**Data Collection for the Renewables 2021**

**Global Status Report**

Offline Country Questionnaire

# INSTRUCTIONS FOR CONTRIBUTORS: PLEASE READ CAREFULLY

|  |
| --- |
| * Thank you for taking the time to fill in the questionnaire. All contributors will be acknowledged in the report unless they indicate that they wish to remain anonymous.
 |
| * **If possible, please use this as a draft that you can copy into the online format, accessible here:** [**https://survey.sogosurvey.com/r/u64EEv**](https://survey.sogosurvey.com/r/u64EEv)
 |
| * Your time is precious! Please refer to the **Table of Contents** provided on **Page 3** and fill only the sections of the questionnaire that best align with your knowledge or expertise.
 |
| * Responses are due **29 November 2021 by 23:00 CEST**
 |
| * **We accept all forms of information:** official statistics; online datasets, working papers, information from books, documents, websites, press releases newspapers, informal communication and personal correspondence.
 |
| * Please provide **full sources/references** for all information that you contribute. As the most frequently referenced report on the status of renewable energy, clear referencing is essential to maintaining the integrity of the GSR.
 |
| * When submitting **information based on informal communication** (emails, discussions etc.) or your own calculations or projections, please explain clearly how you obtained or derived it, including assumptions made and full source information for any references used.
 |
| * If you have any questions while completing the questionnaire, please email us at: gsr@ren21.net.
 |

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# CONTRIBUTOR PROFILE

|  |  |
| --- | --- |
| **Contributor(s) Name(s):** |  |
| **Email Address:** |  |
| **Contributor(s) Affiliation:**  |  |
| **Type of Institution:(Check all that apply)** | [ ]  Governmental (National/Subnational/Other)[ ]  Intergovernmental/International Agency[ ]  Non-governmental Organisation[ ]  Industry Association[ ]  Private Company[ ]  Public Company[ ]  Utility, Energy Service Company, Micro-Grid Operator, [ ]  Industry, Commercial Agency, Retailer, Private Sector, Project Developer or Installer [ ]  Financial Institution (Bank, Micro-Finance Institution, Insurer) [ ]  Research & Academia / Think Tank[ ]  **Other**  **Please Specify:**  |
| **I would like to provide information for the following country:** |  Choose an item.*If you would like to contribute information for more than one country, please kindly use one separate questionnaire per country.* |
| **Personal Data Policy**(Please check all boxes that apply)*To learn about REN21's personal data policy or exercise your rights under GDPR, please refer to* <https://www.ren21.net/about-us/legal-and-privacy/> *or contact us at* secretariat@ren21.net*.​​​​​​​* | [ ]  I give REN21 my permission to print my name and affiliation as a contributor in the final publication of this report.[ ]  By submitting information in this questionnaire, I agree to receive communication from REN21 about this report and the activities of the organization.[ ]  I give REN21 my permission to print my name and affiliation in communication materials. [ ]  If REN21 mentions me in its communication materials on social media, I would like to be tagged. My social media handles are as follows.**Twitter:** **LinkedIn:****Facebook:****Instagram:**  |

# Renewable Energy: Country/Regional Overview

Please provide us with a general overview of the renewable energy situation in the country in 2020, along with **full sources/references** for all information that you contribute. ​​​​​​

|  |
| --- |
| **Developments of Renewables in 2020**What were the main developments for renewables in the country in 2020? *Please specify if it is in general, within a specific end-use sector (buildings, industry, transport) or for energy access.* |
| *Enter text and information here.* |
| References:  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |

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| --- |
| **Barriers and Opportunities for Scaling Up Renewables**What barriers AND opportunities to scaling up renewables exist in the country?*Please specify if it is in general, within a specific end-use sector (buildings, industry, transport) or for energy access.* |
| *Enter text and information here.* |
| References:  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |

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| **Impact of COVID-19 on Renewables Industries**What were the main impacts of the COVID-19 pandemic outbreak on the renewable energy sector in the country in 2020?*Please specify if it is in general, within value chains (production, supply, consumption), within specific Renewable Energy technologies (solar PV, wind power, hydropower, geothermal, etc.), within specific end-use sectors (buildings, industry, transport), or for energy access* |
| *Enter text and information here.* |
| References:  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |

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| **Inclusion of Renewables in COVID-19 Recovery Measures and Plans**What were the main recovery measures and plans put in place for the renewable energy sector in the country?*Please specify if it is in general, within value chains (production, supply, consumption), within specific Renewable Energy technologies (solar PV, wind power, hydropower, geothermal, etc.), within specific end-use sectors (buildings, industry, transport), or for energy access.* |
| *Enter text and information here.* |
| References:  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |

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| **Submitting information on a region** Do you have information on an entire region that is relevant to the above questions? If so, please enter it here. |
| *Enter text and information here.* |
| References:  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |

##

# Renewable Energy Policies

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| --- |
| **Renewable Energy Targets and National Goals**Please indicate the **new or revised targets** **(or national goals)** that have been enacted in the country during 2020. Also include the **source** of the information. |
|  | **Type of target** | **Description of target** | **New in 2020?** | **Revised in 2020?** | **Source & URL** |
| Target 1 | Choose an item. |  | [ ]  | [ ]  |  |
| Target 2 | Choose an item. |  | [ ]  | [ ]  |  |
| Target 3 | Choose an item. |  | [ ]  | [ ]  |  |
| Target 4 | Choose an item. |  | [ ]  | [ ]  |  |
| Target 5 | Choose an item. |  | [ ]  | [ ]  |  |
| Target 6 | Choose an item. |  | [ ]  | [ ]  |  |

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| **Renewable Heating & Cooling Policies**Please indicate the **new or revised** renewable energy support policies in the heating and cooling sector that have been enacted in the country during 2020.*Please note that energy efficiency policies are covered in* ***Part 6: Energy Efficiency and Renewables.*** |
|  | **Type of policy** | **Description** | **New in 2020?** | **Revised in 2020?** | **Source & URL** |
| Policy 1 | Choose an item. |  | [ ]  | [ ]  |  |
| Policy 2 | Choose an item. |  | [ ]  | [ ]  |  |
| Policy 3 | Choose an item. |  | [ ]  | [ ]  |  |
| Policy 4 | Choose an item. |  | [ ]  | [ ]  |  |
| Policy 5 | Choose an item. |  | [ ]  | [ ]  |  |
| Policy 6 | Choose an item. |  | [ ]  | [ ]  |  |

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| --- |
| **Renewable Transport Policies**Please indicate the **new or revised** renewable energy support policies in the transport sector that have been enacted in the country during 2020. |
|  | **Type of policy** | **Description** | **New in 2020?** | **Revised in 2020?** | **Source & URL** |
| Policy 1 | Choose an item. |  | [ ]  | [ ]  |  |
| Policy 2 | Choose an item. |  | [ ]  | [ ]  |  |
| Policy 3 | Choose an item. |  | [ ]  | [ ]  |  |
| Policy 4 | Choose an item. |  | [ ]  | [ ]  |  |
| Policy 5 | Choose an item. |  | [ ]  | [ ]  |  |
| Policy 6 | Choose an item. |  | [ ]  | [ ]  |  |

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| **Renewable Power Policies**Please indicate the **new or revised** renewable energy support policies in the power sector that have been enacted in the country during 2020. |
|  | **Type of policy** | **Description** | **New in 2020?** | **Revised in 2020?** | **Source & URL** |
| Policy 1 | Choose an item. |  | [ ]  | [ ]  |  |
| Policy 2 | Choose an item. |  | [ ]  | [ ]  |  |
| Policy 3 | Choose an item. |  | [ ]  | [ ]  |  |
| Policy 4 | Choose an item. |  | [ ]  | [ ]  |  |
| Policy 5 | Choose an item. |  | [ ]  | [ ]  |  |
| Policy 6 | Choose an item. |  | [ ]  | [ ]  |  |

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| **Policies Outside of the Energy Sector**Are there any policies outside of the energy sector (e.g. trade, environmental, agricultural, health, etc.) related to renewable energy in that we should be aware of? If so, please provide details. |
|  | **Type of policy** | **Description** | **Source & URL** |
| Policy 1 |  |  |  |
| Policy 2 |  |  |  |
| Policy 3 |  |  |  |
| Policy 4 |  |  |  |
| Policy 5 |  |  |  |
| Policy 6 |  |  |  |

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| **Framework for Increased Integration/Complementarity of Renewable Energy Policies** As of 2020, is there a **framework for increased integration/complementarity of renewable energy policies** **across jurisdictional levels** (e.g., cities, states, and national) in the country? If so, please provide details. |
| *Enter text and information here.* |
| References:  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |

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| --- |
| **Further Information****Do you have any additional policy information to add? Please provide it here.**  |
| *Enter text and information here.* |
| References:  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |

# Renewable Energy Market and Industry Trends

This section focuses on market and industry trends specifically for the Renewable Energy technologies (solar PV, wind power, hydropower, geothermal, etc.). Please provide us with the most recent information available.

If you provide data, end-2020 data would be most helpful. Preliminary end-2020 data are fine where final data are not available.

Please provide **full sources/references** for all information that you contribute. ​​​​​​

|  |
| --- |
| **Heating & Cooling Sector - Market and Industry Trends**What are the new technology, market & industry trends and developments for renewable energy use specifically for heating & cooling in the country during 2020? |
| *Enter text and information here.* |
| References:  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |

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| **District Heating & Cooling Sector - Market and Industry Trends**What are the new technology, market & industry trends and developments for renewable energy use specifically for district heating & cooling in the country during 2020? |
| *Enter text and information here.* |
| References:  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |

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| **Contacts in Renewable Heating & Cooling**Are you aware of people knowledgeable about renewable heating and cooling? *Please provide their contact details (Name, affiliation, and email), area of expertise and relevant country.* |
|  | **Country** | **Contact Name** | **Affiliation** | **Area of expertise** | **Email address** |
| Contact 1 |  |  |  |  |  |
| Contact 2 |  |  |  |  |  |
| Contact 3 |  |  |  |  |  |
| Contact 4 |  |  |  |  |  |
| Contact 5 |  |  |  |  |  |
| Contact 6 |  |  |  |  |  |

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| **Transport Sector - Market and Industry Trends**What are the new technology, market & industry trends and developments for renewable energy use specifically for transport in the country during 2020? |
| *Enter text and information here.* |
| References:  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |

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| **Power Sector - Market and Industry Trends**What are the new technology, market & industry trends and developments for renewable energy use for power in the country during 2020? |
| *Enter text and information here.* |
| References:  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |

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| **Renewable Energy Use in Other Sectors**As of 2020, what are examples of projects and programmes using renewable energy in other sectors (e.g. agriculture, health, etc.) in the country during 2020? Please provide details. |
| *Enter text and information here.* |
| References:  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |

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| --- |
| **Programmes and Projects**Please provide a brief description of new or planned renewable energy programmes and projects that are being implemented in the country during 2020. |
|  | **Project/Programme Name:** | **Implementing Body:** | **Technology/ Sector:** | **Project/Programme Scale:** | **New in 2020:** | **Revised in 2020** | **Date of Implementation** | **Project/Programme Description:** |
| Project/Programme 1 |  |  |  | Choose an item. | [ ]  | [ ]  |  |  |
| Project/Programme 2 |  |  |  | Choose an item. | [ ]  | [ ]  |  |  |
| Project/Programme 3 |  |  |  | Choose an item. | [ ]  | [ ]  |  |  |
| Project/Programme 4 |  |  |  | Choose an item. | [ ]  | [ ]  |  |  |
| Project/Programme 5 |  |  |  | Choose an item. | [ ]  | [ ]  |  |  |
| Project/Programme 6 |  |  |  | Choose an item. | [ ]  | [ ]  |  |  |

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| **End-2020 Market Data** |
| In early 2021, will you be able to provide end-2020 market data (E.g. in terms of capacity additions, generation, etc.) for the country?*If you select yes, the REN21 team will reach out to you in January to request this information from you.* |  [ ]  Yes  [ ]  No |
| If yes, please indicate which topics you would have detailed information on in early 2021. |
| [ ] Bioenergy[ ] Solid biomass[ ] Liquid biofuels[ ] Biogas[ ] Geothermal power & heat [ ] Hydropower[ ] Ocean energy[ ] Solar PV[ ] CSP[ ] Solar thermal H&C[ ] Wind Power [ ] H&C (general)[ ]  Transport (general)[ ] Power (general)[ ] Storage |

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| **Information about Costs** |
| Do you know of reports/resources that provide up-to-date information about costs in the country?*These could be on levelised cost of energy, investment costs, and capacity factors for the various renewable energy technologies, etc. If you select forthcoming, please specify the expected publication date.* | [ ]  Yes, I already have such information [ ]  Yes, I know forthcoming information[ ]  No, I do not have such information |
| If yes, please provide links of existing/forthcoming reports/resources that provide up-to-date information about costs. |
| **RE Technology** | **Date of publication** | **Description/Link** |
| [ ] Bioenergy[ ] Solid biomass[ ] Liquid biofuels [ ] Biogas[ ] Geothermal power & heat[ ] Hydropower[ ] Ocean energy[ ] Solar PV[ ] CSP[ ] Solar thermal H&C[ ] Wind Power[ ] H&C (general)[ ]  Transport (general)[ ] Power (general)[ ] Storage |  |  |

**Invitation to Peer Review**

NOTE TO CONTRIBUTORS: Please plan to participate in the **peer review of the GSR Market & Industry chapter drafts**, which will occur in **late March/early April 2021**. We will email you an invitation to review when the drafts are ready!

# Systems Integration and Enabling Technologies

## 4.1 Energy Systems Integration

The integration of higher shares of Variable Renewable Energy (VRE) in the energy system may require (1) strategic planning and linkages in the power market; (2) the evaluation, improvement and enhancement of power systems and grid infrastructure; (3) accurate resource forecasting; and (4) improved flexibility in both generation and demand.

*Please provide* ***full sources/references*** *for all information that you contribute.*

|  |
| --- |
| **Developments in Grid Infrastructure**Please provide information on any advances, projects or initiatives underway aimed at strengthening, extending or interlinking electrical grid infrastructure, in order to accommodate large volumes of renewable energy generation, in the country during 2020. |
| *Enter text and information here.* |
| References:  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |

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| **Power System Flexibility**Please provide information on any advances, projects or initiatives in the electricity markets that are aimed at improving grid flexibility and/or integrating higher shares of variable renewable energy into the grid in the country during 2020. *This could include efforts to digitalise the power system (e.g. technology deployment or blockchain usage), new market designs that reward flexibility (e.g. day ahead markets, time-of-use pricing), creation of new markets (e.g. capacity markets), deployment of grid support equipment for frequency control or inertia, microgrids etc.* |
| *Enter text and information here.* |
| References:  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |

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| **Demand-Side Management**Please provide information on any demand-side management technologies (e.g. smart meters), projects or initiatives underway in the country during 2020. *These could include initiatives aimed at improving demand flexibility (e.g. demand response programmes) as well as those aimed at improving generation (supply) flexibility (both renewable and fossil-fuel generation)* |
| *Enter text and information here.* |
| References:  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |

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| **Renewable Energy Forecasting**Please provide information on any advances, projects or initiatives in the forecasting of renewable energy production, particularly wind and solar, which took place in the country in 2020. |
| *Enter text and information here.* |
| References:  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |

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| --- |
| **Other Renewable Energy Integration Trends and Developments**Please provide any further information on other initiatives and developments around the integration of higher shares of renewable energy in the country for 2020***.*** |
| *Enter text and information here.* |
| References:  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |

## 4.2 Enabling Technologies (storage, EVs, heat pumps, P2X)

Technologies can enable greater renewable energy deployment. These include electric vehicles, heat pumps or storage. Please describe key trends, market and industry developments and provide us with the most recent data for 2020.

*Please provide* ***full sources/references*** *for all information that you contribute.*

Energy Storage Technologies

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| --- |
| **Key Trends**Please describe any key trends in the energy storage industry that took place in the country during 2020. |
| *Enter text and information here.* |
| References:  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |

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| --- |
| **Market Data** |
| In early 2021, will you be able to provide end-2020 market data on energy storage in the country?*If you select yes, the REN21 team will reach out to you in January to request this information from you.* |  [ ]  Yes  [ ]  No |
| If yes, please indicate which **topics** you would have detailed information on in early 2021. |
| [ ]  Mechanical (e.g. pumped storage, compressed air, flywheels, etc.)[ ]  Electrochemical (e.g. batteries)[ ]  Chemical (e.g. hydrogen)[ ]  Thermal (e.g. hot water tanks, pit storage, etc.)[ ]  Other (please specify): ­­­­­­­­­­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

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| **Industry**Please list the leading storage technology manufacturers and service providers in the country during 2020. |
| *Enter text and information here.* |

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| Please describe any projects completed or underway in the country during 2020 for production of renewable hydrogen from renewable electricity. |
| *Enter text and information here.* |
| References:  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |

###

Electric Vehicles

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| **Key Trends**Please describe any key trends in the electric vehicle industry that took place in the country during 2020.*This can include trends relating to passenger EVs, commercial EVs, public transport EVs, two- and three-wheeled EVs, charging infrastructure, or EV technology advances.* |
| *Enter text and information here.* |
| References:  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |

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| Is renewable energy integrated or linked with e-mobility in the country? If so, how? Could you name some specific initiatives? |
| *Enter text and information here.* |
| References:  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |

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| **Market Data** |
| In early 2021, will you be able to provide end-2020 market data on electric vehicles (e.g. Number Existing at End-2020, Number Added in 2020) in the country?*If you select yes, the REN21 team will reach out to you in January to request this information from you.* |  [ ]  Yes  [ ]  No |
| If yes, please indicate which topics you would have detailed information on in early 2021. |
| [ ]  Passenger EVs[ ]  Commercial or Public EVs (including busses, trucks, etc.)[ ]  Fast charging stations[ ]  Slow charging stations[ ]  Other (please specify): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

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| **Industry**Please list the leading EV companies in the country during 2020. |
| EV manufacturers |  |  |
| EV charging station companies |  |  |
| e-mobility service providers |  |  |

###

Heat Pumps

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| --- |
| **Key Trends**Please describe any key trends in the heat pump industry that took place in the country during 2020.*This can include information on air conditioners, refrigerators and freezers, residential, commercial and industrial water heaters, or centralised large heat pumps for district heating or cooling systems.* |
| *Enter text and information here.* |
| References:  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |

|  |
| --- |
| **Market Data** |
| In early 2021, will you be able to provide end-2020 market data on heat pump industry in the country?If you select yes, the REN21 team will reach out to you in January to request this information from you. | [ ]  Yes [ ]  No |

|  |
| --- |
| **Industry**Please list the leading heat pump manufacturers and service providers in the country during 2020. |
| *Enter text and information here.* |

###

Renewable Power-to-X

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| --- |
| **Key Trends**Please provide information on any renewable power conversion (Power-to-X) projects or initiatives in the country during 2020.*These could include using renewable power to produce hydrogen, ammonia, chemicals, gas or electrofuels.* |
| *Enter text and information here.* |
| References:  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |

# Renewable-based Energy Access

This section focuses on the use of renewable energy as a means to provide access to energy (mostly electricity and clean cooking but also cooling and other productive uses). Therefore, these questions primarily relate to energy access deficit regions such as South and South-East Asia and sub-Saharan Africa, and to a lesser extent in Latin America.

*Please provide* ***full sources/references*** *for all information that you contribute.*

|  |
| --- |
| **Policies Supporting Renewable-based Energy Access**Please provide information about any new and important policy developments at national level for the use of renewables in providing energy access in the country during 2020. |
|  | **Type of policy** | **Description** | **Source & URL** |
| Policy 1 | Choose an item. |  |  |
| Policy 2 | Choose an item. |  |  |
| Policy 3 | Choose an item. |  |  |
| Policy 4 | Choose an item. |  |  |
| Policy 5 | Choose an item. |  |  |
| Policy 6 | Choose an item. |  |  |

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| **Renewable-based Electrification Policies**Please indicate where new or revised policies supporting the use of renewables in providing electricity access have been enacted in the country during 2020. |
|  | **Type of policy** | **Description** | **New in 2020?** | **Revised in 2020?** | **Source & URL** |
| Policy 1 | Choose an item. |  | [ ]  | [ ]  |  |
| Policy 2 | Choose an item. |  | [ ]  | [ ]  |  |
| Policy 3 | Choose an item. |  | [ ]  | [ ]  |  |
| Policy 4 | Choose an item. |  | [ ]  | [ ]  |  |
| Policy 5 | Choose an item. |  | [ ]  | [ ]  |  |
| Policy 6 | Choose an item. |  | [ ]  | [ ]  |  |

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| **Renewable-based Clean Cooking Policies**Please indicate where new or revised policies supporting the use of renewables in providing clean cooking access have been enacted in the country during 2020. |
|  | **Type of policy** | **Description** | **New in 2020?** | **Revised in 2020?** | **Source & URL** |
| Policy 1 | Choose an item. |  | [ ]  | [ ]  |  |
| Policy 2 | Choose an item. |  | [ ]  | [ ]  |  |
| Policy 3 | Choose an item. |  | [ ]  | [ ]  |  |
| Policy 4 | Choose an item. |  | [ ]  | [ ]  |  |
| Policy 5 | Choose an item. |  | [ ]  | [ ]  |  |
| Policy 6 | Choose an item. |  | [ ]  | [ ]  |  |

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| **Market Trends and Developments**Please provide information about any new and important market trends or developments (positive and negative) for the use of renewables in providing energy access in the country over the past 1-3 years, but particularly during 2020. |
|  | **Description** | **Source & URL** |
| Technologies |  |  |
| Business models |  |  |
| Demand stimulation and productive use |  |  |
| Finance and Investments |  |  |

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| **Projects, Programmes and Initiatives**Please provide information on existing or newly implemented energy access projects, programmes or initiatives that deploy renewable energy in the country in 2020.*If possible, please provide details of the objectives, organisations involved, duration, coverage and renewable energy technologies used.* |
|  | **Description** | **Source & URL** |
| Name of Project/Programme/Initiative: |  |  |
| Geographic coverage: |  |  |
| Start Date: |  |  |
| Organisations involved: |  |  |
| Technology/sector: |  |  |
| Total number of systems deployed or installed capacity at end-2020 (in nb, kW, litres, etc.): |  |  |
| Description of Project/Programme/Initiative: |  |  |
| Source & URL: |  |  |

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| **Do you want to provide information on another project/programme/initiative in the country in 2020?*****Please replicate the following table as many times as needed.*** |

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| Please provide information on existing or newly implemented energy access projects, programmes or initiatives that deploy renewable energy in the country in 2020.If possible, please provide details of the objectives, organisations involved, duration, coverage and renewable energy technologies used. |
|  | **Description** | **Source & URL** |
| Name of Project/Programme/Initiative: |  |  |
| Geographic coverage: |  |  |
| Start Date: |  |  |
| Organisations involved: |  |  |
| Technology/sector: |  |  |
| Total number of systems deployed or installed capacity at end-2020 (in nb, kW, litres, etc.): |  |  |
| Description of Project/Programme/Initiative: |  |  |
| Source & URL: |  |  |

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| **End-2020 Market Data** |
| In early 2021, will you be able to provide end-2020 national market data for any of the following technologies used to promote energy access?*If you select yes, the REN21 team will reach out to you in January to request this information from you.* |  [ ]  Yes [ ]  No |
| If yes, please indicate which of the following **technologies** you would have detailed information on in early 2021. |
| [ ]  Biogas digester/systems[ ]  Biogas production[ ]  Improved cookstoves[ ]  Mini-grids[ ]  Solar Home Systems[ ]  Solar lamps/lanterns[ ]  Solar streetlights[ ]  Solar water pumping[ ]  Other (please specify) |

# Energy Efficiency and Renewables

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| **Energy Efficiency Trends and Developments**Please provide a brief overview of the current status and trends of energy efficiency in the country.*Topics could include programmes being implemented or planned, energy regulations and standards, sectors being targeted by EE measures (industry, building, transport, power), energy intensity, EE investment, new technologies, etc* |
| *Enter text and information here.* |
| References:  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |

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| **Integrating Renewable Energy & Energy Efficiency** |
| Are energy efficiency and renewable energy addressed within the same governmental agency in the country? |  [ ]  Yes [ ]  No [ ]  I do not know |

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| **Are there policies that combine energy efficiency and renewable energy (in force in 2020) in the country?** Please give examples. |
| *Enter text and information here.* |
| References:  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |

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| **Are there programmes that combine energy efficiency and renewable energy (in force in 2020) in the country?** Please give examples. |
| *Enter text and information here.* |
| References:  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |

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| **Energy Efficiency Targets**Please indicate the new or revised energy efficiency targets (or national goals) that have been enacted in the country during 2020.*Under Description, please detail target focus (primary energy, final energy, electricity); the target type (absolute consumption, energy intensity target, energy savings target, other); the sectors covered (Heating & Cooling, Transport, Power, All), target amount and target year.* |
|  | **Description** | **Is the target mandatory?** | **Is the target non-mandatory?** | **Source & URL** |
| Target 1 |  | [ ]  | [ ]  |  |
| Target 2 |  | [ ]  | [ ]  |  |
| Target 3 |  | [ ]  | [ ]  |  |
| Target 4 |  | [ ]  | [ ]  |  |
| Target 5 |  | [ ]  | [ ]  |  |
| Target 6 |  | [ ]  | [ ]  |  |

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| **Energy Efficiency Policies**Please indicate the new or revised energy policies that have been enacted in the country during 2020. |
|  | **Type of policy** | **Description** | **New in 2020?** | **Revised in 2020?** | **Source & URL** |
| Policy 1 | Choose an item. |  | [ ]  | [ ]  |  |
| Policy 2 | Choose an item. |  | [ ]  | [ ]  |  |
| Policy 3 | Choose an item. |  | [ ]  | [ ]  |  |
| Policy 4 | Choose an item. |  | [ ]  | [ ]  |  |
| Policy 5 | Choose an item. |  | [ ]  | [ ]  |  |
| Policy 6 | Choose an item. |  | [ ]  | [ ]  |  |

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| **Energy Efficiency Funding and Campaigns**Please describe any funding dedicated to energy efficiency in the country.*This could include dedicated funds for residential and commercial building retrofit programmes (e.g. rebates, tax credits, etc.), for labelling programmes that encourage use of efficient appliances, for improving specific appliance efficiency, etc.* |
| *Enter text and information here.* |
| References:  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |

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| **Please describe any national energy efficiency awareness campaigns conducted in the country in 2020.** |
| *Enter text and information here.* |
| References:  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |

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| **Energy Efficiency Trends in Buildings End-Use Sector** What are the new technology, market and industry trends and developments for energy efficiency and energy conservation in the buildings end-use sector in the country during 2020? |
| *Enter text and information here.* |
| References:  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |

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| **Energy Efficiency Trends in Industry End-Use Sector** What are the new technology, market and industry trends and developments for energy efficiency and energy conservation in the industry end-use sector in the country during 2020? |
| *Enter text and information here.* |
| References:  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |

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| **Energy Efficiency Trends in Transport End-Use Sector** What are the new technology, market and industry trends and developments for energy efficiency and energy conservation in the transport end-use sector in the country during 2020? |
| *Enter text and information here.* |
| References:  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |
| Source detail | *Author, Date, Title, Publisher/Institution* |
| Link |  |

**Thank you for your responses!**

The information you have provided in the offline questionnaire is valuable. Please make sure to email it to us by **29 November 2020.**
We will contact you in case we have any questions on the data you have provided. Otherwise, we will be in touch for the next milestones in the GSR 2021 process:

* **January 2020 Round 1 Peer Review**
* **April 2020 Round 2 Peer Review**
* **June 2020 Launch of Final Report**

You may email us at gsr@ren21.net in case of any questions in the meantime.

Thanks again and best regards,

Chetna, Duncan, Hannah and Thomas
The GSR Team