

GREEN ECONOMY: A UK SUCCESS STORY

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Cover Image: International market size comparison

Country	Market size 10/11, £	Population	Per capita market size, £
Brazil	97,829,430,000	194946470	501.83
China	435,323,100,000	1341335152	324.54
Germany	140,370,200,000	82302465	1705.54
UK	122,221,500,000	62035570	1970.18

Sources

Market data: [Department for Business, Innovation and Skills \(BIS\), 2012, Low carbon environmental goods and services: Report for 2010-11](#)

See spread sheet 'Underlying data for low carbon and environmental goods and services industry analysis 2010-11',
tab '2. Country'

Population data: [United Nations, 2011, World population prospects: the 2010 revision](#)

See spread sheet 'Total Population - Both Sexes'

Indexed growth rate since the financial crisis

Green economy turnover			GDP		
	% increase, year-on-year (report)	Increase, indexed to 2007/8 (calculated)		% increase, year-on- year (report)	Increase, indexed to 2007 (calculated)
2007/08			2007		
2008/09	4.3	4.3	2008	-1.1	-1.1
2009/10	4.3	8.8	2009	-4.4	-5.4
2010/11	4.7	13.9	2010	2.1	-3.5
2011/12 *	4.9	19.4	2011 *	0.8	-2.7
2012/13 *	5.1	25.5	2012 *	0.8	-1.9
2013/14 *	5.3	32.2	2013 *	2.0	0.1
2014/15 *	5.5	39.5	2014 *	2.7	2.8

* = Projected figures

Sources

Green economy data: [Department for Business, Innovation and Skills \(BIS\), 2012, Low carbon environmental goods and services: Report for 2010-11](#)

See spread sheet 'Underlying data for low carbon and environmental goods and services industry analysis 2010-11', tabs '3.UK ' and '5. Growth forecasts'

GDP (actual data): [Office for National Statistics \(ONS\), 2012, Quarterly national accounts: Fourth quarter 2011](#)

See spread sheet 'Quarterly National Accounts, Data tables Q4 2011 Month 3'

GDP (projected data): [Office for Budget Responsibility \(OBR\), 2012, Economic and fiscal outlook](#)

See 'Table 3.1: Summary of central forecast and changes since November'

Size of UK economy 2011

	2007/8	2008/9	% change	2009/10	% change	2010/11	% change	
GVA at basic p	1273286	1272937		-0.03	1264937	-0.63	1315268	3.98
LCEGS (£m)	107342	112003		4.3	116780	4.3	122221	4.7

*LCEGS can not be seen simply as a portion of GDP, but a fairer comparison can be made to GVA at basic prices

Sources

LCEGS

[Department for Business, Innovation and Skills \(BIS\), 2012, Low carbon environmental goods and services: Report for 2010-11](#)
See spread sheet 'Underlying data for low carbon and environmental goods and services industry analysis 2010-11', tab '3.UK '

GVA

[Office for National Statistics \(ONS\), 2012, Quarterly national accounts: Fourth quarter 2011](#)
See spread sheet 'Quarterly National Accounts, Data tables Q4 2011 Month 3'

Low carbon and environmental jobs compared to other sectors 2010-11

	Green Employment	Motor Trades	Telecommunications	Finance & Insurance
England	788702	440200	184500	929600
Scotland	77703	46000	18700	86800
Wales	41506	21500	6600	27800
N Ireland	31714	10700	3100	17700
UK total	939625	518400	212900	1061900

Sources

Green employment data:

[BIS, 2012, Low carbon environmental goods and services: Report for 2010-11](#)

See spread sheet 'Underlying data for low carbon and environmental goods and services industry analysis 2010-11', tab '6. UK regions '

General employment data:

[ONS, 2012, Business register employment survey 2010](#)

See spreadsheets 'Annual Employment Statistics (BRES) 2010

Table 4: Region by Broad Industry Group (SIC 2007) (Provisional)' and 'Annual Employment Statistics (BRES) 2010

Table 5: Region by Industry (3-digit SIC 2007) (Provisional)'

Emission reduction targets

	1990 emissions / kTCO ₂ e	2020 reduction target	2020 emissions if targets met / kTCO ₂ e	Reduction between 1990 and 2020 / kT
England*	618659	-33%	416208	202451
Scotland	69227	-42%	40152	29075
Wales	55572	-40%	33343	22229
N. Ireland	24483	-30%[†]	17138	7345
Total UK[^]	767941	-34%	506841	261100

Sources

Targets data: UK figures: [HM Government, 2008, Climate Change Act](#)
 Scotland figures: [Scottish Government, 2009, Climate Change \(Scotland\) Act](#)
 Wales figures: [Welsh Assembly Government, 2010, Climate change strategy for Wales](#)
 N. Ireland figures: [Northern Ireland Executive, 2012, Programme for government 2011-15](#)

Emissions data: [AEA, 2011, Greenhouse gas inventories for England, Scotland, Wales and Northern Ireland: 1990 – 2009, Report to the Department for Energy and Climate Change, the Scottish Government, the Welsh Government and the Northern Ireland Department of Environment](#)
 See Table ES1: Summary of Greenhouse Gas Emission Trends for UK and Devolved Administrations (as GWP-Equivalent Mass of Carbon Dioxide, CO₂e)

[†] Estimate based on target of 35% reduction by 2025 and known reduction of 20.3% by 2009

*England 2020 emissions calculated as difference between UK total and sum of other nations, 2020 target calculated from this

[^]Total UK 1990 emissions calculated from sum of regions (ie does not include unallocated emissions)

Spending on the top 20 infrastructure projects (by cost) 2012-13

Type	Funding Source(s)	Sector	Sub-sector	Sub group	Project / programme name	Total capex cost		2012/13		
						all funding (£m)	2012/13 (£m)	Totals (£m)	Percentage	
Low carbon	Private	Energy	Electricity generation	Wind Offshore	Wind Offshore	54,580		5,506		
		Communications	Other digital communications	Balancing item	Balancing item to cover general communications investment	14,403		3,927		
		Energy	Electricity generation	Nuclear	Nuclear	53,175		2,138		
		Energy	Electricity transmission	Electricity transmission	Other Investment	11,455		815		
		Communications	Fixed line	Fixed line	BT Superfast Fibre Access programme	2,500		500		
		Water	Water and sewerage compani	United Utilities Water	United Utilities Water: Sewerage service	2,188		477		
		Energy	Electricity generation	Wind Onshore	Wind Onshore	4,176		453		
		Water	Water and sewerage compani	Thames Water	Thames Water: Sewerage service	3,400		374		
		Water	Water and sewerage compani	Thames Water	Thames Water: Water service	1,513		327	14,517	63
		Public	Transport	London	London	London Underground capital investment programme	5,672		1,418	1,418
	Public / private	Transport	Rail	Network Rail	Other CP4 investment	13,871		4,616		
		Transport	Rail	Crossrail	Crossrail	14,500		1,650		
		Transport	Rail	Network Rail	Thameslink	4,396		440		
		Communications	Rural broadband	Rural broadband	BDUK rural broadband investment	2,000		330	7,036	31
							Total low carbon 2012/13		22,971	
	High carbon	Private	Transport	Airports	Airports	Heathrow Capital Investment Programme	5,521		580	
			Energy	Electricity generation	CCGT	CCGT	3,793		579	1,159
Public		Transport	LA Majors	Other	Others	1,440		320		
		Transport	LA Majors	HA PFI	Highways Maintenance Block Funding			779		
		Transport	Roads - HA Majors	HA PFI	Highways Agency PFI schemes	1,704		447		
		Transport	Roads - HA Renewals	HA renewals	Highway Agency capital renewals	1,507		394	1,940	63
						Total high carbon 2012/13		3,099		

Source [HM Treasury, 2011, Infrastructure investment pipeline data](#)
See tab 'Infrastructure pipeline'

Renewable electricity consumed per capita across th UK 2011-12

	UK	Scotland	Wales	N Ireland	England
Total net electricity generation (renewable and non-renewable) (GWh)	361,113	46,400	27,404	7,402	279,906
Transfer to England (GWh)		-8096	-7092		+15188
Transfer to N Ireland (GWh)		-2297		+2297	
Transmission loss (GWh)	-6002	-594	-335	-156	-4917
Distribution loss (GWh)	-21040	-1807	-1096	-532	-17605
Total available after losses (GWh)	334,071	33,606	18,881	9,011	272,572
Proportional change (%)	-7.5	-27.6	-31.1	+21.7	-2.6
Renewable electricity generation (GWh)	25,734	9,515	1,621	784	13,814
Renewable electricity after applying proportional change (GWh)	23,807	6,891	1,117	954	13,452
Total electricity consumption from public supply (GWh)	319,702	30,696	17,755	8,693	262,559
Proportion of electricity consumed which is renewable (%)	7.45	22.45	6.29	10.98	5.12

Source

[Department for Energy and Climate Change \(DECC\), 2011,](#)

[Electricity generation and supply figures for Scotland, Wales, Northern Ireland and England, 2007 to 2010](#)

'Table 1: Generation and supply of electricity in Scotland, Wales, Northern Ireland and England, 2007 to 2010'

'Table 2: Generation of electricity by fuel in Scotland, Wales, Northern Ireland and England, 2007 to 2010'

Investment in renewables per capita April 2011 - March 2012

	Total Investment / £m	Population	Per capita Investment
Wales	443	3006430	£147.35
Scotland	1700	5222100	£325.54
N Ireland	180	1799392	£100.03
England	4459.5	52234045	£85.38

Sources

Investment data:

[DECC, 2012, Renewables Investment and Jobs](#)

Population data:

[ONS, 2011, Population Estimates for UK, England and Wales, Scotland and Northern Ireland, Mid-2010](#)

See spread sheet 'Population Estimates for UK, England and Wales, Scotland and Northern Ireland - Mid 2010'

Low carbon and environmental jobs across the UK 2010-11

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'Underlying data for low carbon and environmental goods and services industry analysis 2010-11', tab '6. UK regions '

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Table 4: Region by Broad Industry Group (SIC 2007) (Provisional)' and 'Annual Employment Statistics (BRES) 2010

Table 5: Region by Industry (3-digit SIC 2007) (Provisional)'

Where are the UK's green export markets?

	Imports (£m)	Exports (£m)
Brazil	140.3	232.3
China	463.8	793.9
Germany	170.0	291.0
India	228.9	411.8
Japan	211.1	357.8
US	189.3	330.5
Algeria	5.7	22.5
Argentina	10.8	20.7
Australia	110.5	201.2
Austria	6.7	13.4
Bangladesh	7.1	23.9
Belgium	6.5	22.7
Canada	119.9	244.8
Chile	159.8	268.4
Colombia	8.5	26.8
Czechia	3.5	7.3
Denmark	166.3	317.7
Egypt	7.4	28.4
Finland	3.5	19.8
France	232.3	275.9
Greece	5.4	19.7
Hong Kong	402.7	591.0
Hungary	167.0	247.8
Indonesia	199.0	292.2
Iran	13.2	42.6
Italy	190.2	367.9
Malaysia	229.2	364.9
Mexico	166.9	252.1
Morocco	3.2	6.8
Netherlands	166.3	277.9
New Zealand	3.1	6.1
Pakistan	285.5	409.0
Peru	4.1	24.0
Philippines	10.4	28.3
Poland	205.0	374.0
Portugal	142.2	314.8
Romania	208.3	339.1

Russia	178.8	306.2
Saudi Arabia	113.6	314.2
Singapore	186.2	320.3
South Africa	128.0	250.4
South Korea	289.4	485.1
Spain	308.3	500.5
Sweden	105.0	185.4
Switzerland	5.9	21.5
Taiwan	251.7	419.1
Thailand	162.1	346.0
Turkey	187.0	330.4
Ukraine	7.1	32.2
UAE	261.2	379.4
Venezuela	4.1	7.9
Vietnam	1.2	2.5

Source

[BIS, 2012, Low carbon environmental goods and services: Report for 2010-11](#)

See spread sheet 'Underlying data for low carbon and environmental goods and services industry analysis 2010-11', tabs '8.UK trade by country'