

## Regulatory Indicators for Sustainable Energy (RISE) 2016 Country Data - Morocco

### Energy Efficiency

Indicator	Score
National energy efficiency planning	91.67
Energy efficiency entities	57.14
Information provided to consumers about electricity usage	54.17
EE incentives from electricity rate structures	74.07
Incentives & mandates: large consumers	16.67
Incentives & mandates: public sector	0
Incentives & mandates: utilities	41.67
Financing mechanisms for energy efficiency	83.33
Minimum energy efficiency performance standards	11.11
Energy labeling systems	50
Building energy codes	26.67
Carbon Pricing	0
<b>Total</b>	<b>42.21</b>

### Renewable Energy

Indicator	Score
Legal framework for renewable energy	100
Planning for renewable energy expansion	73
Incentives and regulatory support for renewable energy	100
Attributes of financial and regulatory incentives	67
Network connection and pricing	50
Counterparty risk	62
Carbon pricing and monitoring	0
<b>Total</b>	<b>64.57</b>

## Regulatory Indicators for Sustainable Energy (RISE)

**Overall Score**

**35.59**

### Energy Efficiency

National energy efficiency planning	Score	91.67
Is there legislation or a national action plan that aims to increase EE?		Yes
Name of EE legislation or action plan		Law No. 47-9 related to energy efficiency
Is there an energy efficiency goal or target at the national level?		Yes
National target details		Saving 12% of energy consumption in 2020
Is there a target for the residential sector?		Yes
Target details		Energy saved: 602 Mtoe in 2020 & 957 Mtoe in 2030
Does the target have a milestone or deadline?		Yes
Is there a commercial services sector target?		No
Target details		0
Does the target have a milestone or deadline?		No
Is there an industrial sector target?		Yes
Target details		Energy saved: 360000 toe in 2020 & 450466 toe in 2030
Does the target have a milestone or deadline?		Yes
Is there a power sector target?		Yes

## Regulatory Indicators for Sustainable Energy (RISE)

Target details	0
Does the target have a milestone or deadline?	Yes

Energy efficiency entities	Score	57.14
Are there governmental and/or independent bodies dedicated to setting EE strategy?	Yes	
Name of entity	MEMEE & ADEREE	
Are there governmental and/or independent bodies dedicated to setting EE standards?	Yes	
Name of entity	ADEREE	
Are there governmental and/or independent bodies dedicated to regulating EE activities of energy suppliers?	Yes	
Name of entity	MEMEE & ADEREE with ONEE	
Are there governmental and/or independent bodies dedicated to regulating EE activities of energy consumers?	Yes	
Name of entity	MEMEE & ADEREE	
Are there governmental and/or independent bodies dedicated to certifying compliance with equipment EE standards?	No	
Name of entity	0	
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	

## Regulatory Indicators for Sustainable Energy (RISE)

Name of entity	0
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Information provided to consumers about electricity usage	Score	54.17
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	

## Regulatory Indicators for Sustainable Energy (RISE)

Do the reports include the price levels customers pay for energy usage?	Yes
Does the regulator track utilities' compliance with laws for providing energy usage information to customers?	No
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

## Regulatory Indicators for Sustainable Energy (RISE)

All customers	
Can customers access real time feedback on energy usage (for either prepaid or post-paid systems)?	No
Do customers have the ability to manage energy usage levels remotely (through apps or other technology mediums that can track real time usage)?	No

<b>EE incentives from electricity rate structures</b>	<b>Score</b>	<b>74.07</b>
Residential 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?	Yes	
Commercial customers		
Are customers charged a flat fee (per connection)?	No	
Are customers charged constant block rates?	Yes	
Are customers charged declining block rates?	Yes	
Are customers charged increasing block rates?	Yes	
Industrial customers		
Are customers charged a flat fee (per connection)?	No	
Are customers charged constant block rates?	Yes	
Are customers charged declining block rates?	Yes	

## Regulatory Indicators for Sustainable Energy (RISE)

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

## Regulatory Indicators for Sustainable Energy (RISE)

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

Incentives & mandates: large consumers	Score	16.67
What is the threshold for classifying large consumers?		different threshold for each sector
Large consumer EE mandate/incentive regulations		Law No. 47-9 related to energy efficiency
Is it required for the consumption and/or savings of large-scale energy users to be tracked and documented on a regular basis?		Yes
Are efficiency targets mandated for large consumers?		No



## Regulatory Indicators for Sustainable Energy (RISE)

Details	0
Are energy audits mandated for large consumers?	Yes
Are energy efficiency progress reports mandated for large consumers?	No
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?	No
Are there other incentives for large consumers to invest in energy efficiency?	No
Details	0
Is there a program to publicly recognize large-scale users that have achieved significant energy savings measures?	No
Are energy savings and/or financial savings publicized?	No
Does the program offer assistance (from a government or independent entity) to large-scale users to identify energy savings	No

## Regulatory Indicators for Sustainable Energy (RISE)

investments opportunities?	
Primary Energy Consumption (MJ - latest GTF data from 2012)	29025.84083

Incentives & mandates: public sector	Score	0
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)?		No
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?		No
Is there a specific policy or mandated guidelines for public procurement of energy-efficient products and services?		No
Public procurement guidelines for EE		
Do public budgeting regulations and practices allow public entities to retain energy savings?		No
Public budgeting regulations for EE		

Incentives & mandates: utilities	Score	41.67
Name of utility energy efficiency regulation program		Law No. 47-9 related to energy efficiency
Electricity generation		
Are utilities required to carry out energy efficiency activities in this area?		Yes

## Regulatory Indicators for Sustainable Energy (RISE)

Details	Energy intensity
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?	No
Are there penalties in place for non-compliance with EE requirements?	No
Are there mandates or incentives for new and/or brownfield co-generation?	No
Transmission & distribution	
Are utilities required to carry out energy efficiency activities in this area?	No
Details	N/A
Are energy savings or other target indicators measured to track performance in meeting EE requirements?	No
Are the requirements measured/validated by an independent third party?	No
Are there penalties in place for non-compliance with EE requirements?	No
Demand-side management -	
Are utilities required to carry out energy efficiency activities in this area?	Yes
Details	KWh
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?	No

## Regulatory Indicators for Sustainable Energy (RISE)

Are there penalties in place for non-compliance with EE requirements?	No
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?	No
Is there compensation for revenue losses via a tracking account 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 credit lines 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?	Yes
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

## Regulatory Indicators for Sustainable Energy (RISE)

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?	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 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?	N/A
Are these available as solely market-driven financing mechanisms without any direct government approval, subsidy, authorization or other mediation procedure?	No

## Regulatory Indicators for Sustainable Energy (RISE)

Are these available as government-driven financing mechanisms?	No
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<b>Financing mechanisms for energy efficiency</b>	<b>Score</b>	<b>83.33</b>
Residential 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?	No	
Are credit lines available for energy efficiency investments?	Yes	
Are energy services agreements or ESCOs available for energy efficiency investments?	No	
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?	No	
Are there any other financing mechanisms available for energy efficiency investments?	No	
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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## Regulatory Indicators for Sustainable Energy (RISE)

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Details	
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Are these available as government-driven financing mechanisms?	No
Commercial services sector	
Are there tax incentives available for energy efficiency investments?	Yes

## Regulatory Indicators for Sustainable Energy (RISE)

Are there discounted "green" mortgages available for energy efficiency investments?	No
Is on-bill financing/re-payment available for energy efficiency investments?	No
Are credit lines available for energy efficiency investments?	Yes
Are energy services agreements or ESCOs available for energy efficiency investments?	Yes
Are green bonds available for energy efficiency investments?	No
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?	No
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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?	No
Industrial sector	
Are there tax incentives available for energy efficiency investments?	No

## Regulatory Indicators for Sustainable Energy (RISE)

Are there discounted "green" mortgages available for energy efficiency investments?	No
Is on-bill financing/re-payment available for energy efficiency investments?	No
Are credit lines available for energy efficiency investments?	Yes
Are energy services agreements or ESCOs available for energy efficiency investments?	No
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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?	No

### Minimum energy efficiency performance standards

Score

11.11

EE standards regulations

Law No. 47-9 related to

## Regulatory Indicators for Sustainable Energy (RISE)

	energy efficiency
Refrigerators	
Have minimum energy performance standards been adopted?	No
Details of standards	N/A
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
Air conditioners	
Have minimum energy performance standards been adopted?	Yes
Details of standards	20 C for heating and 26 C for cooling
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?	Yes
Are the standards based on external/international standards?	No
Lighting equipment	
Have minimum energy performance standards been adopted?	No
Details of standards	N/A
Is there a verification program in place?	No

## Regulatory Indicators for Sustainable Energy (RISE)

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
Industrial electric motors	
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
Other industrial equipment	
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
Light duty vehicles	
Have minimum energy performance standards been adopted?	No

## Regulatory Indicators for Sustainable Energy (RISE)

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

<b>Energy labeling systems</b>	<b>Score</b>	<b>50</b>
Refrigerators		
Have energy efficiency labeling schemes been adopted?	Yes	
Is the labeling scheme mandatory?	Yes	
Is the labeling scheme based on external/international standards?	No	
Air conditioners		

## Regulatory Indicators for Sustainable Energy (RISE)

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

## Regulatory Indicators for Sustainable Energy (RISE)

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

<b>Building energy codes</b>	<b>Score</b>	<b>26.67</b>
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 buildings?	Yes	
Is there any provision for regular updates to the code for new commercial buildings?	Yes	
EE building code regulations	Law No. 47-9 related to energy efficiency	
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?	No	



## Regulatory Indicators for Sustainable Energy (RISE)

Is it carried out by a third party?	No
Are renovated residential buildings required to meet a building energy codee?	No
Are renovated commercial buildings required to meet a building energy code?	No
Is the energy efficiency code for renovated residential buildings different from the code for new buildings?	No
Is the energy efficiency code for renovated commercial buildings different from the code for new buildings?	No
Is the energy efficiency code for renovated residential buildings its own stand-alone, separate code or part of the overall building code?	No
Is the energy efficiency code for renovated commercial buildings its own stand-alone, separate code or part of the overall building code?	No
Is there any provision for regular updates to the code for renovated residential buildings?	No
Is there any provision for regular updates to the code for renovated commercial buildings?	No
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?	No
Are commercial and residential buildings required to disclose property energy usage at the point of sale or when leased?	No
Are large commercial and residential buildings required to disclose property energy usage annually?	No
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	No

## Regulatory Indicators for Sustainable Energy (RISE)

of new building stocks that must be LEED certified)?	
Details	0
LEED incentives	No
Local program details	0

<b>Carbon Pricing</b>	<b>Score</b>	<b>0</b>
Is there a carbon pricing mechanism in place?		No
For any carbon pricing mechanism (e.g. carbon tax, emission trading system), what is the portion of national GHG emissions covered)?		0
Is there a monitoring, reporting and verification system for greenhouse gas emissions in place?		No

## Renewable Energy

<b>Legal framework for renewable energy</b>	<b>Score</b>	<b>100</b>
Does a legal framework for renewable energy development exist?		Yes
Name of the Law		Law n°13-09 relative to renewable energies
Is private sector ownership of renewable energy generation legally authorized?		Yes

<b>Planning for renewable energy expansion</b>	<b>Score</b>	<b>73</b>
Does an official renewable energy target exist?		Yes

## Regulatory Indicators for Sustainable Energy (RISE)

Overall target	The objective is to increase the contribution of renewables in primary energy consumption by nearly 5% in 2009 to 8% in 2012 to reach 10-12% in 2020 and 15-20% in 2030. Their share in the power generation will reach 42% in 2020,
Solar target	2000 MW
Wind target	2000 MW
Hydro target	2280 MW
Biomass target	200 MW
Geothermal target	
Does a renewable energy action plan or strategy to attain the target exist?	Yes
Name of the action plan	0
Does the plan or strategy define the amount of investment necessary to meet the RE target?	Yes
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

## Regulatory Indicators for Sustainable Energy (RISE)

Is the expansion plan based on a probabilistic approach?	No
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	in 2004, 2009 & 2014-2015
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?	No
Has the solar resource planning or zoning guidance been undertaken as part of a strategic environmental and social assessment or equivalent process?	Yes
Are the solar resource planning or zoning guidance outputs publically available?	No

## Regulatory Indicators for Sustainable Energy (RISE)

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	Yes
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?	Yes
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?	No
Hydro atlas is validated by ground-based water run-off data and/or site surveys from potential sites;	No
Hydro 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 hydro resources?	No

## Regulatory Indicators for Sustainable Energy (RISE)

Has the hydro resource planning or zoning guidance been undertaken as part of a strategic environmental and social assessment or equivalent process?	No
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;	Yes
Biomass atlas is accompanied by an explanation of the methodology and instrumentation.	Yes
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?	No
Does the country publish or endorse a national geothermal resource map or atlas?	No
The governmentn 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

## Regulatory Indicators for Sustainable Energy (RISE)

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 energy	Score	100
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		No
Feed-in tariff - Solar		No
Feed-in tariff - Wind		No
Feed-in tariff - Hydro		No
Feed-in tariff - Biomass		No
Feed-in tariff - Geothermal		No
Government body in charge		
Projects guaranteed off-take		No
Solar Feed-in-tariff Price (\$ cents/kWh)		

## Regulatory Indicators for Sustainable Energy (RISE)

Solar Feed-in-tariff Max. capacity (single)	
Solar Feed-in-tariff Max. capacity (total)	
Solar Feed-in-tariff Closing date	
Wind Feed-in-tariff Price (\$ cents/kWh)	
Wind Feed-in-tariff Max. capacity (single)	
Wind Feed-in-tariff Max. capacity (total)	
Wind Feed-in-tariff Closing date	
Hydro Feed-in-tariff Price (\$ cents/kWh)	
Hydro Feed-in-tariff Max. capacity (single)	
Hydro Feed-in-tariff Max. capacity (total)	
Hydro Feed-in-tariff Closing date	
Biomass Feed-in-tariff Price (\$ cents/kWh)	
Biomass Feed-in-tariff Max. capacity (single)	
Biomass Feed-in-tariff Max. capacity (total)	
Biomass Feed-in-tariff Closing date	
Geothermal Feed-in-tariff Price (\$ cents/kWh)	
Geothermal Feed-in-tariff Max. capacity (single)	
Geothermal Feed-in-tariff Max. capacity (total)	
Geothermal Feed-in-tariff Closing date	
Competitive bidding	Yes



## Regulatory Indicators for Sustainable Energy (RISE)

Auction 1 - Year	2011: launching of the tender
Auction 1 - Technology	Wind
Auction 1 - Project-specific tender and size (MW)	150 MW
Auction 1 - Auction for total and size (MW)	150 MW
Auction 1 - Standard PPA and Term	20 years from the commissioning
Auction 1 - Price ceiling	No
Auction 1 - Winning bid (\$ cents/kWh)	590 DH/MW
Auction 1 - Government body in charge	ONEE
Auction 2 - Year	2012: Launching of the call for pre-qualification_x000D_2014 : tender delivered to the pre-qualified bidders_x000D_
Auction 2 - Technology	Wind
Auction 2 - Project-specific tender and size (MW)	850 MW
Auction 2 - Auction for total and size (MW)	850 MW in 5 locations
Auction 2 - Standard PPA and Term	20 years from the commissioning
Auction 2 - Price ceiling	No
Auction 2 - Winning bid (\$ cents/kWh)	N/A
Auction 2 - Government body in charge	ONEE
Winning bid guaranteed off-take	Yes

## Regulatory Indicators for Sustainable Energy (RISE)

Mandates	No
Generation premium	No
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?)	Yes
Investment tax credit	No
Accelerated depreciation	No
Reduction in import taxes	Yes
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?	Yes
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	67
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?	Yes	

## Regulatory Indicators for Sustainable Energy (RISE)

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)?	N/A
If there is a guaranteed tariff, is there a mechanism to differentiate tariffs based on the size of the generation plant?	N/A
If there is competitive bidding/auctions, are there provisions to ensure full and timely project completion (e.g., bid-bonds, project milestones, eligibility requirements)	Yes
If there is a renewable energy mandate, can it be met with tradable certificates (e.g., RECs, ROCs, TECs)?	N/A
Is the price subsidy/benefit implied by a renewable energy incentive program passed through in full or in part to the final electricity consumer?	No

<b>Network connection and pricing</b>	<b>Score</b>	<b>50</b>
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?)	No	
Do the rules consider customer type/size in determining eligibility for purchasing electricity from a third party?	Yes	
connection cost document		0

## Regulatory Indicators for Sustainable Energy (RISE)

Does the country have a grid code that includes measures or standards addressing variable renewable energy?	No
Is there more than one balancing area in the country?	No
Are there rules for exchanging power between balancing areas that penalize variable renewable energy (e.g. through imbalance penalties)?	N/A
Are there provisions in the power exchange rules that allow for plant forecasting?	N/A

Counterparty risk	Score	62
Does the government offer or allow backing of utility payments (e.g. through a letter of credit, escrow account, payment guarantee, or other)?	Yes	
Information disclosure	4	
Are the financial statements of the largest utility publicly available?	0	
Are the financial statements of the largest generation company publicly available?	No	
Are the financial statements of the largest transmission company publicly available?	No	
Are the financial statements of the largest distribution company publicly available?	No	
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	No	

## Regulatory Indicators for Sustainable Energy (RISE)

government)?	
Is the distribution loss rate published in a primary official document (by the utility, regulator or ministry and/or government)?	No
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	8
Financial statements independently audited?	0
Are the financial statements of the largest generation company audited?	No
Are the financial statements of the largest transmission company audited?	No
Are the financial statements of the largest distribution company audited?	No
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?	No
Name of the selected utility	LYDEC

## Regulatory Indicators for Sustainable Energy (RISE)

data - 17.1. Current ratio (working capital ratio)	1
data - 17.2 Debt Service Coverage Ratio	11
data - 17.3 Days payable outstanding	797
data - 17.4 EBITDA margin	0
Current ratio (working capital ratio) of selected utility	0
Debt Service Coverage Ratio of selected utility	25
Days payable outstanding of selected utility	0
EBITDA margin of selected utility	25

<b>Carbon pricing and monitoring</b>	<b>Score</b>	<b>0</b>
Is there a carbon pricing mechanism in place?		No
For any carbon pricing mechanism (e.g. carbon tax, emission trading system), what is the portion of national GHG emissions covered)?		0%
Is there a monitoring, reporting and verification system for greenhouse gas emissions in place?		No