

Regulatory Indicators for Sustainable Energy (RISE) 2017 Country Data - Guatemala

Clean Cooking

Indicator	Score
Planning	78
Scope of planning	100
Standards and Labeling	8
Incentives and attributes	25
Total	52.75

Electricity Access

Indicator	Score
Existence and monitoring of officially approved electrification plan	63
Scope of officially approved electrification plan	50
Framework for grid electrification	50
Framework for minigrids	60
Framework for stand-alone systems	67
Consumer affordability of electricity	100
Utility Transparency and Monitoring	94
Utility Creditworthiness	50
Total	66.75

Energy Efficiency

Indicator	Score
National energy efficiency planning	60
Energy efficiency entities	54
Information provided to consumers about electricity usage	56
EE incentives from electricity rate structures	67

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Incentives & mandates: Industrial and Commercial End users	8
Incentives & mandates: public sector	38
Incentives & mandates: utilities	0
Financing mechanisms for energy efficiency	50
Minimum energy efficiency performance standards	17
Energy labeling systems	25
Building energy codes	0
Transport	0
Carbon Pricing and Monitoring	0
Total	28.85

Renewable Energy

Indicator	Score
Legal framework for renewable energy	100
Planning for renewable energy expansion	44
Incentives and regulatory support for renewable energy	43
Attributes of financial and regulatory incentives	33
Network connection and use	60
Counterparty risk	65
Carbon Pricing and Monitoring	0
Total	49.29

Overall Score	49.41
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Clean Cooking

Planning	Score	78
Does the government track household level data on cooking solutions?		Yes

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Is the data publicly available?	Yes
Is the data gender disaggregated?	
Is there a national or regional plan to scale up access to clean cooking solutions, or is access to clean cooking solutions covered as a part of any other government plan (regardless of the sector)?	
If not, is there a draft plan that has been prepared but not yet been approved?	
If yes, when was the latest national plan officially approved?	
Has the plan gone through public consultation?	Yes
Have consultations taken the gender of participants into account?	Yes
Are there agencies dedicated to the following functions?	-
Setting clean cooking strategy/action plan	Yes
Setting, monitoring and enforcing standards for clean cooking solutions	Yes
Tracking access and adoption of clean cooking solutions	Yes

Scope of planning	Score	100
Does the plan take into account geographical and demographical considerations to prioritize the most vulnerable consumers?	Yes	
Does the plan include considerations and action items for involving women throughout the supply chain of clean cooking solutions?	Yes	
Is there a targeted awareness raising strategy to drive adoption of clean cooking solutions, such as any of the following	-	

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Training programs for new stove technologies	Yes; entrepreneur training and capacity building.
Cooking competitions with stove technologies	No
Nationally-sponsored educational campaigns for new stove technologies	Yes; Implement awareness activities built upon government programs, launch a national multimedia campaign, and include topics related to clean cooking in formal education
Private sector advertising campaigns for new stove technologies	No; no evidence of private sector advertising campaigns found through desk research
Partnerships with CSOs and community-based organizations	Yes; NGO funding mechanism
Other	Supporting evidence source and citation: Document: Global Alliance for Clean Cookstoves, Annexes to Guatemala Country Action Plan for Clean Cookstoves and Fuels 2014 (endorsed by the Government of Guatemala, specifically the Ministry of Energy and Mines). Web link: http://cleancookstoves.org/resources_files/guatemala-country-action-plan.pdf File name uploaded: CCook 5.1 Guatemala Global Alliance for Clean Cookstoves, Guatemala Country Action Plan for Clean Cookstoves and

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Fuels 2014.pdf Citation 1: Page 32. Section 2.5.3 Entrepreneur Training and Capacity Building. Citation 2: Pages 24-25. Key Steps and Activities #2. Implement an awareness and education strategy on the effects of smoke and available solutions; Implement awareness activities built upon government programs; Launch a national multimedia campaign; Include topics related to clean cooking in formal education (primary and secondary schools). Citation 3: Page 31. Key Steps and Activities #9c. Develop new funding mechanisms to facilitate the sale and distribution of cookstoves. Create a social fund for NGOs that provide cookstoves in exchange for work from the consumer (integrated projects); Define the terms of revolving funds for NGOs and distributors, with the aim of strengthening the role of brokers and dealers in the value chain. Citation 4: Page 29. Key Steps and Activities #7. Install an exhibition with different types of cookstoves so that their advantages can be presented, and potential consumers can try them; Organize road shows, involving municipal mayors and community leaders. Citation 5: Page 29. Key

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	Steps and Activities #8. Strengthen the role of municipalities and associations of local authorities in the distribution chain for clean cookstoves and fuels Answers confirmed by the most authoritative source: Interviewee: Mr. Richard Grinnell, Regional Director of Market Development - Latin America, the Global Alliance for Clean Cookstoves, see Contact DB. See also document uploaded GUATEMALA RISE 2017-2018 Answers from the Global Alliance for Clean Cookstoves, 19 March 2018.pdf.
Details of other program	
Does the awareness strategy include targeted messages to both men and women?	Yes
Is there a last mile distribution strategy ³ in place for cooking fuels?	Yes
Is there a last mile distribution strategy in place for cooking technologies?	Yes

Standards and Labeling	Score	8
Are there standards for the following aspects of clean cooking solutions		-
Efficiency		No
Emissions		No

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Safety	No
Have the standards been adopted from external standards or developed domestically?	NA
Is there a verification program in place for standards?	No
Does the program work with a standards testing facility or lab?	Yes
Does the stove testing facility or lab need to be accredited?	Yes
Have the standards been verified through field testing?	No
Have labeling schemes been adopted on clean cooking products for the following	-
Efficiency	No
Emissions	No

Incentives and attributes	Score	25
Are there specific financing facilities available to support suppliers/consumers to develop/purchase clean cooking solutions?		Yes
Are there specific financing or subsidy programs for clean cooking solutions targeted to low income consumers?		No
Are there duty exemptions, tax benefits, and/or subsidies to support clean cooking solutions?		
Are there programs for commercial entities to invest in efficient, low-emission stoves? (time stamping) Please indicate the year in which each program was first made available		No

Electricity Access

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Existence and monitoring of officially approved electrification plan	Score	63
Is there an officially approved national electrification plan?		Yes
Are the electrification plan and the updates publicly available?		Yes
Is there a requirement for periodic progress reports tracking progress towards the defined energy access target?		No
Does the reporting actually take place?		No
Are there institution(s) responsible for carrying out the following functions		-
Setting electrification strategy		Yes
Setting electrification milestones and deadlines		Yes
Coordinating generation, transmission, and distribution plans and their implementation		Yes
Reporting progress towards the defined energy access target/milestones with periodic reports		Yes
Is the electrification plan developed based on demand assessment?		Yes
Were there any public consultations while developing the plan?		No
Is there a provision for the plan periodic evaluations?		No

Scope of officially approved electrification plan	Score	50
Does the plan target a service level (e.g., power availability, number of guaranteed hours of power supply, etc.)?		No
Does the electrification plan include off-grid solutions (either/or both minigrids and standalone systems)?		Yes

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Does the plan include productive uses (e.g. agricultural, commercial, and industrial activities)?	Yes
Does the plan include community facilities (e.g. health centers, schools, administrative buildings)?	Yes
Does the plan include areas with informally settled people/groups?	No
Does the plan specifically address the electricity access of female-headed households?	No
Does the plan set up a specific target on female-headed households' electrification?	No
Are there geospatial maps conveying the timeframe of planned grid extension?	Yes
Are these geospatial maps made publicly available?	Yes

Framework for grid electrification	Score	50
Does the government have a dedicated funding line or budget for electrification (e.g., funded national program, budget item, rural electrification fund to finance grid extension)?	Yes	
Are there capital subsidies paid to the utilities to provide distribution systems to rural areas/villages?	No	
Are there consumer financing mechanisms (i.e. utility loans, on bill financing, micro-loans etc.) and/or direct subsidies available to support the payment of connection fees by consumers?	No	
Are there consumer financing mechanisms targeting specifically female headed households?	No	
Are there consumer financing mechanisms targeting low-income households?	No	
Does the government specify standards of performance on reliability (e.g. number of guaranteed hours per day, duration of	Yes	

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the electricity, frequency of outages, SAIDI, SAIFI etc.)?	
Is there a periodic reporting system in place to ensure standards compliance?	Yes

Framework for minigrids	Score	60
Are there programs which aim to develop minigrid systems or support the development of minigrids systems?		Yes
Do the regulations clarify what will occur when the interconnected grid reaches a minigrid?.		No
Are there national programs which aim to develop stand-alone systems or support the development of stand-alone systems?		Yes
Are minigrids legally allowed to operate in the country?		Yes
Can minigrids be owned and operated by private operators?		Yes
Do the regulations detail procedures for consumers to get connected to minigrids?		No
Do the regulations differ by size of minigrids?		No
Are mini-grid operators legally allowed to charge a different tariff from the national tariff?		No
Are there publicly funded mechanisms to secure viability gap funding for operators?		Yes
Are there duty exemptions and/or capital subsidies for minigrid systems and/or individual components?		Yes
Are there specific financing facilities (access to credit etc.) available to support operators?		Yes
Are there duty exemptions and/or subsidies to support standalone home systems?		Yes

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Are there legal restrictions that limit the prices standalone home system retailers or service providers can charge?	No
Are there specific financing facilities available to support operators/consumers to develop/ purchase standalone home systems?	Yes
Are there technical standards detailing the requirements for minigrids to connect the grid?	Yes
Are technical standards made publicly available?	Yes
Are there safety standards for minigrids (e.g. overcurrent protection, system control etc.)?	Yes
Are these safety standards made publicly available?	Yes
Has the government adopted international quality standards for stand-alone systems?	No
Has the government adopted international testing methods or does it accept testing done in another country?	No
Are there environmental regulations on the disposal of solar devices and standalone home system products or components?	No

Framework for stand-alone systems	Score	67
Are there programs which aim to develop minigrid systems or support the development of minigrids systems?	Yes	
Do the regulations clarify what will occur when the interconnected grid reaches a minigrid?.	No	
Are there national programs which aim to develop stand-alone systems or support the development of stand-alone systems?	Yes	
Are there publicly funded mechanisms to secure viability gap funding for operators?	Yes	

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Are there duty exemptions and/or capital subsidies for minigrid systems and/or individual components?	Yes
Are there specific financing facilities (access to credit etc.) available to support operators?	Yes
Are there duty exemptions and/or subsidies to support standalone home systems?	Yes
Are there legal restrictions that limit the prices standalone home system retailers or service providers can charge?	No
Are there specific financing facilities available to support operators/consumers to develop/ purchase standalone home systems?	Yes
Are there technical standards detailing the requirements for minigrids to connect the grid?	Yes
Are technical standards made publicly available?	Yes
Are there safety standards for minigrids (e.g. overcurrent protection, system control etc.)?	Yes
Are these safety standards made publicly available?	Yes
Has the government adopted international quality standards for stand-alone systems?	No
Has the government adopted international testing methods or does it accept testing done in another country?	No
Are there environmental regulations on the disposal of solar devices and standalone home system products or components?	No

Consumer affordability of electricity	Score	100
What is the annual cost of subsistence consumption (30kWh/month) as a percentage of GNI per household of the bottom 20 percent income households of the population?		

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How many months does it take for the consumer to pay the connection fee based on savings of the bottom 20 percent of population?	
Is there a mechanism to support low-volume consumers such as social or lifeline tariff?	Yes

Utility Transparency and Monitoring	Score	94
Are the financial statements of the largest utility publicly available for each of the following	-	
Generation	Yes	
Transmission	Yes	
Distribution	Yes	
Retail sales	Yes	
If yes, are they audited by an independent auditor for each of the following	-	
Generation	Yes	
Transmission	Yes	
Distribution	Yes	
Retail sales	Yes	
Are the following metrics published in a primary official document (by the utility, regulator or ministry and/or government)?	-	
Generation - Electricity available for sale to end-users	Yes	
Transmission - Transmission loss rate	No	

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Distribution - Distribution loss rate	Yes
Retail Sales - Bill collection rate	Yes
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 measurements reported to the regulatory body?	Yes
Are the measurements available to public?	Yes

Utility Creditworthiness	Score	50
No Data Found		

Energy Efficiency

National energy efficiency planning	Score	60
Is there legislation or a national action plan that aims to increase EE?	Yes	
Is there an energy efficiency goal or target at the national level?	Yes	
Are there targets defined for any of the following sectors?	-	
Residential sector	Yes	
Commercial services sector	Yes	
Transport sector	Yes	
Industrial sector	Yes	

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Power sector	No
Are targets derived from detailed analysis that is publicly available?	No
Is there a requirement for periodic progress reports tracking data related to the efficiency target(s)?	No

Energy efficiency entities	Score	54
Are there governmental and/or independent bodies that carry out formulation and implementation of EE strategy, policy and regulation for each of the roles listed below	-	
Setting EE strategy	Yes	
Setting EE standards	Yes	
Regulating EE activities of energy suppliers	No	
Regulating EE activities of energy consumers	No	
Certifying compliance with equipment EE standards	Yes	
Certifying compliance with building EE standards	No	
Selecting and/or approving third party auditors tasked with certifying EE standards	Yes	
Are energy efficiency programs developed based on market analyses with plans open to public consultation and periodic evaluation?	Yes	
Are there professional certification/accreditation programs mandated for any of the following energy efficiency activities	-	
Energy auditing/energy management	No	
Energy efficiency financing	No	

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Monitoring and verification of energy consumption/savings	No
Building energy efficiency construction/design	No
Other	No

Information provided to consumers about electricity usage	Score	56
Is it mandatory for the selected utility to provide the following customers with reports of their energy usage, in a bill or by other means for residential customers, commercial services customers, and industrial customers?		
Residential customers	Yes	
Commercial customers	Yes	
Industrial customers	Yes	
At what intervals do they receive these reports (times per year)?		
Residential customers	12	
Commercial customers	12	
Industrial customers	12	
Do the reports include the price levels customers pay for energy usage?		
Residential sector	Yes	
Commercial sector	Yes	
Industrial sector	Yes	
Does the regulator track the utility's compliance with laws for providing energy usage information to customers?	Yes	

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

EE incentives from electricity rate structures	Score	67
What types of electricity rate structure do the residential, commercial services, and industrial customers face?		-
Residential customers		-
Commercial customers		-
Industrial customers		-
Which of the following charges do electricity customers pay in the commercial services sector and industrial sector?		-

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Commercial sector	-
Industrial sector	-
Are any of the following time-of-use (TOU) rate structures applied to the residential sector, commercial services sector, and industrial sector?	-
Residential sector	-
Commercial sector	-
Industrial sector	-

Incentives & mandates: Industrial and Commercial End users	Score	8
Are there any of the following energy-efficiency mandates for large energy users?	-	
Targets (e.g. kWh savings or lower energy intensity or carbon dioxide reductions, etc.)	No	
Mandatory audits	No	
Progress/tracking reports	No	
Energy-management system (computer technologies to optimize energy use)	No	
Are there penalties in place for non-compliance with regulatory obligations for EE?	No	
Is there a requirement for periodic reporting of energy consumption in order to enforce and/or track progress of energy efficiency in large consumers' facilities?	No	
Is there a measurement and verification program in place?	No	

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Are energy efficiency incentives in place for large-scale users?	No
Is there an energy efficiency mandate or incentive program for SMEs?	No
Is there a program to publicly recognize end users that have achieved significant energy savings measures?	No
Are energy savings and/or financial savings publicized?	Yes
Does the program offer assistance (from a government or independent entity) to end users to identify energy savings investments opportunities?	No

Incentives & mandates: public sector	Score	38
Are there binding energy savings obligations for public buildings and/or other public facilities (may include water supply, wastewater services, municipal solid waste, street lighting, transportation, and heat supply) ?	No	
Is there a reporting mechanism to track and enforce energy savings in public sector facilities (either in-house or by a third party)?	No	
Is there a specific policy or mandated guidelines for public procurement of energy-efficient products and services?	Yes	
Are procurement guidelines updated periodically to reflect technological advances and best practices in energy efficient products and services?	No	
Do public budgeting regulations and practices allow public entities to retain energy savings at the following levels?	Yes	

Incentives & mandates: utilities	Score	0
Generation	-	

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Are utilities required to carry out energy efficiency activities in this area?	No
Are there penalties in place for non-compliance with EE requirements?	No
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
Transmission and distribution networks	-
Are utilities required to carry out energy efficiency activities in this area?	No
Are there penalties in place for non-compliance with EE requirements?	No
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
Demand-side management	-
Are utilities required to carry out energy efficiency activities in this area?	No
Are there penalties in place for non-compliance with EE requirements?	No
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 any of the following mechanisms available for utilities to recover costs associated with or revenue lost from mandated	-

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energy efficiency activities in the residential, commercial, and/or industrial sectors	
Public budget financing	No
Compensation for revenue losses from EE activities via a tracking account	No
Revolving funds and/or credit lines for EE activities	No
Partial risk guarantees	No
Program cost recovery	No
On-bill financing/pre-payment	No
Decoupling	No

Financing mechanisms for energy efficiency	Score	50
Are any of the following financing mechanisms for energy efficiency activities available in the (R) residential sector, (C) commercial services sector, and (I) industrial sector?		-
Residential sector		-
Tax incentives		No
Discounted "green" mortgages		No
On-bill financing		No
Credit lines and/or revolving funds with banks for energy efficiency activities		No
Green or energy efficiency bonds		No
Energy services agreements (pay-for-performance contracts)		No

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Vendor credit and/or leasing for energy efficiency activities	No
Partial risk guarantees	No
Commercial services sector	-
Tax incentives	No
Discounted “green” mortgages	No
On-bill financing	No
Credit lines and/or revolving funds with banks for energy efficiency activities	Yes
Green or energy efficiency bonds	No
Energy services agreements (pay-for-performance contracts)	No
Vendor credit and/or leasing for energy efficiency activities	No
Partial risk guarantees	Yes
Industrial sector	-
Tax incentives	No
Discounted “green” mortgages	No
On-bill financing	No
Credit lines and/or revolving funds with banks for energy efficiency activities	Yes
Green or energy efficiency bonds	No
Energy services agreements (pay-for-performance contracts)	No
Vendor credit and/or leasing for energy efficiency activities	No

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Partial risk guarantees	Yes
How many financial and/or non-financial institutions offer financial products for energy efficiency investments in each sector?	-
Residential sector	-
Commercial sector	-
Industrial sector	-

Minimum energy efficiency performance standards	Score	17
Have minimum energy performance standards been adopted for the following product categories?	-	
Refrigerators	Yes	
Heating, ventilation and/or air conditioning (HVAC)	Yes	
Lighting equipment	No	
Industrial electric motors	No	
Other industrial equipment	No	
Light vehicles (heavy duty transport vehicles were tracked but not included in the scoring)	No	
Are there verification programs that include the following components for each product category	-	
Refrigerators	-	
Heating, ventilation and/or air conditioning (HVAC)	-	

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Lighting equipment	-
Industrial electric motors	-
Other industrial equipment	-
Light vehicles	-

Energy labeling systems	Score	25
Have energy efficiency labeling schemes been adopted for?	-	
Refrigerators	Yes	
HVAC	Yes	
Lighting equipment	No	
Industrial electric motors	No	
Other industrial equipment	No	
Transport vehicles	No	
Do the labeling schemes have the following components for each product category	-	
Refrigerators	-	
HVAC	-	
Lighting equipment	-	
Industrial electric motors	-	
Other industrial equipment	-	
Transport vehicles	-	

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Building energy codes	Score	0
Are there energy efficiency codes for new residential buildings?		No
Are there energy efficiency codes for new commercial buildings?		No
Are the building energy efficiency standards required to be updated on a regular basis to reflect technological advances and changes in best practices for building energy efficiency in each sector		-
Residential buildings		No
Commercial buildings		No
Is commission testing for energy efficiency required for final building acceptance documentation?		No
Is there a requirement for periodic reporting to verify compliance with building energy efficiency requirements?		No
Is verification carried out by a third party?		No
Are renovated buildings required to meet a building energy code, in each sector		-
Residential sector		No
Commercial sector		No
Are the building energy efficiency standards required to be updated on a regular basis to reflect technological advances and changes in best practices for building energy efficiency in each sector		-
Residential sector		No
Commercial sector		No
Is there a mandatory standardized rating or labeling system for the energy performance of existing buildings?		No

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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 of new building stocks that must be LEED certified)?	No

Transport	Score	0
Is there a national database or national reporting system to periodically track and report the following transport efficiency metrics	-	
Fuel per mile driven	No	
Average distance traveled per vehicle	No	
Distance traveled by public transit as a share of total passenger distance traveled	No	
Vehicle miles traveled per capita	No	
Other	No	
Are there any mandate or incentive programs that support reduction of transport demands or shifts to more energy efficient modes of transport for personal use, such as	-	
Regularly scheduled teleworking	No	
Bicycle and/or other non-motorized schemes	No	
Car sharing	No	
Public transit subsidies for consumers	No	

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Congestion charges	No
Electric vehicle programs	No
Other	No
Is there a requirement for periodic reporting to verify compliance or progress of the program(s)?	No
Are there any mandate or incentive programs that support reduction of transport demands or shifts to more energy efficient modes of transport for commercial and/or industrial use, such as	-
Heavy duty vehicle fuel economy standards (data already collected in Indicator 10 can be scored here)	No
Freight rail mandatory fuel economy standards or efficiency incentives	No
Energy efficiency procurement standards or incentives for municipal rail and bus fleets	No
Efficient fuel switching mandate or incentive programs for commercial/industrial vehicle fleets	No
Other	No
Is there a requirement for periodic reporting to verify compliance or progress of the program(s)?	No

Carbon Pricing and Monitoring

Score

0

No Data Found

Renewable Energy

Legal framework for renewable energy

Score

100

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Does a legal framework for renewable energy development exist?	Yes
Does the legal framework allow private sector ownership of renewable energy generation?	Yes

Planning for renewable energy expansion	Score	44
Does an official renewable energy target exist?	Yes	
Is the target legally binding?	No	
Is the RE target linked to international commitments (eg. NDC or regional commitment)?	Yes	
Is the target based on a transparent methodology?	No	
Is there a renewable energy action plan or strategy to attain the target ?	Yes	
Is there any provision for consultation with the public on the renewable plan?	Yes	
Is there an assessment of the role of renewables in electricity supply?	Yes	
Is there a target for renewables in electricity?	Yes	
Is there an assessment of the needs for heating and cooling in buildings and industry in the country and of how renewables can contribute?	No	
Is there a specific target for renewables for heating and cooling?	No	
Is there an assessment of the potential role for renewables in transport including biofuels and electrification?	No	
Is there a specific target for renewables in transport?	No	
Does the renewable plan or strategy estimate the amount of	No	

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investment necessary to meet the RE target?	
Is there an institution responsible for tracking progress in renewable energy development?	Yes
Is there any periodic reporting mechanism for renewable energy progress?	No
Is there a mechanism for adjusting the plan based on reporting of renewable energy deployment?	No
Is current policy environment conducive to renewable energy deployment?	Yes
Is generation and transmission planning integrated?	Yes
Is planning for dispatch included in the generation and transmission plan?	Yes
Is the generation plan based on a probabilistic approach?	Yes
Does the current transmission planning consider renewable energy scale-up?	Yes
Does the government endorse and use the solar/wind resource maps and data applicable to their country that are available through the Global Solar Atlas / Global Wind Atlas, or have they published some other solar/wind resource map that conforms to best practice in the last five years?	No
Has the country carried out geospatial planning or produced zoning guidance to inform the commercial development of the RE resource?	No
Has the geospatial planning or zoning guidance been carried out according to best practice by	No

Incentives and regulatory support for renewable energy **Score** **43**

Does the country offer long term PPA's for renewable electricity	Yes
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production for large scale producers(e.g. via. feed-in-tariffs, PPA's awarded through auctions etc.)	
Does the country offer long term PPA's for renewable electricity production for small scale producers(e.g. via. feed-in-tariffs, PPA's awarded through auctions etc.)	Yes
Does the government publish clear and practical guidance on what permissions are required to develop a RE electricity project?	Yes
Does the government offer other direct fiscal incentives for renewable electricity (e.g. capital subsidies, grants or rebates, investment tax credits, tax reductions, production tax credits, FITs for large producers?)	Yes
Does the country provide prioritized access to the grid for RE?	No
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?	No
Is the compensation due because of curtailment actually given out.	No
Is there a biofuels blending mandate or other obligation to use biofuels?	No
Are there sustainability criteria which biofuels which contribute to the mandate must meet?	Yes
If there is a plan for producing biofuels in the country, has this included an assessment of sustainability impacts (e.g. against the GBEP Sustainability indicators) including an assessment of impacts on food security.	No
Is there at least one scheme to encourage use of electric/hybrid vehicles? (e.g. Tax benefit to consumers and manufacturers, etc.)	Yes

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Are there any policies to encourage deployment of any renewable energy heating and cooling technologies?	No
Are there specific measures (financial support or promotion) designed to encourage the use of renewables in the heating and cooling sectors?	No
Are opportunities for renewable heat promoted alongside energy efficiency measures in buildings and/or industry?	No

Attributes of financial and regulatory incentives	Score	33
Is competition used to ensure large scale RE generation (projects >10MW) is cost competitive (e.g. through auctions for PPA's)?	Yes	
Is there a schedule for future bids/auctions available for investors?	No	
Is there a pre-qualification process to select bidders?	Yes	
Are tariffs indexed (in part or in whole) to an international currency or to inflation?	Yes	
Are there provisions to ensure full and timely project completion (e.g. bid-bonds, project milestones)	Yes	
Are projects awarded through auctions/bids online/on track to be online on stated date?	No	
Have auctions/bids met stated target for installations?	Yes	
Can small producers (residential, commercial rooftop PV,etc) connect to the grid?	Yes	
Are contracts with fixed tariffs available for such producers?	No	
Is there a schedule or clear rules (e.g. capacity based limits) for adjusting the tariff level over time?		

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Are different tariffs available for different technologies and sizes of the generation plant?	No
Is there a mechanism to control the capacity built under each tariff?	No
Are tariffs indexed (in part or in whole) to an international currency or to inflation?	No

Network connection and use	Score	60
Does the country have a grid code that clearly specifies connection procedures?	Yes	
Do the connection procedures meet international best practices?	Yes	
Does the grid code include measures or standards addressing variable renewable energy?	Yes	
Are there rules defining the allocation of connection costs?	Yes	
Is the type of the connection cost allocation policy considered shallow (grid operator pays for connection costs)?	No	
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 use of the transmission and distribution system (e.g. wheeling charges, locational pricing)?	Yes	
Does the country carry out regular assessments of the flexibility of the electricity grid and the issues relating to renewables integration?	No	
Can renewable energy projects sell into balancing/ancillary services?	Yes	
Are there rules for exchanging power between balancing areas that penalize variable renewable energy, e.g. through imbalance	No	

Regulatory Indicators for Sustainable Energy (RISE)

penalties? (only scored in countries with multiple balancing areas)	
Are there provisions in the power exchange rules that allow for plant forecasting? (only scored in countries with multiple balancing areas)	Yes
Does the country integrate high quality forecasting for any variable RE resources (either through subscription service or provided by national agencies) into their dispatch operations?	No
Are dispatch operations being carried out in real time?	Yes

Counterparty risk	Score	65
Are the following financial ratios of the counterparty deemed creditworthy?		-
Current ratio		Yes
EBITDA margin		No
Debt service coverage ratio		No
Days payable outstanding		Yes
Is the counterparty underwritten by a government guarantee or are there other mechanisms to ensure credit worthiness (e.g. through a letter of credit, escrow account, payment guarantee, or other)?		No
Are standard PPAs bankable?		Yes
Are the financial statements of the largest utility publicly available in the following categories?		-
Generation		Yes
Transmission		Yes
Distribution		Yes

Regulatory Indicators for Sustainable Energy (RISE)

Retail sales	Yes
If yes, are they audited by an independent auditor for the following categories of utilities?	-
Generation	Yes
Transmission	Yes
Distribution	Yes
Retail sales	Yes
Are the following metrics published in a primary official document (by the utility, regulator or ministry and/or government)?	-
Generation - Electricity available for sale to end-users	Yes
Transmission - Transmission loss rate	No
Distribution - Distribution loss rate	Yes
Retail Sales – Bill collection rate	Yes
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 measurements reported to the regulatory body?	Yes
Are the measurements available to public?	Yes

Carbon Pricing and Monitoring

Score

0

No Data Found