshore wind farms.

In terms of further development opportunities for round one and round two projects, the Crown of Estates has offered to extend leases to 50 years where this is not already the case. This will allow operators to plan for re-powering of their projects with new turbines. The Crown Estates has also offered operators the opportunity to bring forward proposals for extending these projects. A number of the Thames Estuary operators are known to be interested in taking advantage of this offer which will further strengthen the areas position as a centre for the offshore wind industry. It could also be advantageous to suppliers looking to establish facilities in the UK as the industry gears up to the challenge of building projects in deeper coastal waters.

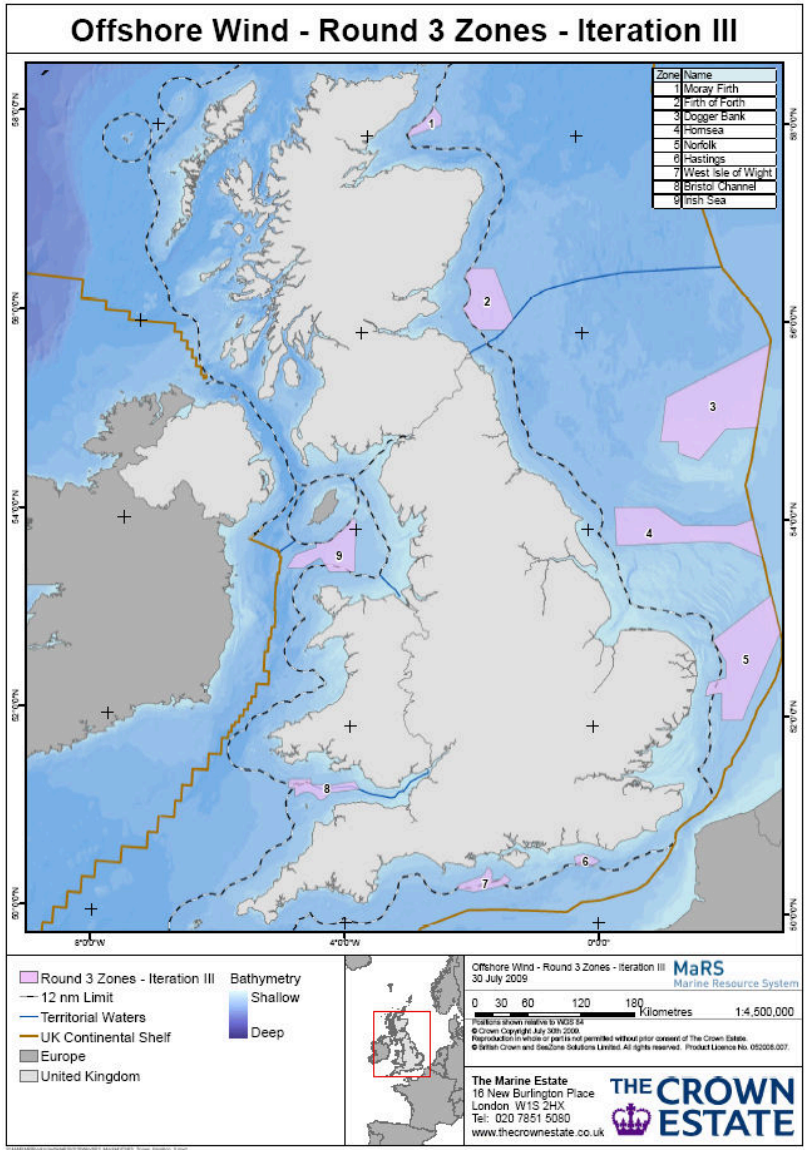
The next tranche of offshore wind development in deeper coastal waters is covered by the Crown Estates third round development programme (*see map 2*). This is now at an advanced stage with the developer selection process complete. It is intended that this round will bring forward projects in deeper coastal waters with the largest of the new development areas being in the Southern North Sea.

The latest round confirms the significant level of UK ambition to grow offshore wind towards 33GW of installed capacity by 2030. Kent is well placed to support this expansion and can offer a strategic location capable of hosting support services and supply chain businesses. We firmly believe our region can play a key role in supporting the delivery of UK offshore wind.

Map 1


THE CROWN ESTATE
Round One & Two Wind Farm Sites
Legend
Round One Projects - Generating/Under Construction
Round One Projects
Round Two Projects
12NM Limit (as of 18/07/05)
Isle of Man Waters
Robin Rigg
Teeside
Ormonde
Walney
Barrow
West Duddon
Shell Flats
Westermost Rough
Humber Gateway
Triton Knoll
Gwynt Y Mor
Burbo Bank
Rhyl Flats
North Hoyle
Lincs
Race Bank
Dudgeon East
Inner Dowsing
Lynn
Docking Shoal
Sheringham Shoal
Cromer
Scroby Sands
Greater Gabbard
Gunfleet Sands
Gunfleet Sands II
London Array
Scarweather Sands
Kentish Flats
Thanet

Map 2

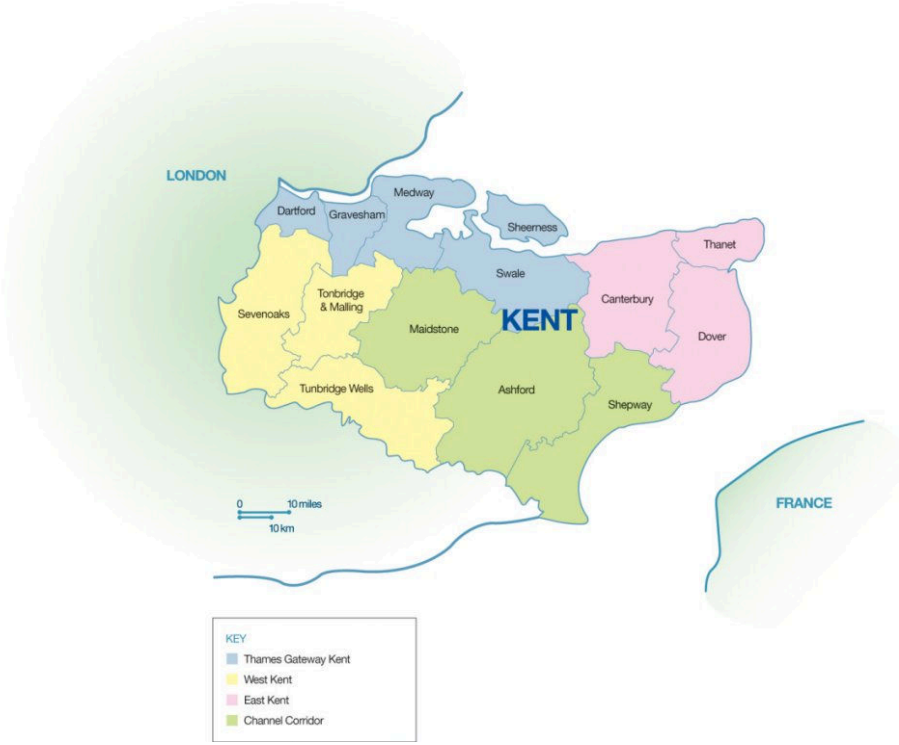

Offshore Wind - Round 3 Zones - Iteration III
Zone Name
1 Moray Firth
2 Firth of Forth
3 Dogger Bank
4 Hornsea
5 Norfolk
6 Hastings
7 West Isle of Wight
8 Bristol Channel
9 Irish Sea
Round 3 Zones - Iteration III
12 nm Limit
Territorial Waters
UK Continental Shelf
Europe
United Kingdom
Bathymetry
Shallow
Deep
Offshore Wind - Round 3 Zones - Iteration III
30 July 2009
MaRS
Marine Resource System
0 30 60 120 180 Kilometres
1:4,500,000
The Marine Estate
16 New Burlington Place
London W1S 2HX
Tel: 020 7851 5080
www.thecrownestate.co.uk
THE CROWN ESTATE

3. A strong region and a great place for business

Kent including Medway is positioned at the hub of commercial activity between London and mainland Europe. The region offers easy access to both UK and European markets and is the base for around 60,000 companies and a workforce of 785,100. It is one of the UK Governments areas for strategic economic development with plans for 137,000 new homes and 125,000 new jobs by 2026.

Kent is a important part of the Greater South East which includes London and extends from The Wash down to Dover and across to the Isle of Wight. The Greater South East is home to 21 million people or 35 per cent of the UK's population and has almost 753,000 registered businesses.

With an annual GDP of over £451 billion it ranks as the 10th largest economy in the world. The regions that make up the Greater South East are the only three in the UK in the top 20 global regions in terms of Gross Value Added, innovation and global competitiveness. (*Source: 'The Greater South East' written by SEEDA, EEDA and LDA)*



Infrastructure

There are four national motorways (M20, M2, M26 and M25) providing a high degree of accessibility within Kent and connectivity to London and other parts of the UK. This is backed up by a strong local highway network that has been enhanced in recent years to improve access to towns and development areas.

London's three main airports at Heathrow, Gatwick and Stansted are all within a drive time of less than 65 minutes from the County town of Maidstone. In addition Kent has two regional airports in Kent International Airport at Manston and London Ashford Airport at Lydd.

Eurostar provides international rail services from stations at Ashford and Ebbsfleet with journey times of less than two hours to Paris and Brussels. The completion of the Channel Tunnel Rail Link into St Pancras in central London and the new international station at Ebbsfleet in North Kent has greatly enhanced European rail access from the County. New high speed domestic rail services have now commenced with journey times to London of 17 minutes from Ebbsfleet, 37 minutes from Ashford and less than an hour from East Kent.

Kent together with Medway has six main seaports at Sheerness, Thamesport, Dover, Ramsgate, Chatham and Dart Terminals London each benefiting from good road access. These ports operate freight and passenger services at a scale that is of national significance to the UK economy. In addition to our ports Kent has a unique transport feature in the Channel Tunnel. The tunnel which lies on the outskirts of Folkestone provides rail access to the European Union for cars, commercial vehicles and freight.

Proximity to London is seen as an advantage with the city having been ranked the best in terms of external transport links (*Cushman & Wakefield European Cities Monitor, 2007*) and recognised for its connections to UK, European and global consumer and business centers.

The Economy of Kent & Medway

The local economy is built around established centres of excellence in hi-tech engineering, ICT, automotive industry, bio-technology and pharmaceuticals, financial services and food processing. A number of these are high performing sectors which account for a fifth of Kent and Medway's workforce. There are some significant geographical business clusters as follows:

- Transport and communications sector in North and East Kent;
- Manufacturing, engineering and high technology in Medway and North Kent;
- Construction, banking, finance and insurance sectors in North and West Kent;
- Hotels, leisure and tourism in Canterbury, Maidstone, Rochester and Tunbridge Wells.

Manufacturing is a significant component of the Kent and Medway economy. Often quoted as the "powerhouse of the South East", manufacturing has an estimated output worth some £3.5 billion, 17% of the regions total output. There are over 3,500 manufacturing companies in Kent & Medway, employing almost 70,000 people.

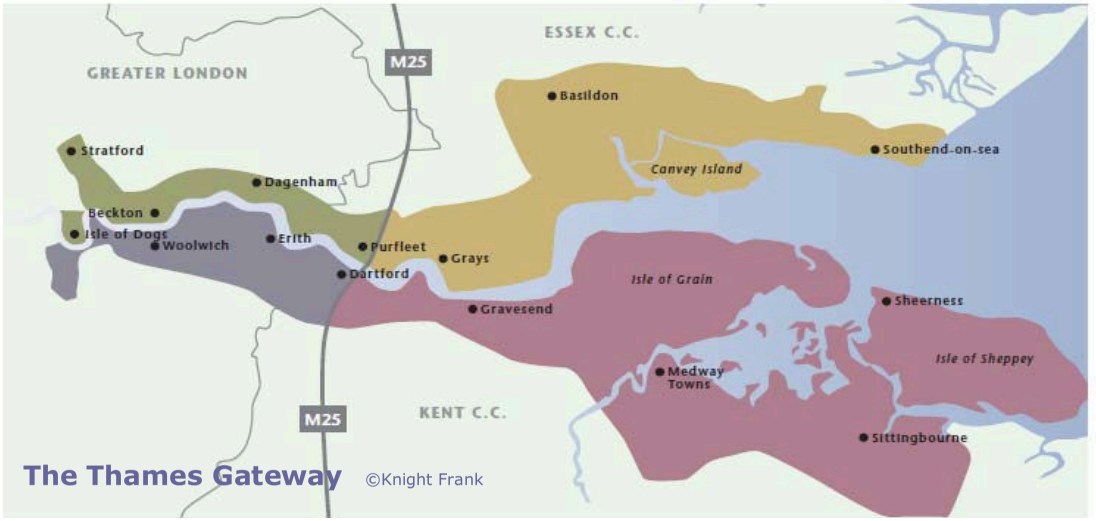
The advantages of Kent and Medway have been recognised by many world-class businesses. More than 400 foreign owned companies have chosen to place themselves at the business heart of Europe. For example, Pfizer has a major presence in East Kent employing around 3,600 people.

Land & Property

There are 35 strategic sites across the region providing more than 2,400 hectares of development land and property. The area offers a combination of attractive, modern business parks, fully-serviced development sites and commercial and industrial property. A strong feature of these sites is their accessibility and many have benefited from investment in highway improvement schemes.

Thames Gateway

The Thames Gateway is the UK's largest regeneration area, stretching for 40 miles (*60 kilometres*) along both sides of the Thames Estuary (*see map*). The area has attracted significant levels of public and private investment as part of initiatives to facilitate and bring forward regeneration projects. The Kent area of the Gateway offers a number of opportunities alongside the Thames Estuary which could be attractive to businesses involved in offshore wind development, turbine supply and component manufacture.



Skills, Education and Training

Government figures suggest that the UK plans for offshore wind expansion could create up to 70,000 new jobs across operations and maintenance, turbine and component manufacturing, engineering and design, research and development. We recognise that developing the skilled workers to fill these jobs is a major challenge and that incoming companies will want some certainty that there are skilled personnel available. Kent is strong on educational resources and has excellent schools and universities capable of delivering a highly qualified workforce. The County Council as a lead provider of education services is willing to work with incoming developers to help meet their requirements from the local workforce. There are good opportunities to build training capacity in Kent and tailor courses to the occupational standards and qualifications of the offshore wind industry (*see page 22*).

Kent is home to the Universities of Kent, Canterbury Christ Church and Greenwich. All three universities offer a wide range of higher education courses, research and development programmes and consultancy services. The University of Kent has a dedicated Business School and runs Kent Innovation and Enterprise, a unit supporting business development. Canterbury Christ Church University specialises in higher education linked to public services while the University of Greenwich has a highly respected School of Engineering.

Quality of Life

The environmental quality of Kent is recognised by many and its beautiful landscapes and coastline are protected for their national and international value. Traditionally known as the 'Garden of England' the region is not only a great place for business to invest in but a great place in which to live. There is a plenty of well located high quality housing to meet the needs of executives and the workforce.

4. Key sites and development opportunities

The engineering challenge to deliver the UK's plans to add a further 25GW of offshore wind generating capacity by 2030 to the 8GW already planned is huge and equivalent to installing 7,000 3.6MW turbines. Other European countries have aspirations too and the number of offshore turbines needed could easily be doubled. This Pan-European challenge presents major opportunities for wind farm developers, turbine manufactures and component suppliers.

The advantages of Kent's strategic location in relation to the UK's prime development areas have already been highlighted. Here we look at how the region can support the growth of offshore wind through existing facilities and new development opportunities. Our discussions with the industry have identified a range of requirements which inter-relate with each other and which can be summarised as follows:

- port facilities and services
- project construction and assembly facilities
- manufacturing land and plant
- operations and maintenance bases.

There are a number of key sites in Kent and Medway where these requirements can be met in full or part. Some of these fall within the aforementioned Thames Gateway regeneration area. The common link across all the sites is the port or quayside access they can offer. The sites are discussed below and an assessment of what we think they can offer is provided in the accompanying capability matrix. This is not intended to be a definitive assessment of what is available but a guide to the potential of Kent for prospective developers and investors. Locate in Kent can assist with more detailed site appraisals, site owner discussions and can help to find solutions which match your requirements.

Port of Sheerness

The Port of Sheerness is part of Peel Ports the UK's second largest port group, which also includes the Port of Liverpool, the Manchester Ship Canal, the Port of Heysham and Clydesport in Scotland. Located on the Isle of

Sheppey at the confluence of the River Thames and the River Medway, Sheerness is one of the UK's most important ports handling a diverse range of cargoes and benefiting from Freeport status.

The Port of Sheerness covers more than 150 hectares and is a deepwater port with 9 berths and no lock restrictions. The port benefits from sheltered natural deepwater and enjoys easy access for shipping at all states of the tide. The port is open 24 hours and 365 days a year and has not been known to close due to bad weather conditions. It is well connected to the highway network and is close to the M2, M20 and London's M25 orbital motorway. The completion of the new Swale crossing in 2006 has greatly enhanced access to and from the port which is also rail connected. The port can further offer approved and designated helipads which may be attractive to offshore wind developers.

The port's core business is currently fresh produce, forest products and car imports. However, it also handles a significant amount of general cargo, including steel, cement and aggregates and has attracted industries to the area including engineering and steel. In the case of the later, the Thamesteel works is located close to the port.

Sheerness is very well located in relation to the Thames Estuary development area and around 100 nautical miles from one of the largest Round 3 development areas. There are opportunities within the port and in areas close by for the location of uses, permanent and temporary, which meet the identified requirements of the offshore wind industry. Peel Group, the port owners, recognise the importance of the offshore wind to the UK and other European countries and are very supportive of the role that Sheerness and its other port facilities can play in the manufacture, construction and servicing of offshore wind farms. A subsidiary of the Peel Group, Peel Wind Power Ltd are have secured planning permission for the development of four 2.5 MW turbines at the port further reflecting the Group's interest and commitment to the wind industry.

Port of Ramsgate

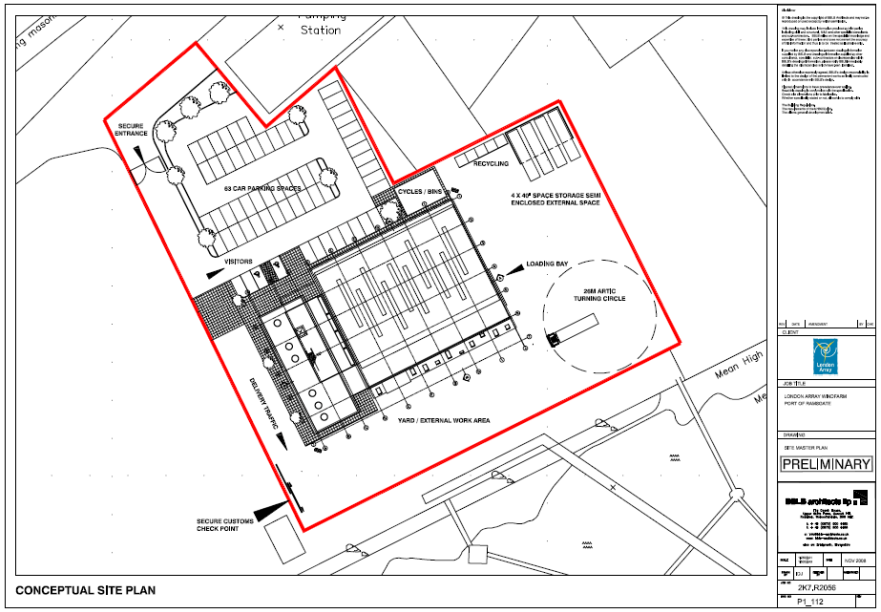
The Port of Ramsgate is one of the largest municipal ports in England and Wales and second only in turnover to Portsmouth. It is owned and operated by Thanet District Council and provides the only passenger/freight ferry service between the Channel ports and Belgium. The port comprises 13.2 hectares of dedicated land located on the East Kent coast. Its sheltered harbour is protected by a wrap-around breakwater and offers all weather

accessibility. The port currently has 3 Ro-Ro berths with a main channel depth of 7.5m. The port can accommodate vessels of up to 180 metres in length with a 6.5 metres draft and with no tidal restrictions.

The port is open 24 hours and 365 days a year and provides easy access to the English Channel, North Sea and Thames Estuary. It has a good weather record and has not been closed once in the past 5 years. Highway links to the port are excellent with a dedicated £30 million access road into the port and a dual carriageway connection to the London bound M2 motorway. The M25 orbital motorway is a 60 minute drive from the port. Kent International Airport (*see below*) is only 5 miles from the port and handles air freight, passenger and helicopter movements.

Wind farm developers have already recognised the potential of the port to act as a base during the construction phase and as a location for future operations and maintenance facilities. Vattenfall the developer of the Thanet Offshore Wind Farm and the London Array (*see conceptual site plan*) are constructing state of the art O&M facilities at the port. Their relationship with the wind turbine suppliers Vestas and Siemens respectively means that these two companies will have a presence at the port once O&M activities commence.


Port of Ramsgate ©Offshore Wind Power Marine Services Ltd



Thanet District Council is committed to assisting the offshore wind industry and is actively engaged in a programme of updating and modernising the port. With land available for further development both at the port and at a range of nearby sites, the port and surrounding area are capable of playing an important supporting role to the offshore wind industry.

Thamesport and the Isle of Grain

Thamesport is located on the Isle of Grain in Medway, North Kent. It is one of the UK's busiest container ports and a member of the Hutchison Port Holdings Group which also owns the Port of Felixstowe as well as Harwich International Port. Thamesport is one of the most advanced container ports in the world capable of handling the latest generation of large container ships. Strategically located at the point where the deep-water channels of the River Medway and River Thames converge, Thamesport's offers good accessibility to and from the shipping lanes of Northern Europe. The port is open 24 hours and 365 days a year.

The port covers an area of 85 hectares and facilities include 2 berths with a total length of 655 metres and a low water depth of 15.5m depth. A large proportion of the goods which come into the port are electronics and consumables from Asia, although the Port also handles a significant amount of heavy and bulky freight, such as raw materials and equipment for the construction or heavy manufacturing industries.

Thamesport has a dedicated rail terminal with services to UK destinations including Manchester, Birmingham, London, Doncaster, Leeds and Glasgow. The port is well connected to the highway network and is 10 miles from the M2 and 20 miles from the M25 orbital motorway.

The port is keen to develop short sea and coastal shipping initiatives which could include activities related to the offshore wind industry. Although the primary business of the port is containers there are significant land holdings in the vicinity of the port which could support a large dock side based manufacturing and assembly operation to serve the offshore sector. Further details of this land holding are given below and Locate in Kent can assist interested parties who may wish to consider this opportunity further.

Isle of Grain Development Opportunity

Site Owner	National Grid Holdings.
Site Description	Approximately 280 hectares of vacant land with waterside frontage to the River Medway.
Potential	Large dock side based manufacturing and assembly operation for the offshore wind sector.
Plot Size	As above.
Service / Utilities infrastructure	None connected.
Planning Situation	Allocated for Port related activities and industrial uses (B1(c), B2, B8 and more specialist industrial uses) in the local development plan.
Availability	Subject to planning permission and exchange of legal documentation.
Terms	For discussion – The site owners and agents are prepared to discuss land values.
Existing Occupiers	E.on, Thamesport, Foster Yeoman, Grain LNG.
Additional Information & Grant Availability	The Isle of Grain is located within a Tier 3 Assisted Area.

Port of Dover

The Port of Dover is one of the world's busiest international ferry ports and the second busiest UK cruise port. The port is located on the East Kent coast and is easily accessed via the M20 motorway. It is owned and operated by the Dover Harbour Board and covers approximately 140 hectares of land. The Eastern Docks comprise 9 berths in the main handling passenger and freight traffic but including a cargo and container berth. The Western Docks provide facilities for fast ferry passenger services, a bulk goods dock and two cruise ship berths serviced by a new terminal building.

Dover is the nearest UK landing point to continental Europe and one of the busiest road haulage freight portals in the country. In 2007, 2.5 million road freight vehicles were recorded as passing through the port. In addition, Dover Harbour Board has operated a deep sea cargo terminal since 1998. The terminal is now one of the UK's top four handling locations by tonnage. It offers a 24-hour port with no locks or tidal restrictions and a minimum quay water depth of 8.5m close to the English Channels main shipping lanes. Commercial vessels (other than ferries) of up to 260m length can be safely manoeuvred to suitable berths within the port provided their draft is not excessive.

The busy nature of this port and its location further south than the other ports profiled means that it is most likely to be suitable for temporary activities linked to the construction and pre assembly of offshore wind farms. There may be sufficient vacant land within the port capable of supporting this activity.

Whitstable

Whitstable Harbour lies on the North Kent coast at the mouth of the River Swale and the River Thames. It is a municipal harbour owned by Canterbury City Council and managed by the Whitstable Harbour Board. Whitstable is a niche port which accommodates a mix of activities including importation of aggregates, shellfish processing, ship lay-by and repair and wind farm maintenance facilities.

Whitstable Harbour is the current operations and maintenance base for the Kentish Flats Wind Farm which is owned by Vattenfall. The harbour was the construction management base for the wind farm and following its completion has provided operations and maintenance base facilities for the past 3 years. These services are

currently provided by the turbine manufacturer Vestas who operate support vessels from the harbour. Although the harbour is tidal, Vestas have arranged their working schedules and procedures to accommodate tidal patterns and shown that Whitstable is a viable base for operations and maintenance.

The Harbour Board is keen to support new services and activities for the growing wind farm industry in the Thames Estuary. The harbour has areas of land that could be made available for development. Quay infrastructure is in a good condition and Canterbury City Council has a commitment to maintaining and improving these facilities.

Northfleet

Northfleet lies alongside the River Thames in North Kent and upstream of the Thames Estuary development area. It is the most westerly of the locations profiled and lies within the Thames Gateway regeneration area. The area comprises a mix of riverside industrial complexes and wharves many of which are vacant pending redevelopment. An area of land including a wharf with quayside has been identified as possible location which could provide temporary space for use in connection with offshore wind farm construction and pre-assembly. Further investigation would be required to determine its suitability for use but the landowner has indicated that the site could be made available.

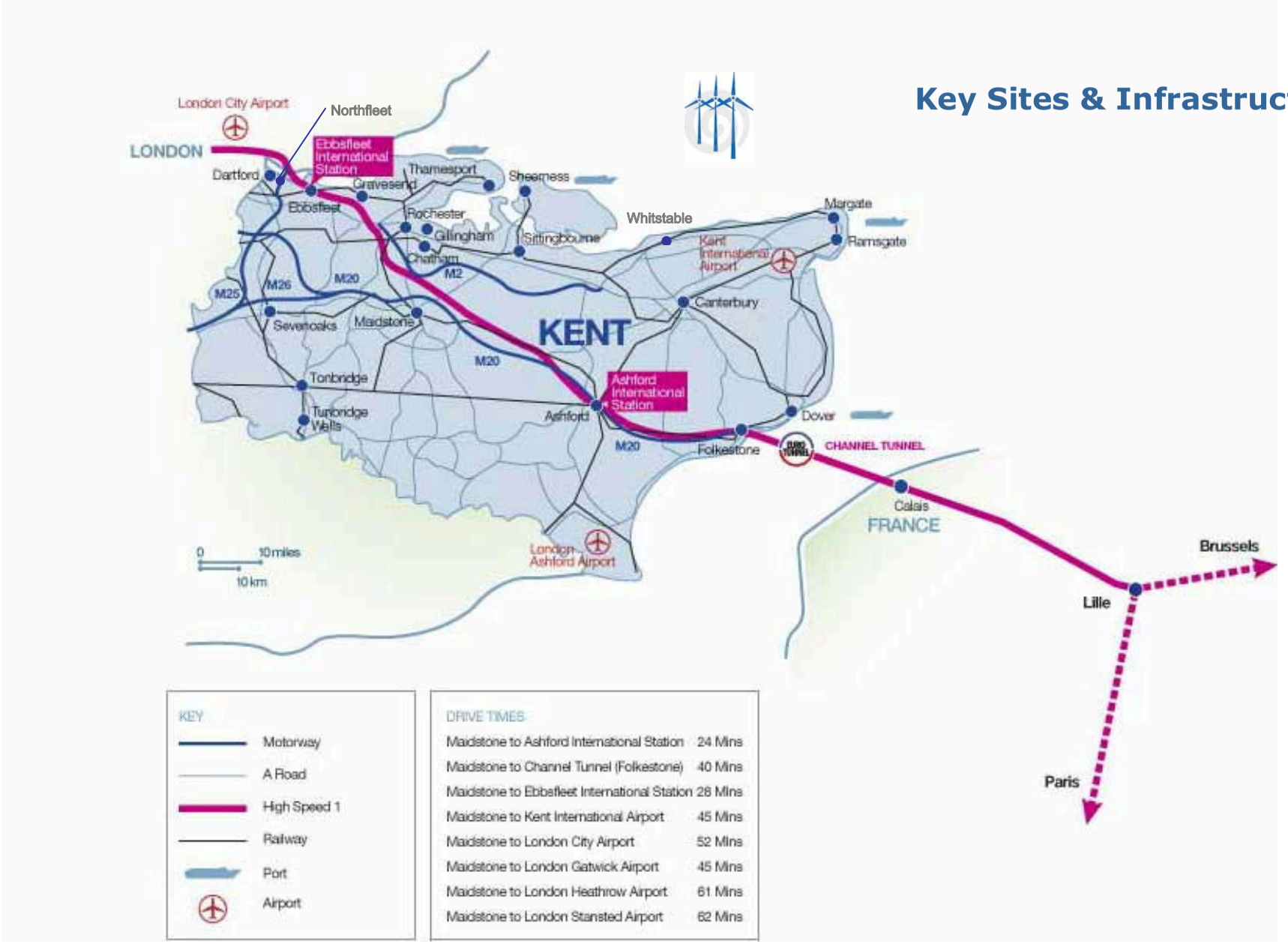
Kent International Airport

Kent International Airport is situated at Manston near Ramsgate in East Kent. It has one of the longest runways in the UK and its location in the South East within easy reach of London has resulted in a growing freight business and future plans to expand passenger services. The airport is profiled here because of its potential to support future wind farm activities particularly operations and maintenance where wind farms are located further offshore. The airport is very well placed to cater for helicopter movements and its location brings the whole of the Thames Estuary eastern seaboard development area within an easy flying time. The airports proximity to both the Port of Ramsgate and sites suitable for development offers good opportunities for businesses connected to the offshore wind industry.

Key Site Capability Matrix

Port of Ramsgate	Port of Sheerness	Thamesport & Isle of Grain	Port of Dover	Whitstable Harbour	Northfleet	Port of Sheerness ©Medway Ports Ltd
✓	✓	✓				Suitable as a construction base for project management, crew transfers and wind farm commissioning
	✓	✓	✓		✓	Suitable as a load in and load out port with no pre-assembly area
	✓	✓	✓		✓	Suitable as a base for all pre-assembly and installation works
✓	✓	✓		✓		Suitable as a base for operations and maintenance and related offshore services
✓	✓	✓	✓			Suitable as an emergency port and shelter for marine equipment in adverse weather conditions
	✓	✓				Suitable location for turbine and/or component manufacture and assembly

Key Sites & Infrastructure



5. Business and financial support

The UK offshore wind industry has grown very quickly in the past 10 years and the increasing demand for wind turbines and components now offers major commercial opportunities for manufacturers to locate in the UK. More than £40 billion is expected to be invested in UK offshore wind farms in the period to 2020. Kent is perfectly placed to support the continued growth and to offer a bright and sustained future to the industry. Its strategic location in relation to key UK development areas is a major advantage. Kent could also be capable of helping to fulfill plans further a field in coastal waters off Northern Europe. We feel providing support to companies wanting to take advantage of new economic opportunities is vital and we are committed to offering that support.

Locate in Kent is the investment promotion agency for Kent and Medway. It provides a range of company relocation services to both UK and internationally owned companies. All Locate in Kent's services are provided free of charge on a completely confidential basis.

Locate in Kent can provide support to your company whether you are looking to establish a new base or expand your business in the UK. The service is run by a team of dedicated professionals who work closely with property developers, commercial agents, legal advisers, banks and other partners to provide the advice, information and the contacts you need. The company relocation and expansion advisory services are totally free, independent and confidential and include:

- working with you to define your location or expansion requirements;
- undertaking specific research to support your location decision;
- providing the latest comprehensive information on available commercial sites and properties;
- arranging personal tours of the county, allowing you to explore the opportunities;
- providing introductions and liaison with professional intermediaries, consultants and advisers to give you access to local knowledge and sources of assistance;

- providing you with information about grants and financial assistance that may be available to your company in certain areas of Kent; and
- providing an aftercare service to all Kent and Medway based companies, assisting them to grow and develop.

Locate in Kent can provide advice and guidance on the availability of **financial support** in the UK and the Kent region.

The UK Government's main measure for supporting investment in renewable electricity generation is the Renewables Obligation which requires electricity suppliers to source a growing percentage of the electricity they sell from renewable sources each year. This obligation is currently to provide 9.7% of electricity from renewable sources in 2009 with the figure rising each year thereafter. Renewable Obligation Certificates (ROCs) are issued for each megawatt hour of energy generated from a renewable source. ROCs can be traded on the free market to power suppliers unable to reach their Renewables Obligation target.

From April 1st 2009, a new system of "banded" ROCs" came into effect after ministers feared that newer technologies were not getting enough support compared to more established renewable energy technologies. Offshore wind power now receives two ROCs per MWh of energy produced effectively doubling the available subsidy. The Government has also announced that the Renewables Obligation will be extended through to 2037 giving a greater degree of certainty for investors.

The Government has acknowledged that building a UK supply chain will be critical in meeting its plans for the expansion of offshore wind and that the Renewables Obligation alone will not achieve these. It has a number of other ways to support growth and has developed an investment programme for low carbon technologies which it plans to role out in partnership with UKTI, Regional Development Agencies and other delivery bodies.

In the 2009 budget the Government announced that it is providing up to £120 million to support investment in the development of the offshore wind industry in the UK. This includes funding for new offshore wind manufacturing facilities and investment in the development of next-generation offshore wind technologies through large scale demonstration. The newly formed Office for Renewable Energy Development is working proactively to support

investment in large-scale production facilities by both existing wind turbine manufacturers and new entrants to the offshore wind market.

At a very local level grants are available across Kent and Medway under the Grant for Business Investment scheme. The grant scheme is funded by South East England Development Agency (SEEDA) and delivered by Finance South East in the South East region. The scheme aims to assist businesses looking to expand, modernise, rationalise, diversify and increase productivity in order to maintain or establish sustainable growth and provide skilled jobs. All business grants are paid in arrears and in instalments against expenditure already paid.

Kent County Council is responsible for providing a wide range of services that support residents and businesses in Kent. These services cover highways, education and training, social services, libraries, trading standards, planning and regeneration. The County Council works closely with the local councils on matters affecting Kent and in partnership where there is shared responsibility.

The County Council recognises that new economic opportunities linked to the 'green' economy can bring increased prosperity to Kent and it is committed to supporting new business growth and job creation. It has recently produced a strategy for regeneration called 'Unlocking Kent's Potential'. Developing and attracting high-tech and sustainable technology businesses such as the offshore wind industry has been identified as a priority action and as a way of accelerating new approaches to 'green' growth in the County.

Creating the right skills base in Kent to support growth is something that the County Council believes it can help with. It has recently started work on designing a **Kent Skills Framework** and action plan to deliver the skills and qualifications required by the sustainable technology sector in the coming decade (2010-20). The skills framework will cover both young people in education and the existing workforce and specifically, it will seek to meet the skills needs required by new renewable energy technologies. A range of delivery formats is envisaged including 14-19 vocational training, apprenticeships, short courses and formats for developing higher skills levels.

Thanet District Council provides a range of important local services to Margate, Broadstairs and Ramsgate as well as surrounding towns and villages. Thanet is a coastal district situated at the eastern end of Kent in close proximity to the continent. The district benefits from having both the Port of Ramsgate and the developing Kent International Airport at Manston. The Port is owned by the Council and has already been identified by offshore wind farm developers as a good location for operational activities linked to Thames Estuary projects. Further growth in onshore activities would be welcomed and consistent with the Council priorities which include diversification at the port, support for growth of the airport and development of key industrial and employment sites.

Envirobusiness is a specialist company supported by SEEDA which is helping businesses involved with environmental technology and services to secure a greater share of the global market for solutions to environmental change. By working across a wide range of technologies, engaging with buyers and investors and those influencing the development of markets, Envirobusiness is able to identify new business potential and match businesses according to their needs and ambitions. As part of the service, Envirobusiness runs a free membership scheme for environmental technology and service providers.

Envirobusiness is co-ordinating a new intensive package of support for high potential companies capable of serving growing global markets for environmental technologies and services. This will involve helping 600 companies to generate £60M of new commercial activity and to secure greater prominence world wide. Part of the programme is to focus on exploiting the commercial opportunities associated with the burgeoning demand for offshore wind and marine renewables in South East England including working with top tier companies to facilitate strategic investments in the South East, building new supply chains and identifying opportunities to create competitive advantage through R&D. Envirobusiness has appointed BVG Associates to liaise with the industry to maximise the

positive economic impact for the region and encourage businesses to engage and take advantage of the new opportunities.

Marine South East is the regional marine initiative of the SEEDA. It was instigated to tackle issues affecting marine businesses in the region and to support the economic development of the marine sector in the South East. This includes working with marine businesses seeking to exploit new business opportunities linked to the growth of offshore renewables. Marine South East recognises that the marine industry has an important supporting role to the offshore industry and is seeking to support growth through the promotion of and development of businesses and skills within the region.

6. Contacting us to take advantage of these opportunities

Please feel free to contact us for more information and help about the opportunities in Kent. Locate in Kent will act as the first point of contact for your enquiry.

Contact Details

Peter Symons
Director of Business Development
T: 01732 520 711
F: 01732 520 701
E: peters@locateinkent.com

Karl Jansa
Business Development Manager
T: 01732 520 713

E: karlj@locateinkent.com

www.locateinkent.com

Locate in Kent
2 Kings Hill Avenue
Kings Hill
West Malling
Kent
ME19 4AQ

7. Useful links

Crown Estates
www.crownestates.co.uk

British Wind Energy Association
www.bwea.com

Department for Climate Change and Energy
www.decc.gov.uk

Locate in Kent
www.locateinkent.com

Kent County Council
www.kent.gov.uk

Thanet District Council
www.thanet.gov.uk

Envirobusiness
www.envirobusiness.co.uk

Marine South East
www.marinesoutheast.co.uk

South East England Development Agency
www.seeda.co.uk

Notes