



RENEWABLES  
EAST

**EAST OF ENGLAND RENEWABLE ENERGY  
STATISTICS  
SEPTEMBER 2005**

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## **East of England Renewable Energy Statistics – September 2005.**

**Summary:** The East of England has achieved 4% against the 2010 target of 14% of the regions electricity consumption from renewable sources.

1. The region's target for production of electricity from renewables as set out in the draft East of England Plan is as follows:

**Table1.** East of England Regional target

2010 Excluding offshore wind	2010 Including offshore wind	2020 Excluding offshore wind	2020 Including offshore wind
10%	14%	17%	44%

*Source: Table 9.2 East of England Plan. Reviewed renewable energy targets expressed as the percentage contribution of renewables to total electricity consumption in the East of England*

2. In order to monitor progress towards achievement of this target, it is necessary for it to be expressed in terms of MW of installed capacity since data on new projects is normally available in this form from OFGEM and industry sources.
3. The study "Making Renewable Energy a Reality- Setting a Challenging Target for the East of England", produced in 2000 by ESD/ Global to Local and Tony Hams, expressed the target in GWhrs per year across each technology. This was converted to a MW target for each technology in a report to DTI and DTLR by Oxera Environmental in 2002. This drew together the various regions' figures and, for the East of England, accepted the GWh figures stated in the ESD report.

**Table 2.** The 2010 regional target by technology

	2010 Target in GWh/yr (ESD/Hams study)	Equivalent in MW of installed capacity. (Oxera study 2002)
Offshore wind	1300	371
Onshore wind	1700	647
Biomass	700	94
All others	600	76
<b>Total</b>		<b>1188</b>

**Table 3.** Installed capacity as at September 05

	MW of installed capacity	MW target	%of technology target
Offshore wind	60	371	16%
Onshore wind	16	647	2%
Biomass	117	94	124%
All others	147	76	193%
<b>Total</b>	<b>338</b>	<b>1188</b>	<b>28%</b>

*Sources: Renewables East for wind and DTI Energy Trends September 05 for other technologies.*

4. **Progress against 14% target to date.** Taking the 1188MW in Table 2 as 14% of total consumption at 2010, total MW required to meet demand is 8485 MW. So the region has achieved 3.98%, against the 2010 target of 14%.
5. **Sub-Regional Targets.** At present none of the formally adopted targets in Table 1 have been disaggregated into adopted sub-regional or county targets, (although the ESD/Hams report did include County targets expressed in GWh/yr). Data on projects generating electricity or in the planning system are collected by Government. These include the project's address. The latest published figures enabling installed capacity by County (including their associated Unitaries) to be estimated are summarised in Table 4. There is some variation between the regional totals in Tables 3 and 4 due to different data sources.

**Table 4 Latest figures for installed generating capacity (MW) from renewables by County**

	Cambs	Norfolk	Suffolk	Essex	Herts	Beds	TOTAL
Offshore Wind							60.0
Onshore Wind	2.45	7.05	2.75	3.6	.225	-	16.075
Biomass	36.85	41.5	14.316	-	-	-	92.666
Others-Landfill gas	12.623	12.592	8.463	63.671	4.000	38.384	139.733
-sewage gas	.270	1.000	-	.270	1.480	.450	3.470
- PV	-	-	-	.003	-	-	.003
<b>TOTAL</b>	<b>54.193</b>	<b>62.142</b>	<b>25.529</b>	<b>67.554</b>	<b>5.705</b>	<b>38.834</b>	<b>311.947</b>

Sources: Renewables East for wind and OFGEM data as at 12 Jan 05 for other technologies.

6. **Projects in the pipeline.** In preparing the table below an attempt has been made to identify and only include projects which are "live". Accordingly, small projects which received approval under round 1 of the Non Fossil Fuels Obligation (NOFFO) in the 1990's but which appear now to be dormant are not included. Also, projects which are undergoing their pre-planning application stages are not included. "In Planning" includes projects at appeal. "Planning" here refers only to the Town and Country Planning process. See para 8 for the alternative approval processes.

**Table 5 Projects awaiting development**

	Approved	MW	In Planning	MW
	Projects		Projects	
Onshore wind	12	120	5	80
Biomass	1	-	-	5.5
Landfill gas	9	32	5	4

Sources: Renewables East for wind and DTI RESTATS Planning database July 2005 for other technologies.

7. **Other On-shore projects.** One project within the region is currently the subject of an application under s36 of the Electricity Act to the DTI. It is the Peterborough Renewable Energy Ltd project in Peterborough. This is for a 172MW Energy from Waste power station which will have energy crops as one of its feed stocks.
8. **Offshore Wind projects.**  
The following offshore projects have received either a lease or lease option from Crown Estates. They are all off the region's coast, but not all will land their power within the region and so contribute to the region's target.

**Table 6. Offshore wind projects.**

Project	Location	MW	Developer	Current status.
<b>Round One.</b>				
Scroby Sands	Off Caister/Gt Yarmouth	60	E.ON UK	Operational
Cromer	Off Cromer	100	EDF Energy	TWA Order sought
Gunfleet Sands	Off Clacton	108	GE Wind Gunfleet Ltd	TWA Order sought
<b>Round Two</b>				
London Array	12m off Essex coast	1000	Shell WindEnergy/E.ON and Core	Application submitted June 05
Greater Gabbard	26m off Felixstowe	500	Airtricity-Fluor	Lease option agreement Dec 2003
Gunfleet Sands 2	Off Clacton	64	Delatic	ditto
Sheringham Shoal	11m off Sheringham	315	Scira Offshore Energy Ltd	ditto
Dudgeon East	Off Cromer	300	Warwick Energy	ditto
Docking Shoal	Off Wells	500	AMEC	ditto
Race bank	Off Wells	500	AMEC	ditto

**TABLE 7: EAST OF ENGLAND WIND MONITOR - SEPTEMBER 2005**

<b>CAMBRIDGESHIRE</b>					
<b>Project</b>	<b>Capacity</b>	<b>Turbines</b>	<b>Council</b>	<b>Developer</b>	<b>Notes</b>
<b>BUILT</b>					
<b>Wood Green</b> Animal Shelter, Kings Bush Farm, London Road, Godmanchester	.225 MW	1 Turbine Vestas	Huntingdon DC	Wood Green Enterprises Ltd	<b>Built 1990</b>
<b>Abbey Produce (Ramsey)</b> Ltd,( now G's Marketing) St Marys Road Ramsey	.225MW	1 Turbine Vestas	Huntingdon DC	Fivestone Ltd	<b>Built 1993</b>
<b>Long Hill Rd</b> , March.	2MW	1 Turbine R E Power	Fenland	Wind Prospect/ Snowmountain Ltd	<b>Built Dec 04</b>
<b>TOTAL</b>	<b>2.450MW</b>	3 Turbines			
<b>APPROVED</b>					
<b>French Fm</b> , French drove, Thorney.	.45MW	2 Turbines @ .225	Peterborough	All Wind UK Ltd	<b>Approved</b> 1993. Renewed 1999. Technical start made on development
<b>Stags Holt</b> , Nr March	15.57MW	9 Turbines @ 1.75	Fenland	Eon Renewables	<b>Approved</b> May 02
<b>Glassmoor</b> Between Ponders Br & Ramsey Mereside	14MW	8 Turbines @1.75MW	Fenland	Wind Prospect	<b>Approved</b> June 2003
<b>Coldham Farm</b> , NE of March	14MW	8 Turbines @1.75MW	Fenland DC	CWS Coldham Estate, March.and West Coast Energy	<b>Approved</b> Sept 2003 <b>Under Construction</b>
<b>Ranson Moor Fm</b> Doddington, March, (2.5 km from Doddington)	5.25MW	3 Turbines@1.75 MW Vestas V66	Fenland	Fenpower Ltd (co set up by local landowner for the purpose) with EcoGen	<b>Approved</b> Dec 03
<b>Red Tile Farm</b> 3.5km NE of Warboys	24MW	12 turbines @ 2MW each.	Hunts DC	Wind Prospect	<b>Approved</b> May 04
Wryde Croft, off <b>French Drove</b> , Thorney	14MW	7 turbines @2MW each	Peterborough	R E S UK Ltd	<b>Approved</b> Nov 04
<b>TOTAL</b>	<b>87.27MW</b>	49 Turbines			

<b>IN PLANNING</b>					
<b>Cambridge Services</b> (A14)between Conington and Boxworth.	32MW	16 Turbines @ 2MW	South Cambs	Your Energy	Application August 04 Refused November 04 - Landscape effect, radar, highway safety, noise, wildlife. Appeal lodged
<b>NORFOLK</b>					
<b>BUILT</b>					
<b>Blood Hill</b> , Collis Lane, West Somerton	2.25MW	10 Turbines @ .225MW each (Enercon E-66)	Gt Yarmouth BC	E-ON UK	<b>Built Dec 1992</b>
<b>Ecotech Centre</b> , Swaffham	1.5MW	1 Turbine @1.5 MW (Enercon)	Breckland DC	Ecotricity	<b>Built Aug 1999</b>
<b>Blood Hill</b> , West Somerton	1.5MW	1 Turbine @1.5 MW	Gt Yarmouth BC	Ecotricity	<b>Built July 2000</b>
Sporle Road, <b>Swaffham</b>	1.8MW	1 Turbine @1.8 MW(Enercon)	Breckland DC	Ecotricity	<b>Built July 2003</b>
<b>Scroby Sands</b> , 3km NE Gt Yarmouth	60MW	30 Turbines @2 MW each	Offshore	Powergen Renewables Offshore Wind Ltd (PROWL)	<b>Built June - Aug 04</b>
<b>TOTAL</b>	60 plus 7.05				
<b>APPROVED</b>					
<b>North Pickenham</b> , Norfolk (just south east of Swaffham)	16MW	8 Turbines @2MW	Breckland DC	Enertrag UK	<b>Approved July 04</b>
<b>Cromer</b> 6.5km off Foulness, Norfolk	120MW	30 Turbines	Offshore	Norfolk Offshore Wind/Enertrag	<b>Consented Oct 03</b>
<b>IN PLANNING</b>					
Wood Farm, <b>Shipdham</b> (south west of East Dereham)	3.6MW	2 Turbines@1.8 MW	Breckland DC	Ecotricity	Refused December 04 - Aircraft safety. Appeal lodged
<b>Guestwick nr Reepham</b>	12MW	6 turbines @2MW	Broadland DC	Enertrag UK	Refused March 05 - Highway, landscape, aviation, noise. Appeal lodged
<b>SUFFOLK</b>					
<b>BUILT</b>					
Ness Point, Lowestoft	2.75MW	1 Turbine @2.75MW	Waveney	SLP	<b>Built</b> December 04

<b>APPROVED SCHEMES</b>					
Ness Point , Lowestoft	.600 MW	1 Turbine @ 600KW	Waveney	Ecotricity	<b>Approved</b> on appeal December 02
Parham Airfield, nr Great Glemham, Marlesford & Parham	12MW	6 Turbines @1.3MW each	Suffolk Coastal	Saxon Windpower Ltd	<b>Approved</b> October 05
<b>ESSEX</b>					
<b>BUILT</b>					
Ford Motor Company, Dagenham	3.6MW	2 Turbines	Barking & Dagenham	Ecotricity	<b>Built</b> April 04
<b>APPROVED SCHEMES</b>					
Gunfleet Sands	108MW	30 Turbines	offshore	G E Gunfleet Ltd	<b>Consented</b> October 03
<b>HERTFORDSHIRE</b>					
<b>BUILT</b>					
RES Headquarters, Kings Langley.	.225MW	1 Turbine	Three Rivers DC	Renewable Energy Systems Ltd	<b>Built</b>
<b>BEDFORDSHIRE</b>					
<b>IN PLANNING</b>					
Airfield Farm, Podington	20.7MW	9 Turbines	Bedford Borough Council	Nuon Renewables	<b>Application</b> October 05

**Table 8: Non-Wind Generators accredited for the Renewables Obligation (RO) in the East of England**

(Source: OFGEM: Last Update 15/07/05)

Generating stations accredited with a DNC more than 50 kw					
	Generating Station Name	Total Installed Generating Capacity (MW)	Operator Company	Generator Address	Date Station Commissioned
<b>Biomass &gt; 50 kW</b>					
	Elean Business Park*	36.85	EPR Ely Ltd	Elean Business Park, Sutton, Cambs	09/00
	Eye Power Station (Fibropower)	14.316	Fibropower Ltd	Oaksmere Business Park, Eye, Suffolk,	07/92
	Thetford Power Station	41.5	Fibrothetford Ltd, C/o Thetford Power Station	Two Mile Bottom, Thetford, Norfolk	01/98
	<b>Total Biomass</b>	<b>92.666</b>			
*Estimation calculation: ROCs are only issued for the percentage of electricity generated from eligible renewable sources. This qualifying percentage changes on a monthly basis for each station. To calculate the "renewable capacity" (for the purpose of this spreadsheet only), the <u>max</u> monthly qualifying percentage for each station in the past year has been applied to the respective TIGC.					
<b>Landfill Gas &gt;50 KW</b>					
	<b>Cambridgeshire and Peterborough</b>				
	Dogsthorpe	1.976	Shanks Chemical Services Ltd	Dogsthorpe Landfill Site, Welland Road, Peterborough, Cambs.	06/96
	Godmanchester	2.3	Natural Power Ltd	Cow Lane, Godmanchester, Cambridgeshire	02/00
	March Landfill Gas Project	1.003	March Energy Ltd	March Landfill Site, Hundred Road, Cambridgeshire	12/00
	Milton Landfill	2.136	Waste Recycling Group	Butt Lane, Milton, Cambridge	05/93
	Milton Phase 2 Generation	2.128	Waste Recycling Group Plc	Milton Landfill Site, Butts Lane, Milton, Cambridge	07/04
	Station Farm Landfill	2.05	Natural Power Ltd	Brampton Road, Buckden, Huntingdon, Cambridge	05/89
	Warboys Power	1.030	Natural Power Ltd	Warboys Landfill Site, Puddock Hill, Station Road, Warboys, Cambridgeshire	06/96
	<b>Total</b>	<b>12.623</b>			

	<b>Norfolk</b>				
	Attlebridge	1.2	United Utilites Green Energy Ltd	Attlebridge Landfill Site,Reepham Road,Attlebridge,Norwich	12.92
	Beetley Energy RO	1.024	Beetley Energy Limited	Beetley Landfill Site, Folly Lane, Beetley, Norfolk	10/04
	Blackborough End	1.888	Blackborough End Energy Ltd	Blackborough End Landfill Site, Mill Drove,Blackborough End,Kings Lynn,Norfolk	07/01
	Costessey Landfill Gas Project	.950	Combined Landfill Projects Ltd	Longwater Industrial Estate,Dereham Rd,Norwich	04/03
	Costessey 2 Landfill Power Generation	2.2	Costessey Energy Limited	Longwater Industrial Estate,Dereham Rd,Norwich	12/00
	Feltwell (1)	1.003	Feltwell Energy Ltd	The Oakery, Lodge Road, Feltwell, Thetford, Norfolk	08/03
	Feltwell (2)	1.050	Feltwell Energy Ltd	The Oakery, Lodge Road, Feltwell, Thetford, Norfolk	12/99
	Edgefield Hall Farm	.630	Buyinfo Ltd	Edgefield,Melton Constable,Norfolk	06/02
	Mayton Wood	1.582	Mayton Wood Energy Ltd	Mayton Wood Landfill Site, Little Hautbois,Coltishall,Norwich	03/98
	Snetterton Energy RO - A (15/4/5)	1.065	Snetterton Energy RO	Harling Road Snetterton Norfolk	04/05
	<b>Total</b>	<b>12.592</b>			
	<b>Suffolk</b>				
	Bramford	.880	United Utilities Green Energy Ltd	Bramford Landfill Site,Somersham Road,Bramford,Ipswich	04/04
	Bramford Landfill Site	.650	Biffa Waste Services	Papermill Lane, Bramford	11/01
	Foxhall	1.2	United Utilities Green Energy Ltd	Foxhall Road,Ipswich,	11/95
	Kennett Generation	.660	Waste Recycling Group	Dane Hill Road, Kennett, Newmarket, Suffolk	12/04
	Lackford Landfill	1.333	Gengas Ltd	Bury Road,Lackford,Bury St Edmonds,Suffolk	12/98
	Masons Power Plant	2.22	Viridor Waste Management	Masons Landfill,Great Blakenham,Claydon,Ipswich	12/96
	Wangford Landfill Site	.900	United Utilities Green Energy Ltd	Wangford,Beccles,Suffolk	07/87
	Wetherden Landfill Gas Project	.620	Wetherden Energy Ltd	Warren Farm,Wetherden,Stowmarket,Suffolk	01/99
	<b>Total</b>	<b>8.463</b>			
	<b>Essex</b>				
	Aveley	3.952	Aveley Methane Ltd	Sandy Lane,Aveley,Essex,	12/01
	Aveley - NFFO 5	2.006	Waste Recycling Group Plc.	Aveley Landfill Site,Sandy Lane,Aveley,Essex	07/99

	Aveley Landfill	3.840	Waste Recycling Group (Central) Ltd	Sandy Lane,Aveley,Essex	06/04
	Barling - (NFFO5)	2.443	EDL Operations (Barling) Limited	Barling Hall Farm, Little Wakering Road, Great Wakering Farm, Essex	05/93
	Bellhouse Farm	2.850	Bellhouse Energy	Church Lane,Stanway,Colchester	05/04
	Bellhouse South	4.239	EDL Operations (Bellhosue) Limited	Stanway Pit, Warren Lane, Stanway, Colchester, Essex	07/03
	Crumps Farm Landfill Gas Generation Project	.480	Edwards Waste Management Ltd	Crumps Farm Landfill site, Little Canfield, Great Dunmow Road, Essex, England	09/04
	Mucking 3	4.074	EDL Operations (Mucking) Ltd	Crown Cottage,Mucking Wharf Road,Stanford le Hope,Essex	07/00
	Mucking Gas 2-NFFO	4.074	EDL Operations (Mucking) Ltd	Mucking Wharf Road,Stanford le Hope,Essex	11/91
	Mucking Landfill	3.2	EDL Operations (Mucking) Ltd	Mucking Wharf Road,Stanford le Hope,Essex	11/01
	Mucking Landfill 2	3.55	EDL Operations (Mucking) Ltd	Mucking Landfill Site,Mucking Wharf Road,Stanford-le-Hope,Essex	06/02
	Ockendon "A" Power Plant	4.016	Viridor Waste Management	Medebridge Road,Grays,Essex	08/99
	Ockendon "B" Power Plant	4.756	Viridor Waste Management	Medebridge Road,Grays,Essex	04/03
	Ongar - NFFO 4	1.920	Waste Recycling Group (Central) Ltd	Mill Lane,High Ongar,Essex	05/99
	Ongar - NFFO 5	2.033	Waste Recycling Group (Central) Ltd	Mill Lane,High Ongar,Essex	06/04
	Rainham Landfill	4.074	EDL Operations (Rainham) Ltd	Ferry Lane,Rainham,Essex	04/00
	Rainham Phase II	10.864	EDL Operations (Rainham) Ltd	Wennington Marshes,Rainham,Essex	01/90
	Roxwell Landfill Gas Project	1.3	United Utilities Green Energy Ltd	Roxwell Quarry,Boyton Cross,Roxwell,Chelmsford	04/04
	<b>Total</b>	<b>63.671</b>			
	<b>Hertfordshire</b>				
	Brazier Methane Conversion Plant	4.00	EDL Operations (Brazier) Ltd	Westmill Road,Ware,Hertfordshire	12/03
	<b>Total</b>	<b>4.00</b>			
	<b>Bedfordshire</b>				
	Arlesey	1.15	Shanks Waste Services Ltd	Arlesey High Street,Arlesey, Beds	07/98
	Arlesey Phase II	1.15	Shanks Waste Services Ltd	Arlesey High Street,Arlesey, Beds	03/00
	Brogborough Phase III	6.678	Shanks Waste Services Ltd	Brogborough Landfill Site,Woburn Road,Brogborough,Bedford,Bedfordshire	02/00
	Brogborough Phase IV	2.3	Shanks Waste Services Ltd	Brogborough Landfill Site,Woburn Road,Brogborough,Bedford,Bedfordshire	09/92

	Brogborough Power Station (Phase I & II)	11.128	Shanks Waste Services Ltd	Brogborough Landfill Site, Woburn Road, Brogborough, Bedford, Bedfordshire	09/99
	Elstow	1.8	United Utilities Green Energy Ltd	Elstow Landfill Site, Elstow, Bedford, Bedfordshire	10/98
	L'Field Stewartby	12.328	Shanks Waste Services Ltd	L'Field Landfill Site, Green Lane, Stewartby	05/02
	Sundon	1.8	United Utilities Green Energy Ltd	Sundon Landfill Site, Common Lane, Upper Sundon, Luton, Bedfordshire	02/00
	<b>Total</b>	<b>38.384</b>			
	<b>Total Landfill Gas</b>	<b>139.733</b>			
	<b>Sewage gas &gt; 50kW</b>				
	East Hyde STW	.450	Thames Water Utilities Ltd	Lower Luton Rd, East Hyde, Luton, Beds	11/90
	Cambridge STW	.270	Anglian Water Services Limited	Cowley Road, Cambridge, Cambridgeshire, England	10/04
	Colchester STW	.270	Anglian Water Services Limited	Haven Road, Colchester Road, Essex, England	01/05
	Ryemeads STW	1.48	Thames Water Utilities Ltd	Rye Road, Stanstead Abbots, Herts	07/02
	Whitlingham STW CHP Plant	1.00	Anglian Water Services Ltd	Whitlingham STW CHP Plant, Whitlingham STW, Kirby Bedon Road, Trowse, Norwich	11/89
	<b>Total Sewage Gas</b>	<b>3.47</b>			
<b>Generating station accredited with a DNC of 50 kw or less</b>					
<b>PV ≤ 50 kW</b>					
	Pitsea swimming pool	.003	Basildon District Council	Rectory Park Drive, Pitsea Basildon, Essex SS13 3DW	04/04
	<b>Total PV</b>	<b>.003</b>			