

2016 Country Data - United Kingdom

Energy Efficiency

Indicator	Score
National energy efficiency planning	100
Energy efficiency entities	57.14
Information provided to consumers about electricity usage	75
EE incentives from electricity rate structures	77.78
Incentives & mandates: large consumers	66.67
Incentives & mandates: public sector	75
Incentives & mandates: utilities	58.33
Financing mechanisms for energy efficiency	100
Minimum energy efficiency performance standards	69.44
Energy labeling systems	66.67
Building energy codes	100
Carbon Pricing	72.5
Total	76.54

Renewable Energy

Indicator	Score
Legal framework for renewable energy	100
Planning for renewable energy expansion	82
Incentives and regulatory support for renewable energy	88
Attributes of financial and regulatory incentives	81
Network connection and pricing	100
Counterparty risk	100
Carbon pricing and monitoring	73
Total	89.14



Overall Score 55.23

Energy Efficiency

National energy efficiency planning	Score	100
Is there legislation or a national action plan that ain EE?	ns to increase	Yes
Name of EE legislation or action plan		Law 3. Framework Law on Mother Earth and Comprehensive Development for Good Living.; Strategic Plan for Energy Saving and Energy Efficiency by the Viceministry of Energy Development.
Is there an energy efficiency goal or target at the na	itional level?	Yes
Natonal target details		The target is set at 129.2 million tonnes of oil equivalent (mtoe) for final energy consumption on a net calorific value basis. This represents an 18% reduction in final energy consumption relative to 2007 business-as-usual projection (and is equivalent to a 20% reduction in primary energy consumption). The target was set on 30th April 2013 in response to Article 3 of the EU Energy Efficiency Directive (EED) and is non-bindingx000Dx000D_UK has additionally set a binding target (under Article 7 of the EED) to achieve a cumulative enduse energy savings target



	by 31st December 2020 equivalent to 1.5 per cent of annual energy sales to final energy users relative to the average energy sales over the period 2010-12. This target is set at 324 TWh. The energy savings are to be met through the deployment of supplier obligations and/or alternative measuresx000D_
Is there a target for the residential sector?	Yes
Target details	VW summary
Does the target have a milestone or deadline?	Yes
Is there a commercial servcies sector target?	Yes
Target details	VW summary
Does the target have a milestone or deadline?	Yes
Is there an industrial sector target?	Yes
Target details	VW summary
Does the target have a milestone or deadline?	Yes
Is there a power sector target?	Yes
Target details	VW summary
Does the target have a milestone or deadline?	Yes

Energy efficiency entities	Score	57.14
Are there governmental and/or independent bodi	es dedicated to	Yes

setting EE strategy?	
Name of entity	DECC
Are there governmental and/or independent bodies dedicated to setting EE standards?	Yes
Name of entity	DECC; DCLG
Are there governmental and/or independent bodies dedicated to regulating EE activities of energy suppliers?	No
Name of entity	Ofgem
Are there governmental and/or independent bodies dedicated to regulating EE activities of energy consumers?	Yes
Name of entity	Ofgem
Are there governmental and/or independent bodies dedicated to certifying compliance with equipment EE standards?	Yes
Name of entity	NMRO
Are there governmental and/or independent bodies dedicated to certifying compliance with building EE standards?	No
Name of entity	0
Are there governmental and/or independent bodies dedicated to selecting and/or approving third party auditors tasked with certifying EE standards?	No
Name of entity	CICAIR Limited

Information provided to consumers about electricity usage	Score	75
Residential customers		



Is it mandatory for utilities to provide reports of their energy usage, in a bill or by other means?	Yes
Commercial customers	
Is it mandatory for utilities to provide reports of their energy usage, in a bill or by other means?	Yes
Industrial customers	
Is it mandatory for utilities to provide reports of their energy usage, in a bill or by other means?	Yes
Residential customers	
At what intervals do customers receive these reports (times per year)?	12
Do the reports include the price levels customers pay for energy usage?	Yes
Commercial customers	
At what intervals do customers receive these reports (times per year)?	12
Do the reports include the price levels customers pay for energy usage?	Yes
Industrial customers	
At what intervals do customers receive these reports (times per year)?	12
Do the reports include the price levels customers pay for energy usage?	Yes
Does the regulator track utilites' compliance with laws for providing energy usage information to customers?	Yes
Residential customers	



Do customers receive a bill or report which compares them to other users in the same region and/or usage class?	No
Method of comparison	N/A
Commercial customers	
Do customers receive a bill or report which compares them to other users in the same region and/or usage class?	No
Method of comparison	N/A
Industrial customers	
Do customers receive a bill or report which compares them to other users in the same region and/or usage class?	No
Method of comparison	N/A
Residential customers	
Do customers receive a bill or report that shows their energy usage compared to previous bills or reports over time?	Yes
Commercial customers	
Do customers receive a bill or report that shows their energy usage compared to previous bills or reports over time?	Yes
Industrial customers	
Do customers receive a bill or report that shows their energy usage compared to previous bills or reports over time?	Yes
All customers	
Can customers access real time feedback on energy usage (for either prepaid or post-paid systems)?	Yes
Do customers have the ability to manage energy usage levels remotely (through apps or other technology mediums that can	Yes



track real time usage?

EE incentives from electricity rate structures	Score	77.78
Residential customers		
Are customers charged a flat fee (per connection)?		Yes
Are customers charged constant block rates?		Yes
Are customers charged declining block rates?		No
Are customers charged increasing block rates?		No
Commercial customers		
Are customers charged a flat fee (per connection)?		No
Are customers charged constant block rates?		Yes
Are customers charged declining block rates?		No
Are customers charged increasing block rates?		No
Industrial customers		
Are customers charged a flat fee (per connection)?		No
Are customers charged constant block rates?		Yes
Are customers charged declining block rates?		No
Are customers charged increasing block rates?		No
Residential customers		
Do customers pay energy charges (per kWh)?		Yes



Do customers pay demand charges (per kW)?	No
Do customers pay reactive power charges (per kVAR)?	No
Commercial customers	
Do customers pay energy charges (per kWh)?	Yes
Do customers pay demand charges (per kW)?	Yes
Do customers pay reactive power charges (per kVAR)?	No
Industrial customers	
Do customers pay energy charges (per kWh)?	Yes
Do customers pay demand charges (per kW)?	Yes
Do customers pay reactive power charges (per kVAR)?	No
Residential customers	
Are customers charged based on real-time pricing?	Yes
Are customers charged based on variable peak pricing?	Yes
Are customers charged based on critical peak pricing?	Yes
Are tariffs adjusted according to seasons?	No
Do customers pay according to time-of-day electricity use or receive peak-time rebates?	No
Commercial customers	
Are customers charged based on real-time pricing?	Yes
Are customers charged based on variable peak pricing?	No



Are customers charged based on critical peak pricing?	No
Are tariffs adjusted according to seasons?	No
Do customers pay according to time-of-day electricity use or receive peak-time rebates?	No
Industrial customers	
Are customers charged based on real-time pricing?	Yes
Are customers charged based on variable peak pricing?	No
Are customers charged based on critical peak pricing?	No
Are tariffs adjusted according to seasons?	No
Do customers pay according to time-of-day electricity use or receive peak-time rebates?	No

Incentives & mandates: large consumers	Score	66.67
What is the threshold for classifying large consumers?		0
Large consumer EE mandate/incentive regulations		
Is it required for the consumption and/or savings of large energy users to be tracked and documented on a regular		No
Are efficiency targets mandated for large consumers?		No
Details		N/A
Are energy audits mandated for large consumers?		No
Are energy efficiency progress reports mandated for large consumers?	2	No



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Interval of reports	0
Are energy-management systems mandated for large consumers?	No
Details	0
Are there penalties in place for non-compliance with regulatory obligations for large consumers?	No
Is there a measurement and verification program in place?	No
Is verification done by a third party?	No
Are there financial incentives for large consumers to invest in energy efficiency?	No
Details	0
Are there tax incentives for large consumers to invest in energy efficiency?	Yes
Are there other incentives for large consumers to invest in energy efficiency?	Yes
Details	Climate Change Agreements offer rebate on CCL (Climate Change Levy). Climate change agreements are voluntary agreements made by UK industry and the Environment Agency to reduce energy use and carbon dioxide (CO2) emissions. In return, operators receive a discount on the Climate Change Levy (CCL), a tax added to electricity and fuel bills. The Environment Agency administers the CCA scheme on behalf of the



	whole of the UK. For operators who hold a CCA, the CCL will be reduced by:90% on electricity bills and 60% on other fuel bills.
Is there a program to publicly recognize large-scale users that have achieved significant energy savings measures?	Yes
Are energy savings and/or financial savings publicized?	Yes
Does the program offer assistance (from a government or independent entity) to large-scale users to identify energy savings investments opportunities?	Yes
Primary Energy Consumption (MJ - latest GTF data from 2012)	2347800.559

Incentives & mandates: public sector Score	75
Are there binding energy savings obligations for public buildings?	No
Are energy savings from efficiency activities at public buildings tracked (either in-house or by a third party)?	Yes
Are there binding energy savings obligations for other public facilities (may include water supply, wastewater services, municipal solid waste, street lighting, transportation, and heat supply)?	No
Are energy savings from efficiency activities at other public facilities tracked?	Yes
Is there a specific policy or mandated guidelines for public procurement of energy-efficient products and services?	Yes
Public procurement guidelines for EE	
Do public budgeting regulations and practices allow public entities to retain energy savings?	Yes



Public budgeting regulations for EE

Incentives & mandates: utilities Sc	ore 58.33
Name of utility energy efficiency regulation program	
Electricity generation	
Are utilities required to carry out energy efficiency activities in this area?	n No
Details	There is no specific requirement beyond the plans of the government to use more efficient combined cycle turbines within its national Electric Expansion Plan (TRENT 6 DEL) focusing on heat rate enhancements and cost savings per KWh.
Are energy savings or other target indicators measured to traperformance in meeting EE requirements?	ack No
Are the requirements measured/validated by an independen third party?	t No
Are there penalties in place for non-compliance with EE requirements?	No
Are there mandates or incentives for new and/or brownfield generation?	co- No
Transmission & distribution	
Are utilities required to carry out energy efficiency activities in this area?	n Yes
Details	There is no specific requirement but the



	natural expansion of the grid comes with efficiency in energy transport in low, medium, and high voltages.
Are energy savings or other target indicators measured to track performance in meeting EE requirements?	Yes
Are the requirements measured/validated by an independent third party?	Yes
Are there penalties in place for non-compliance with EE requirements?	Yes
Demand-side management -	
Are utilities required to carry out energy efficiency activities in this area?	Yes
Details	No specific requierement stablished.
Are energy savings or other target indicators measured to track performance in meeting EE requirements?	Yes
Are the requirements measured/validated by an independent third party?	Yes
Are there penalties in place for non-compliance with EE requirements?	Yes
Is there a demand-side management department within the selected utility?	Yes
Do utilities provide customers incentives for demand response, such as peak-time rebates?	Yes
Is there public budget funding available for utilities to recover costs associated with or revenue lost from mandated energy efficiency activities?	Yes
Is there compensation for revenue losses via a tracking account	No



available for utilities to recover costs associated with or revenue lost from mandated energy efficiency activities?	
Are these available as solely market-driven financing mechanisms without any direct government approval, subsidy, authorization or other mediation procedure?	No
Are these available as government-driven financing mechanisms?	No
Are there credit lines available for utilities to recover costs associated with or revenue lost from mandated energy efficiency activities?	No
Are these available as solely market-driven financing mechanisms without any direct government approval, subsidy, authorization or other mediation procedure?	No
Are these available as government-driven financing mechanisms?	No
Are there partial risk guarantees available for utilities to recover costs associated with or revenue lost from mandated energy efficiency activities?	No
Are these available as solely market-driven financing mechanisms without any direct government approval, subsidy, authorization or other mediation procedure?	No
Are these available as government-driven financing mechanisms?	No
Is there program cost recovery available for utilities to recover costs associated with or revenue lost from mandated energy efficiency activities?	Yes
Are these available as solely market-driven financing mechanisms without any direct government approval, subsidy, authorization or other mediation procedure?	No
Are these available as government-driven financing mechanisms?	Yes



Is there ESCO financing available for utilities to recover costs associated with or revenue lost from mandated energy efficiency activities?	No
Are these available as solely market-driven financing mechanisms without any direct government approval, subsidy, authorization or other mediation procedure?	No
Are these available as government-driven financing mechanisms?	No
Is there on-bill financing/re-payment available for utilities to recover costs associated with or revenue lost from mandated energy efficiency activities?	No
Are these available as solely market-driven financing mechanisms without any direct government approval, subsidy, authorization or other mediation procedure?	No
Are these available as government-driven financing mechanisms?	No
Are there any other financing mechanisms available for utilities to recover costs associated with or revenue lost from mandated energy efficiency activities?	0
Are these available as solely market-driven financing mechanisms without any direct government approval, subsidy, authorization or other mediation procedure?	No
Are these available as government-driven financing mechanisms?	No

Financing mechanisms for energy efficiency	Score	100
Residential sector		
Are there tax incentives available for energy efficiency investments?		No



Are there discounted "green" mortgages available for energy efficiency investments?	Yes
Is on-bill financing/re-payment available for energy efficiency investments?	Yes
Are credit lines available for energy efficiency investments?	No
Are energy services agreements or ESCOs available for energy efficiency investments?	No
Are green bonds available for energy efficiency investments?	No
Is vendor credit and/or leasing available for energy efficiency investments?	Yes
Are partial risk guarantees available for energy efficiency investments?	No
Are there any other financing mechanisms available for energy efficiency investments?	Yes
Are these available as solely market-driven financing mechanisms without any direct government approval, subsidy, authorization or other mediation procedure?	Yes
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Are these available as government-driven financing mechanisms?	No
Details	
Are these available as solely market-driven financing mechanisms without any direct government approval, subsidy, authorization or other mediation procedure?	No
Are these available as government-driven financing mechanisms?	Yes
Commercial services sector	
Are there tax incentives available for energy efficiency investments?	Yes
Are there discounted "green" mortgages available for energy efficiency investments?	No
Is on-bill financing/re-payment available for energy efficiency investments?	Yes
Are credit lines available for energy efficiency investments?	
Are energy services agreements or ESCOs available for energy efficiency investments?	Yes
Are green bonds available for energy efficiency investments?	Yes



Is vendor credit and/or leasing available for energy efficiency investments?	Yes
Are partial risk guarantees available for energy efficiency investments?	Yes
Are there any other financing mechanisms available for energy efficiency investments?	Yes
Are these available as solely market-driven financing mechanisms without any direct government approval, subsidy, authorization or other mediation procedure?	No
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Details	
Are these available as solely market-driven financing mechanisms without any direct government approval, subsidy, authorization or other mediation procedure?	No
Are these available as government-driven financing mechanisms?	Yes
Industrial sector	
Are there tax incentives available for energy efficiency investments?	Yes
Are there discounted "green" mortgages available for energy efficiency investments?	No
Is on-bill financing/re-payment available for energy efficiency investments?	Yes
Are credit lines available for energy efficiency investments?	No
Are energy services agreements or ESCOs available for energy efficiency investments?	No
Are green bonds available for energy efficiency investments?	No



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Is vendor credit and/or leasing available for energy efficiency investments?	No
Are partial risk guarantees available for energy efficiency investments?	No
Are there any other financing mechanisms available for energy efficiency investments?	Yes
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Are these available as government-driven financing mechanisms?	No
Details	
Are these available as solely market-driven financing mechanisms without any direct government approval, subsidy, authorization or other mediation procedure?	No
Are these available as government-driven financing mechanisms?	Yes

Minimum energy efficiency performance Score standards	69.44
EE standards regulations	
Refrigerators	
Have minimum energy performance standards been adopted?	Yes
Details of standards	he standard is defined in terms of a minimum energy efficiency index (EEI) plus there are other requirements
Is there a verification program in place?	Yes



Is it carried out by a third party?	No
Is there a penalty for non-compliance with energy efficiency standards?	Yes
Are the standards based on external/international standards?	Yes
Air conditioners	
Have minimum energy performance standards been adopted?	Yes
Details of standards	In ratios, not units
Is there a verification program in place?	Yes
Is it carried out by a third party?	No
Is there a penalty for non-compliance with energy efficiency standards?	Yes
Are the standards based on external/international standards?	Yes
Lighting equipment	
Have minimum energy performance standards been adopted?	Yes
Details of standards	0
Is there a verification program in place?	Yes
Is it carried out by a third party?	No
Is there a penalty for non-compliance with energy efficiency standards?	Yes
Are the standards based on external/international standards?	Yes
Industrial electric motors	
Have minimum energy performance standards been adopted?	Yes



Details of standards	0
Is there a verification program in place?	Yes
Is it carried out by a third party?	No
Is there a penalty for non-compliance with energy efficiency standards?	Yes
Are the standards based on external/international standards?	Yes
Other industrial equipment	
Have minimum energy performance standards been adopted?	Yes
Details of standards	0
Is there a verification program in place?	Yes
Is it carried out by a third party?	No
Is there a penalty for non-compliance with energy efficiency standards?	Yes
Are the standards based on external/international standards?	Yes
Light duty vehicles	
Have minimum energy performance standards been adopted?	No
Details of standards	0
Is there a verification program in place?	No
Is it carried out by a third party?	No
Is there a penalty for non-compliance with energy efficiency standards?	No
Are the standards based on external/international standards?	No



Heavy duty vehicles	
Have minimum energy performance standards been adopted?	No
Details of standards	0
Is there a verification program in place?	No
Is it carried out by a third party?	No
Is there a penalty for non-compliance with energy efficiency standards?	No
Are the standards based on external/international standards?	No

Energy labeling systems	Score	66.67
Refrigerators		
Have energy efficiency labeling schemes been adopted?		Yes
Is the labeling scheme mandatory?		Yes
Is the labeling scheme based on external/international standards?		Yes
Air conditioners		
Have energy efficiency labeling schemes been adopted?		Yes
Is the labeling scheme mandatory?		Yes
Is the labeling scheme based on external/international standards?		Yes
Lighting equipment		
Have energy efficiency labeling schemes been adopted?		Yes



Is the labeling scheme mandatory?	Yes
Is the labeling scheme based on external/international standards?	Yes
Industrial electric motors	
Have energy efficiency labeling schemes been adopted?	No
Is the labeling scheme mandatory?	No
Is the labeling scheme based on external/international standards?	Yes
Other industrial equipment	
Have energy efficiency labeling schemes been adopted?	Yes
Is the labeling scheme mandatory?	Yes
Is the labeling scheme based on external/international standards?	Yes
Light duty vehicles	
Have energy efficiency labeling schemes been adopted?	No
Is the labeling scheme mandatory?	No
Is the labeling scheme based on external/international standards?	No
Heavy duty vehicles	
Have energy efficiency labeling schemes been adopted?	No
Is the labeling scheme mandatory?	No
Is the labeling scheme based on external/international standards?	No



Building energy codes Score	100
Are there energy efficiency codes for new residential buildings?	Yes
Are there energy efficiency codes for new commercial buildings?	Yes
Is the energy efficiency code for new residential buildings its own stand-alone, separate code or part of the overall building code?	Yes
Is the energy efficiency code for new commercial buildings its own stand-alone, separate code or part of the overall building code?	Yes
Is there any provision for regular updates to the code for new residential buildilngs?	Yes
Is there any provision for regular updates to the code for new commercial buildings?	Yes
EE building code regulations	
When was the code last updated for residential buildings?	2014
When was the code last updated for commercial buildings?	2014
Is there a system to ensure compliance with building energy efficiency codes?	Yes
Is it carried out by a third party?	Yes
Are renovated residential buildings required to meet a building energy codee?	Yes
Are renovated commercial buildings required to meet a building energy code?	Yes
Is the energy efficiency code for renovated residential buildings different from the code for new buildings?	Yes
Is the energy efficiency code for renovated commercial buildings different from the code for new buildings?	Yes



Is the energy efficiency code for renovated residential buildings its own stand-alone, separate code or part of the overall building code?	Yes
Is the energy efficiency code for renovated commercial buildings its own stand-alone, separate code or part of the overall building code?	Yes
Is there any provision for regular updates to the code for renovated residential buildings?	Yes
Is there any provision for regular updates to the code for renovated commercial buildings?	Yes
Is there a mandatory standardized rating or labeling system for the energy performance of existing buildings?	Yes
Is the labeling scheme or rating adopted from external standards?	Yes
Are commercial and residential buildings required to disclose property energy usage at the point of sale or when leased?	Yes
Are large commercial and residential buildings required to disclose property energy usage annually?	Yes
Are there mandates or targets for new building stocks to achieve high quality energy efficiency certifications, such as LEED (Leadership in Energy & Environmental Design) (e.g. percentage of new building stocks that must be LEED certified)?	Yes
Details	There are no direct financial incentives available. However, from 1st April 2012, standard Feed-in Tariff (FIT) is only available in instances where the building the installation is attached to (or wired to provide electricity to) is a level D or above. If not, such installations receive a lower tariff. There is an exemption from meeting



	the energy efficiency requirements of EPC Level D or above for solar PV community and school installations.
LEED incentives	No
Local program details	0

Carbon Pricing	Score	72.5
Is there a carbon pricing mechanism in place?		Yes
For any carbon pricing mechanism (e.g. carbon tax, emtrading system), what is the portion of national GHG encovered)?		0.45
Is there a monitoring, reporting and verification system greenhouse gas emissions in place?	n for	Yes

Renewable Energy

Legal framework for renewable energy	Score	100
Does a legal framework for renewable energy development exist?	nt	Yes
Name of the Law		0
Is private sector ownership of renewable energy generation legally authorized?	on	Yes

Planning for renewable energy expansion	Score	82
Does an official renewable energy target exist?		Yes



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Overall target	Legally binding target of 15% from all renewables sources by 2020, 234TWh of all renewable resources by 2020
Solar target	combined for hydro, geothermal, solar and domestic heat - 14 TWh
Wind target	On shore wind - 24-32 TWh and for Off shore wind - 33-58 TWh
Hydro target	combined for hydro, geothermal, solar and domestic heat - 14 TWh
Biomass target	biomass heat - 32-50 TWh and for biomass heat non domestic - 36-50 TWH
Geothermal target	combined for hydro, geothermal, solar and domestic heat - 14 TWh
Does a renewable energy action plan or strategy to attain the target exist?	Yes
Name of the action plan	0
Does the plan or startegy define the amount of investment necessary to meet the RE target?	No
The amount of investment identified	0
Is there an institution responsible for tracking progress in renewable energy development?	Yes
Name of the institution	0



Does an electricity generation plan that includes renewable energy development exist?	Yes
Name of the generation plan	0
Is the expansion plan based on a probabilistic approach?	Yes
Does the current transmission planning consider renewable energy scale-up?	Yes
Name of the transmission plan	0
Has the country conducted a variable renewable energy integration study?	Yes
Name of the integration study	0
Year of the integration study	2012
Does the country have sufficient resource abundance to warrant a solar resource atlas?	Yes
Does the government publish or endorse a solar resource atlas or other data on the abundance and quality of the resource?	Yes
Solar atlas is validated by at least 5 ground-based measurements taken for a period of at least a year;	No
Solar atlas has a spatial resolution of 5km or less;	No
Solar atlas is based on modeling inputs covering at least a 10 year period;	No
Solar atlas is accompanied by an explanation of the methodology and instrumentation	No
Has the country carried out strategic planning or produced zoning guidance to inform the commercial development of solar resources?	Yes
Has the solar resource planning or zoning guidance been undertaken as part of a strategic environmental and social	No



assessment or equivalent process?	
Are the solar resource planning or zoning guidance outputs publically available?	No
Does the country have sufficient resource abundance to warrant a wind resource atlas?	Yes
Does the government publish or endorse a wind resource atlas or other data on the abundance and quality of the resource?	Yes
Wind atlas is validated by at least 5 ground-based measurements taken for a period of at least a year;	Yes
Wind atlas has a spatial resolution of 5km or less;	Yes
Wind atlas is based on modeling inputs covering at least a 10 year period;	Yes
Wind atlas is accompanied by an explanation of the methodology and instrumentation	No
Has the country carried out strategic planning or produced zoning guidance to inform the commercial development of wind resources?	Yes
Has the wind resource planning or zoning guidance been undertaken as part of a strategic environmental and social assessment or equivalent process?	No
Are the wind resource planning or zoning guidance outputs publically available?	No
Does the country have sufficient resource abundance to warrant a hydro resource atlas?	Yes
Does the country publish or endorse a national hydro resource map or atlas?	Yes
Hydro atlas is validated by ground-based water run-off data and/or site surveys from potential sites;	Yes



Hydro atlas is accompanied by an explanation of the methodology and instrumentation	Yes
Has the country carried out strategic planning or produced zoning guidance to inform the commercial development of hydro resources?	Yes
Has the hydro resource planning or zoning guidance been undertaken as part of a strategic environmental and social assessment or equivalent process?	Yes
Are the hydro resource planning or zoning guidance outputs publically available?	No
Does the country have sufficient resource abundance to warrant a biomass resource atlas?	Yes
Does the country publish or endorse a national biomass resource map or atlas?	Yes
Biomass atlas is validated by ground-based survey or officially reported data;	No
Biomass atlas is accompanied by an explanation of the methodology and instrumentation.	No
Has the biomass resource planning or zoning guidance been undertaken as part of a strategic environmental and social assessment or equivalent process?	No
Are the biomass resource planning or zoning guidance outputs publically available?	No
Does the country have sufficient resource abundance to warrant a geothermal resource atlas?	Yes
Does the country publish or endorse a national geothermal resource map or atlas?	No
The governmetn has collected and recorded well data at potential geothermal sites?	No



Does the government publish a national geological map?	No
The government has supported surface exploration (geological; geochemical; temp; gradient) at potential sites?	No
The government has supported test drilling at at least one site (slim bore or full well)?	No
The government has supported the creation of a reservoir model at at least one site?	No
Has the country carried out strategic geothermal resource planning or produced zoning guidance to inform the commercial development of the resource?	No
Has the geothermal resource planning or zoning guidance been undertaken as part of a strategic environmental and social assessment or equivalent process?nt process?	No
Are the geothermal resource planning or zoning guidance outputs publically available?	No

Incentives and regulatory support for renewable Score energy	88
Is there at least one scheme to support renewable energy per unit of electricity generated? (e.g., feed-in tariff, competitive bidding/auction, mandates, generation premiums, production tax credits)?	Yes
Feed-in tariff	Yes
Feed-in tariff - Solar	Yes
Feed-in tariff - Wind	Yes
Feed-in tariff - Hydro	Yes
Feed-in tariff - Biomass	Yes



9	0) (- /
Feed-in tariff - Geothermal	No
Government body in charge	Ofgem
Projects guaranteed off-take	Yes
Solar Feed-in-tariff Price (\$ cents/kWh)	9
Solar Feed-in-tariff Max. capacity (single)	5MW
Solar Feed-in-tariff Max. capacity (total)	None
Solar Feed-in-tariff Closing date	Date an eligible Installation is commissioned will be its Eligibility Date, as long as an application for accreditation is made before this.
Wind Feed-in-tariff Price (\$ cents/kWh)	4
Wind Feed-in-tariff Max. capacity (single)	5MW
Wind Feed-in-tariff Max. capacity (total)	None
Wind Feed-in-tariff Closing date	Date an eligible Installation is commissioned will be its Eligibility Date, as long as an application for accreditation is made before this.
Hydro Feed-in-tariff Price (\$ cents/kWh)	4
Hydro Feed-in-tariff Max. capacity (single)	5MW
Hydro Feed-in-tariff Max. capacity (total)	None
Hydro Feed-in-tariff Closing date	Date an eligible Installation is



	commissioned will be its Eligibility Date, as long as an application for accreditation is made before this.
Biomass Feed-in-tariff Price (\$ cents/kWh)	13
Biomass Feed-in-tariff Max. capacity (single)	5MW
Biomass Feed-in-tariff Max. capacity (total)	None
Biomass Feed-in-tariff Closing date	Date an eligible Installation is commissioned will be its Eligibility Date, as long as an application for accreditation is made before this.
Geothermal Feed-in-tariff Price (\$ cents/kWh)	
Geothermal Feed-in-tariff Max. capacity (single)	NA
Geothermal Feed-in-tariff Max. capacity (total)	NA
Geothermal Feed-in-tariff Closing date	NA
Competitive bidding	Yes
Auction 1 - Year	2015
Auction 1 - Technology	Off Shore Wind, On Shore wind and Solar PV
Auction 1 - Project-specific tender and size (MW)	
Auction 1 - Auction for total and size (MW)	
Auction 1 - Standard PPA and Term	n/a
Auction 1 - Price ceiling	Yes



Auction 1 - Winning bid (\$ cents/kWh) A list was provided of all winning bids-not specific Auction 1 - Government body in charge Department of Energy and Climate Change (DECC) Auction 2 - Year NA Auction 2 - Technology Auction 2 - Project-specific tender and size (MW) Auction 2 - Auction for total and size (MW) Auction 2 - Standard PPA and Term Auction 2 - Price ceiling No Auction 2 - Winning bid (\$ cents/kWh) Auction 2 - Government body in charge Winning bid guaranteed off-take Yes Generation premium Yes Froduction tax credit No Does the government offer other direct fiscal incentives for renewable energy (e.g. capital subsidies, grants or rebates, investment tax credits, tax reductions?) Investment tax credit Accelerated depreciation No Reduction in import taxes		0 5 · ,
Auction 2 - Year NA Auction 2 - Technology Auction 2 - Project-specific tender and size (MW) Auction 2 - Auction for total and size (MW) Auction 2 - Standard PPA and Term Auction 2 - Price ceiling No Auction 2 - Winning bid (\$ cents/kWh) Auction 2 - Government body in charge Winning bid guaranteed off-take Yes Mandates Yes Generation premium Yes Production tax credit No Does the government offer other direct fiscal incentives for renewable energy (e.g. capital subsidies, grants or rebates, investment tax credits, tax reductions?) Investment tax credit Yes Accelerated depreciation No	Auction 1 - Winning bid (\$ cents/kWh)	The state of the s
Auction 2 - Technology Auction 2 - Project-specific tender and size (MW) Auction 2 - Auction for total and size (MW) Auction 2 - Standard PPA and Term Auction 2 - Price ceiling No Auction 2 - Winning bid (\$ cents/kWh) Auction 2 - Government body in charge Winning bid guaranteed off-take Yes Mandates Yes Generation premium Yes Production tax credit No Does the government offer other direct fiscal incentives for renewable energy (e.g. capital subsidies, grants or rebates, investment tax credits, tax reductions?) Investment tax credit Accelerated depreciation No	Auction 1 - Government body in charge	and Climate Change
Auction 2 - Project-specific tender and size (MW) Auction 2 - Auction for total and size (MW) Auction 2 - Standard PPA and Term Auction 2 - Price ceiling Auction 2 - Winning bid (\$ cents/kWh) Auction 2 - Government body in charge Winning bid guaranteed off-take Yes Mandates Yes Generation premium Yes Production tax credit No Does the government offer other direct fiscal incentives for renewable energy (e.g. capital subsidies, grants or rebates, investment tax credits, tax reductions?) Investment tax credit Accelerated depreciation No	Auction 2 - Year	NA
Auction 2 - Auction for total and size (MW) Auction 2 - Standard PPA and Term Auction 2 - Price ceiling Auction 2 - Winning bid (\$ cents/kWh) Auction 2 - Government body in charge Winning bid guaranteed off-take Yes Mandates Yes Generation premium Yes Production tax credit No Does the government offer other direct fiscal incentives for renewable energy (e.g. capital subsidies, grants or rebates, investment tax credit, tax reductions?) Investment tax credit Yes Accelerated depreciation No	Auction 2 - Technology	
Auction 2 - Standard PPA and Term Auction 2 - Price ceiling No Auction 2 - Winning bid (\$ cents/kWh) Auction 2 - Government body in charge Winning bid guaranteed off-take Yes Mandates Yes Generation premium Yes Production tax credit No Does the government offer other direct fiscal incentives for renewable energy (e.g. capital subsidies, grants or rebates, investment tax credits, tax reductions?) Investment tax credit Yes Accelerated depreciation No	Auction 2 - Project-specific tender and size (MW)	
Auction 2 - Price ceiling Auction 2 - Winning bid (\$ cents/kWh) Auction 2 - Government body in charge Winning bid guaranteed off-take Yes Mandates Yes Generation premium Yes Production tax credit No Does the government offer other direct fiscal incentives for renewable energy (e.g. capital subsidies, grants or rebates, investment tax credits, tax reductions?) Investment tax credit Yes Accelerated depreciation No	Auction 2 - Auction for total and size (MW)	
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Auction 2 - Government body in charge Winning bid guaranteed off-take Yes Mandates Yes Generation premium Yes Production tax credit No Does the government offer other direct fiscal incentives for renewable energy (e.g. capital subsidies, grants or rebates, investment tax credits, tax reductions?) Investment tax credit Yes Accelerated depreciation No	Auction 2 - Price ceiling	No
Winning bid guaranteed off-take Mandates Yes Generation premium Yes Production tax credit No Does the government offer other direct fiscal incentives for renewable energy (e.g. capital subsidies, grants or rebates, investment tax credit, tax reductions?) Investment tax credit Yes Accelerated depreciation No	Auction 2 - Winning bid (\$ cents/kWh)	
Mandates Generation premium Yes Production tax credit No Does the government offer other direct fiscal incentives for renewable energy (e.g. capital subsidies, grants or rebates, investment tax credits, tax reductions?) Investment tax credit Yes Accelerated depreciation No	Auction 2 - Government body in charge	
Generation premium Production tax credit No Does the government offer other direct fiscal incentives for renewable energy (e.g. capital subsidies, grants or rebates, investment tax credits, tax reductions?) Investment tax credit Yes Accelerated depreciation No	Winning bid guaranteed off-take	Yes
Production tax credit Does the government offer other direct fiscal incentives for renewable energy (e.g. capital subsidies, grants or rebates, investment tax credits, tax reductions?) Investment tax credit Accelerated depreciation No	Mandates	Yes
Does the government offer other direct fiscal incentives for renewable energy (e.g. capital subsidies, grants or rebates, investment tax credits, tax reductions?) Investment tax credit Yes Accelerated depreciation No	Generation premium	Yes
renewable energy (e.g. capital subsidies, grants or rebates, investment tax credits, tax reductions?) Investment tax credit Yes Accelerated depreciation No	Production tax credit	No
Accelerated depreciation No	renewable energy (e.g. capital subsidies, grants or rebates,	Yes
	Investment tax credit	Yes
Reduction in import taxes No	Accelerated depreciation	No
	Reduction in import taxes	No



Reduction in sales tax or other taxes	Yes
Does the country provide prioritized access to the grid for RE?	Yes
Do RE projects receive priority in dispatch?	Yes
Are there provisions to compensate seller if offtake infrastructure is not built in time?	No
Are there mechanisms to compensate RE projects for lost generation due to certain curtailments after project commissioning?	Yes

Attributes of financial and regulatory incentives Score	81
Is the market entry mechanism for private RE projects defined? (e.g. 1st come 1st served; tenders)	Yes
Details	0
Are projects subject to development timelines or milestones?	No
Are tariffs indexed (in part or in whole) to an international currency or to inflation?	Yes
If there is a guaranteed tariff, is there a mechanism to adjust the level of the tariff for new entrants (e.g., declination)?	Yes
If there is a guaranteed tariff, is there a mechanism to differentiate tariffs based on the size of the generation plant?	Yes
If there is competitive bidding/auctions, are there provisions to ensure full and timely project completion (e.g., bid-bonds, project milestones, eligibility requirements)	No
If there is a renewable energy mandate, can it be met with tradable certificates (e.g., RECs, ROCs, TECs)?	Yes
Is the price subsidy/benefit implied by a renewable energy incentive program passed through in full or in part to the final	Yes



electricity consumer?

Network connection and pricing Score	100
Are there rules defining the allocation of connection costs?	Yes
What is the type of the connection cost allocation policy (i.e. shallow/deep)?	Shallow
Are there rules that allow electricity customers to purchase power directly from a third party (i.e. an entity other than the designated utility in a service area)?	Yes
Do the rules define the size and allocation of costs for transmission and distribution wheeling charges? (e.g., wheeling charges, locational pricing?)	Yes
Do the rules consider customer type/size in determining eligibility for purchasing electricity from a third party?	Yes
connection cost document	Rules on connection to the grid, Decree NEURC
Does the country have a grid code that includes measures or standards addressing variable renewable energy?	Yes
Is there more than one balancing area in the country?	Yes
Are there rules for exchanging power between balancing areas that penalize variable renewable energy (e.g. through imbalance penalties)?	No
Are there provisions in the power exchange rules that allow for plant forecasting?	Yes

Counterparty risk	Score	100
Does the government offer or allow backing of util (e.g. through a letter of credit, escrow account, pay	J 1 J	No



guarantee, or other)?	
Information disclosure	25
Are the financial statements of the largest utility publicly available?	0
Are the financial statements of the largest generation company publicly available?	Yes
Are the financial statements of the largest transmission company publicly available?	Yes
Are the financial statements of the largest distribution company publicly available?	Yes
Are the financial statements of the largest retail electricity sales company publicly available?	Yes
Are the following metrics published in a primary official document (by the utility, regulator or ministry and/or government)?	0
Is the transmission loss rate published in a primary official document (by the utility, regulator or ministry and/or government)?	Yes
Is the distribution loss rate published in a primary official document (by the utility, regulator or ministry and/or government)?	Yes
Is the bill collection rate published in a primary official document (by the utility, regulator or ministry and/or government)?	No
Is the amount of electricity available for sale to end-users published in a primary official document (by the utility, regulator or ministry and/or government)?	No
Information Auditing	33
Financial statements independently audited?	0



Are the financial statements of the largest generation company audited?	Yes
Are the financial statements of the largest transmission company audited?	Yes
Are the financial statements of the largest distribution company audited?	Yes
Are the financial statements of the largest retail electricity sales company audited?	Yes
Monitoring Reliability	0
Is the utility operating an incidence/outage recording system (or SCADA/EMS with such functionality)?	Yes
Is the utility measuring the SAIDI and SAIFI or any other measurements for service reliability?	Yes
Are the data reported to the regulatory body?	Yes
Are the data available to the public?	Yes
Name of the selected utility	British Gas
data - 17.1. Current ratio (working capital ratio)	no data
data - 17.2 Debt Service Coverage Ratio	N/A
data - 17.3 Days payable outstanding	no data
data - 17.4 EBITDA margin	no data
Current ratio (working capital ratio) of selected utility	0
Debt Service Coverage Ratio of selected utility	0
Days payable outstanding of selected utility	0



EBITDA margin of selected utility	0
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Carbon pricing and monitoring	Score	73
Is there a carbon pricing mechanism in place?		Yes
For any carbon pricing mechanism (e.g. carbon tax, trading system), what is the portion of national GHG covered)?		45%
Is there a monitoring, reporting and verification syst greenhouse gas emissions in place?	em for	Yes