TRACKING SDG7

THE ENERGY PROGRESS REPORT 2021

A joint report of the custodian agencies

IEA International Energy Agency

IRENA International Renewable Energy Agency

United Nations Statistics Division

THE WORLD BANK IBRD • IDA | WORLD BANK GROUP

World Health Organization

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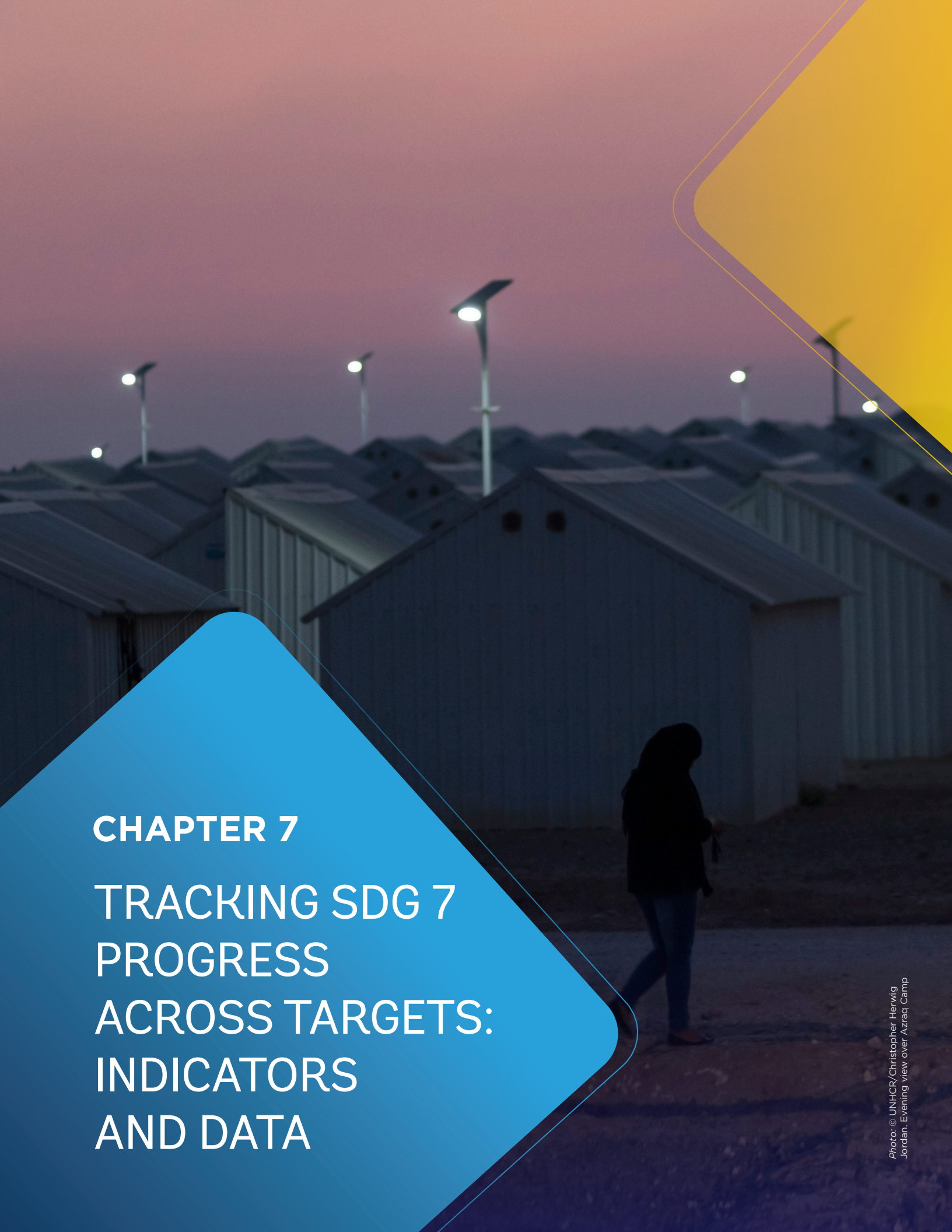

CHAPTER 7

TRACKING SDG 7 PROGRESS ACROSS TARGETS: INDICATORS AND DATA

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Jordan. Evening view over Azraq Camp

Comprehensive and accurate data are essential for countries intent on making evidence-based decisions. In developed and developing countries alike, this focus on accurate data provides transparency with respect to trends and helps track progress toward policy goals. Well-designed and appropriately resourced data collection on national energy statistics and trends plays a fundamental role in how countries monitor their own progress toward achieving Sustainable Development Goal 7.

Working with national data across regions, several custodian agencies collaborated on this account of progress on SDG 7.[63]

Global tracking certainly benefits from continuous improvements of national data systems—as countries set up legal frameworks and institutional arrangements;[64] gather accurate supply-and-demand data and balance equations;[65] implement end-user surveys (e.g., of households, businesses, and others); and establish quality-assurance frameworks consistent with the United Nations' *International Recommendations for Energy Statistics.*[66] Global progress toward SDG 7 makes a number of energy policies relevant, so tracking them is an opportunity to strengthen data collection.

This chapter compiles the indicators used to track progress across the SDG 7 targets, as set out in table 7.1; it also describes the work done at national and international levels to obtain the underlying data. For further information on the methodologies behind indicators, please refer to the individual chapters or to the United Nations' metadata repository for SDGs.[67]

TABLE 7.1 • Targets and indicators for SDG 7

TARGET	INDICATOR
7.1—By 2030, ensure universal access to affordable, reliable and modern energy services	7.1.1—Proportion of population with access to electricity
	7.1.2—Proportion of population with primary reliance on clean fuels and technology
7.2—By 2030, increase substantially the share of renewable energy in the global energy mix	7.2.1—Renewable energy share in total final energy consumption
7.3—By 2030, double the global rate of improvement in energy efficiency	7.3.1—Energy intensity measured in terms of primary energy and GDP
7.a—By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology	7.a.1—International financial flows to developing countries in support of clean energy research and development and renewable energy production, including in hybrid systems
7.b—By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing states, and landlocked developing countries, in accordance with their respective programs of support	7.b.1—Installed renewables-based generating capacity in developing countries (in watts per capita)

63 This report is based on the work of the several custodian agencies in tracking progress across the SDG 7 targets: 7.1—access (World Bank, WHO); 7.2—renewables (IEA, IRENA, UNSD); 7.3—energy efficiency (IEA, UNSD); 7.a—international cooperation (OECD, IRENA); 7.b—public financial flows (IRENA).

64 Institutional arrangements are made to optimize data production, exchange, and governance across organizations, mainly statistical offices and government agencies (energy ministries) responsible for implementing energy polices.

65 Energy balances are comprehensive accounts of all the energy entering, exiting, and consumed in the territory of a given country, typically covering production, import, and export of primary energy sources, in addition to its transformation into fuels for final consumption and consumption within each major end-use sector. Examples are available at https://www.iea.org/data-and-statistics/data-tables?country=WORLD and https://unstats.un.org/unsd/energystats/dataPortal/.

66 Under IRES (United Nations 2018) data quality is marked by relevance, accuracy, and reliability; timeliness and punctuality; coherence and comparability; and accessibility and clarity. For quality-assurance frameworks, please refer to IRES, chapter IX.

67 https://unstats.un.org/sdgs/metadata/

ACCESS TO ELECTRICITY

Tracking progress on electrification requires a universally applicable and transparent approach. This complex process tracks cumulative progress across interventions carried out by a number of national and international players—including governments, energy utilities, private sector companies, funding agencies, and developmental organizations. Given the rise of decentralized energy solutions and the socioeconomic complexity of access-deficit countries, the tracking process also encompasses a mix of technologies such as grids, mini-grids, and self-generation solutions like solar home systems. Finally, assessments must tally the numbers of people benefiting from these interventions and describe the nature and magnitude of improvements. It is critical, however, to help governments and practitioners understand their current access status and identify any bottlenecks to rapid electrification so they can make informed decisions and achieve their universal access goals in more efficient ways.

In order to set goals for investment priorities and track progress, a multi-tier framework (MTF) based on household surveys has been established through a multiagency effort.[68] Defining and measuring access to electricity should focus not only on the number of users with access but also on the nature and degree of access across a number of attributes—capacity (adequacy), availability, reliability, affordability, quality, legality, health impact, safety, and convenience, among others. The MTF has been deployed by national statistical offices and the World Bank since 2016, and data collection has been completed for 16 first-round countries. New MTF surveys are being implemented in seven countries.

For the purposes of global measurement, however, given the paucity of data for multi-tier metrics, standardized country-level surveys (and supply-side data from governments or utilities) complement the MTF approach for now.

Some methods to track electricity access include:

- Conducting workshops (e.g., on geospatial planning) to develop the capacity of national statistical offices in data collection, arranged through development partners.
- Improving the usability of datasets for energy practitioners by helping governments adopt emerging technology and data analytics. Survey design can be hampered by outdated or nonexistent censuses.
- Exploring the use of large-scale open databases, such as satellite data.

Most microdata found in household, enterprise, and agriculture surveys are useful for energy practitioners and ministries. It takes significant time and effort, however, to extract data on energy access, including socioeconomic status, electrification status, and village-level information. Data harmonization and standardization could help more end users access and use such datasets, for example, to design projects and formulate policy.

ACCESS TO CLEAN FUELS AND TECHNOLOGIES FOR COOKING

For the purposes of monitoring SDG 7 on access to clean cooking (and SDG 3 on health), a nonparametric statistical model is used to estimate country and regional access[69]. "Clean cooking" is determined by the emission levels of a particular fuel-and-technology combination. The analysis for SDG 7.1.2 presently centers on cooking fuels, using them as surrogates to estimate reliance on clean cooking.[70]

In the future, it will be essential to have information on the many types of cooking fuels and technologies, as well as their frequency and duration of use, in order to design, implement, and monitor the effectiveness

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68 Participants in the MTF process were the Energizing Development Program (EnDev), the Energy Sector Management Assistance Program (ESMAP), the Global Alliance for Clean Cookstoves (the Alliance), the International Energy Agency (IEA), Practical Action Consulting (PAC), the UN Development Program (UNDP), the UN Foundation, the UN Industrial Development Organization (UNIDO), the World Bank, and the World Health Organization (WHO).

69 See methodology section of chapter 2.

70 This approach is rooted in the lack of globally representative data on household-level cooking technologies. Households considered to have access to clean cooking for SDG 7.1.2 are those primarily relying on electricity, biogas, solar, alcohol fuels, natural gas, and liquefied petroleum gas (LPG) for household cooking.

and outcomes of clean cooking policies and programs. The wording, and number, of survey questions is important. Country-level estimates of clean cooking access are also used to gauge the burden of disease and ultimately the "mortality rate from the joint effects of ambient and household air pollution," which is one of the indicators used to monitor the environmental health impacts under SDG 3 (SDG 3.9.1). By improving data collection on "stove stacking" (the parallel use of different cooking fuels in the home, a common practice in low- and middle-income countries), surveys can produce more accurate appraisals of household exposure to air pollution and of resultant disease burdens.

Simple improvements to surveys enable a better job of monitoring the trends and outcomes of clean cooking. For example, with more robust data collection on the fuels households use, the clean cooking estimates presented here have been able to employ more advanced modeling techniques. Doing so has allowed analysts to estimate the percentage of households mainly using biomass, charcoal, coal, kerosene, gaseous fuels, or electricity, and to arrive at such estimates for each country in every region. With specific estimates, decision-makers can more readily monitor the trends and outcomes of policy changes, such as subsidies or tariffs.

As refinements in household surveys and censuses are made, countries should begin gathering a more complete picture of household energy use, including heating and lighting fuels and technologies (which affect household air pollution as well as stove stacking). Steps have already been taken to develop a harmonized and robust set of questions for national household surveys and censuses.[71] More information on such initiatives by WHO and the World Bank can be found in the 2020 edition of this report (chapter 2, box 2.2).

RENEWABLE ENERGY

Renewable energy progress is tracked for SDG 7 as the share of renewables in total final energy consumption (TFEC).[72] The tracking effort requires comprehensive data across all energy sources (renewable and non-renewable) and across supply, transformation, and final consumption sectors. In terms of data, computation of this indicator relies on the availability of a full supply-demand energy balance,[73] as well as some assumptions regarding electricity and heat.

Specific challenges to accurately tracking renewables include the need to monitor the swift development of geographically distributed sources[74] and to improve the capacity across countries to measure traditional use of biomass for energy (solid biofuels) by households—the largest component of renewable energy in the developing world.

Developing better estimates of solid biofuel use in households requires dedicated effort, for example, through surveys—either enhancing existing surveys with an energy module or establishing new energy surveys. Survey-based results are valuable, and they not infrequently initiate significant revisions of previous estimates, in such cases affecting SDG 7.2 tracking.

A broader question to be addressed for biomass is how much of its use can be considered sustainable—as, for example, traditional fuel wood harvesting is associated with deforestation.

ENERGY EFFICIENCY

Energy efficiency is tracked for SDG 7 through energy intensity, which is the ratio of total energy supply[75] to economic output. Defining the total energy supply requires robust information on primary energy production across all sources, as well as trade in all energy products, among other things. The supply information

71 The WHO/World Bank Core questions on household energy use are available here: https://www.who.int/tools/core-questions-for-household-energy-use

72 Please refer to IRES for the methodology to derive the TFEC.

73 Please refer to IRES for methodology to derive an energy balance.

74 Solar PV, wind, etc.; including off-grid and micro-grid.

75 Please refer to IRES for the methodology to derive the total energy supply (TES).

may be collected from administrative sources[76] or through surveys of higher-level players, such as energy suppliers; the information is available for most commercially traded energy sources[77] and in most countries is of reasonably good quality.

Tracking energy intensity is best done in conjunction with analysis of demand drivers across sectors, such as industry, transport, and building—both residential and services. Given the diverse nature of end users, demand-side data collection is inherently more complex, time-consuming, and costly than supply-side collection. Direct consumer surveys may be necessary, especially when suppliers cannot provide detailed information on how much energy is being delivered to the various types of users.

To analyze sectoral energy efficiency, countries are encouraged to monitor intensities at the end-use level,[78] at least for priority sectors. Apart from the greater data disaggregation required, such indicators require more coordination across entities concerning activities beyond the energy sector, such as building records, vehicle registrations, and so on. Many countries have started to collect end-use data so they can compile energy efficiency indicators to support their policy making and planning.[79]

INTERNATIONAL FINANCIAL FLOWS TO DEVELOPING COUNTRIES IN SUPPORT OF CLEAN AND RENEWABLE ENERGY

SDG indicator 7.a.1 focuses on public financial flows to developing countries in support of clean energy research and development and renewable energy production, including in hybrid systems. The indicator measures public financial flows based on data extracted from IRENA and OECD databases. Public international financial flows data are susceptible to multiple changes and adjustments that call for increased attention to detail, standardized data collection and management cycles, and constant revision of the existing commitment values.

Information on public investment flows to support SDG 7.a.1 could be improved in the following four areas:

- Tracking investments
- Standardizing commitment details
- Centralizing data collection
- Presenting constant flows.

Improved investment tracking should reveal how recipients use international public financial commitments for end-use projects or programs. It is also useful for estimating the amount of private capital leveraged by public funds. End-to-end flow tracking would require commitment identification numbers assigned to end-use organizations and projects by public investors. International flows are often disbursed in multiple phases as they pass through local governments, ventures, or funds. If and when reporting institutions revise financial investment figures, these should be extended to include several years of information to account for commitment cancelations or modifications in amounts.

Standardizing commitment details could be achieved by sharing best practices among public donors and investors, refining reporting directives, and encouraging public donors and investors to provide energy details according to international standards. Standardization would increase reporting accuracy regarding progress toward SDG 7.a.1 and enhance the level of detail concerning commitments—such as

76 Data collected by various agencies in response to legislation and/or regulation, not necessarily for statistical purposes, may be used to compile energy statistics by ensuring quality and addressing limitations related to their different purposes.

77 Difficulties remain in estimating the supply of solid biofuels in several countries, implying uncertainties about TES if solid biofuel use is significant in the overall energy mix.

78 Examples of energy efficiency indicators include energy per passenger-kilometer (or tonne-km for freight), by vehicle type, for transport; energy for space heating/cooling per area, for buildings; energy per amount of physical production of a good, for industry. IEA's Energy Efficiency Indicators: Fundamentals on Statistics (https://www.iea.org/reports/energy-efficiency-indicators-fundamentals-on-statistics) includes a methodological framework for energy efficiency indicators, as well as experiences from countries to produce relevant data.

79 Examples of projects include: the IEA energy efficiency indicators, https://www.iea.org/reports/energy-efficiency-indicators for IEA member countries and beyond; and the Odyssée database for Europe, https://www.indicators.odyssee-mure.eu/energy-efficiency-database.html.

on technology, type of finance (e.g., project-level finance, infrastructure, research, or technical assistance), type of financial mechanism, and so forth. Data collection on investments have an inherently financial focus and are commonly missing the details mentioned above. Centralizing data collection efforts could be encouraged with preformatted questionnaires and online data-entry portals to improve flow comparability across public donors. The OECD's CRS database is exemplary in this regard—public donors and investors fill out questionnaires with data about their commitments. But data collection for public investments in clean energy and renewables at a global scale is mostly decentralized, making commitments data less uniform.

Correcting international commitments for currency exchange rates and inflation is key to making flows comparable across countries and over time. To account for currency exchange rate changes and inflation, it is important that countries and other institutions tracking these flows deflate them properly. Sustainable Development Goal target 7.a.1 uses the OECD methodology to deflate international flows, first by adjusting for inflation from the year the flows occurred to a baseline year (2018) and, second, by converting those local-currency values to United States dollars using the exchange rates from the baseline year (2018).

INSTALLED RENEWABLE ELECTRICITY-GENERATING CAPACITY IN DEVELOPING COUNTRIES

Indicator 7.b.1 is defined as the installed capacity of power plants that generate electricity from renewable energy sources divided by the total population of a country. *Capacity* is defined as the net maximum electrical capacity installed at year end, following IRES. Renewable energy sources are defined in the IRENA statute as hydropower, marine (ocean, tidal, and wave), wind, solar (photovoltaic and thermal), bioenergy, and geothermal.

The capacity data are collected as part of IRENA's annual questionnaire cycle. Questionnaires are sent to countries at the start of each year. They ask for renewable energy data over the previous two years. The data are then validated and checked with countries. IRENA's *Renewable Energy Statistics Yearbook* publishes them in late June.

Population data come from the *World Population Prospects*, published by the United Nations Population Division. These figures represent total population of a country as of midyear (July 1).

For each country and year, the renewable-electricity-generating capacity at year end is divided by the population at midyear to produce a measure of watts per capita. This division scales the capacity data to account for the enormous variations in country needs. It uses population rather than GDP to scale the data, because population is the most basic indicator of country demand for modern and sustainable energy services.

The focus of this indicator on electricity capacity does not capture any trends in the modernization of technologies used to produce heat or provide energy for transport.

With the trend toward electrification of end uses, however, the focus here on electricity may become less of a drawback in the future, serving instead only as a general indicator of progress on electrification in developing countries.

Furthermore, as reflected in numerous national policies, plans, and targets, many countries regard increased production of electricity (in particular, renewable electricity) as a top priority in their transition to delivering more modern and sustainable energy services. Thus, this indicator is a useful first step toward measuring progress on this target in a way that reflects country priorities. It can also be used until other additional or better indicators are developed.

CONCLUSION

We know from efforts to track SDG 7 that good-quality data are vital for informed policy making at country, regional, and international levels. Improved data quality worldwide is made possible through cooperation, at national and international levels, and through strengthened statistical capacity.

At the national level, cooperation among statistical offices and institutions across policy domains is key to optimizing the use of data-collection resources. For example, household surveys could be designed to support tracking across SDG 7 targets, such as clean cooking and energy efficiency at end-use levels[80] and also with targets beyond SDG 7, such as quality of life, cleaner air, and better health.

International cooperation strengthens the effort to track progress toward achieving SDG 7 by raising awareness about the need for good-quality data. Good data underpin good policy. In addition, standardized methodologies for indicators are needed, along with common frameworks for surveys. International databases need to be compiled. And more support is needed for developing statistical capacity in countries and regions. As the custodian agencies work together to track progress toward SDG 7, they have found ways to refine their collaboration on data—with each other and among countries.

Finally, the custodian agencies would like to acknowledge the work and dedication of all the colleagues working on energy data collection across national administrations worldwide. It is they who make possible the international work without which this tracking report would be impossible.

80 For example, clean cooking and space heating are linked for rural households in colder climates. More broadly, all end uses of energy within a household (lighting, appliances, cooking, heating, cooling) can and should be addressed by surveys.

SDG 7.1.1 - ACCESS TO ELECTRICITY

Data provided by the World Bank

Country/region	Total electricity access rate (%)										Urban electricity access rate (%)		Rural electricity access rate (%)	
	2000		2005		2010		2015		2019		2019		2019	
Afghanistan			22		43	*d*	72	*d*	98	*g*	100		97	
Albania	100	*m*	100	*m*	100	*m*	100	*k*	100	*m*	100	*m*	100	*m*
Algeria					99		99		100	*c*	100	*c*	99	
American Samoa														
Andorra	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*
Angola			30		35		42	*d*	46		72			
Anguilla	95		96		98		100		100					
Antigua and Barbuda	97		92	*d*	99		100	*m*	100	*m*	100	*m*	100	*m*
Argentina	95		97		99	*e*	100		100		100		100	
Armenia	99	*d*	100	*d*	100	*d*	100	*d*	100	*g*	100		100	
Aruba	92	*e*	100	*m*	93	*e*	100	*m*	100	*m*	100	*m*	100	*m*
Australia	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*
Austria	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*
Azerbaijan	99	*c*	99		100		100		100		100		100	
Bahamas	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*
Bahrain	100		100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*
Bangladesh	32	*d*	44	*g*	55	*g*	74		92	*c*	98	*c*	89	
Barbados	100	*m*	100		100	*m*	100	*m*	100	*m*	100	*m*	100	*m*
Belarus	100	*m*	100	*m*	100	*m*	100	*m*	100	*c*	100	*c*	100	*m*
Belgium	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*
Belize	79	*e*	84		90	*e*	92	*c*	93	*e*	98	*e*	88	
Benin	22		26		34	*g*	30	*k*	40		65		17	
Bermuda	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*
Bhutan	31	*g*	60	*e*	73	*c*	95		100		100		100	
Bolivia (Plurinational State of)	70	*h*	68	*h*	88		92	*h*	96		100		88	
Bosnia and Herzegovina	100	*m*	100	*m*	100	*m*	100	*k*	100	*m*	100	*m*	100	*m*
Botswana	27		38		52		62	*k*	70		88		28	
Brazil	94		97	*h*	99		100	*h*	100	*g*	100		98	

Country/region	Total electricity access rate (%)										Urban electricity access rate (%)		Rural electricity access rate (%)	
	2000		2005		2010		2015		2019		2019		2019	
British Virgin Islands	97		98		99		100	*m*	100	*m*	100	*m*	100	*m*
Brunei Darussalam	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*
Bulgaria	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*
Burkina Faso	9		11		13	*d*	16		18		65			
Burundi	2		3	*c*	5	*d*	8		11		63		3	
Cabo Verde			67	*d*	81	*e*	87		96		95		96	
Cambodia	17	*d*	21	*d*	31	*d*	69		93		100		91	
Cameroon	41	*c*	47		53		59		63		93		24	
Canada	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*
Cayman Islands	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*
Central African Republic	6	*c*	8		10	*c*	13		14	*c*	32	*c*	2	
Chad	3		5		6	*c*	8	*d*	8	*c*	37	*c*		
Channel Islands	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*
Chile	98	*h*	98		100		100	*h*	100	*m*	100	*m*	100	*m*
China	97		98		100	*k*	100		100		100		100	
China, Hong Kong Special Administrative Region	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*
China, Macao Special Administrative Region	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*
Colombia	95	*d*	97	*d*	97	*h*	98	*h*	100		100		99	
Comoros	40		51		70		74		84		98		78	
Congo			34	*d*	40		44		48		66		13	
Cook Islands					99		100		100		100			
Costa Rica	97	*k*	99	*h*	99	*h*	99	*h*	100	*g*	100	*g*	99	
Côte d'Ivoire	49		59	*d*	58		63	*k*	69		94		42	
Croatia	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*
Cuba	97	*k*	97		98		99		100	*c*	100	*c*	99	
Curaçao	100		100		100	*m*	100	*m*	100	*m*	100	*m*	100	*m*
Cyprus	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*
Czechia	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*

Country/region	Total electricity access rate (%)										Urban electricity access rate (%)		Rural electricity access rate (%)	
	2000		2005		2010		2015		2019		2019		2019	
Democratic People's Republic of Korea					29		40		49		42		61	
Democratic Republic of the Congo	7	*c*	6	*g*	13		16		19	*k*	41		1	
Denmark	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*
Djibouti	56		56		56		58		61		72		25	
Dominica	81		88		94		100		100				100	
Dominican Republic	89	*h*	90	*h*	98	*h*	99	*h*	100		100		100	
Ecuador	94		96	*h*	97	*h*	99	*h*	100		100		100	
Egypt	98	*d*	99	*d*	99		99	*k*	100		100		100	
El Salvador	85	*h*	88	*h*	92	*h*	95	*h*	100		99		100	
Equatorial Guinea							66		67		91		2	
Eritrea	29		35		40		46		50		76		37	
Estonia	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*
Eswatini			34		46	*c*	64		77		91		73	
Ethiopia	13	*d*	14	*d*	33		29	*d*	48		93		36	
Faroe Islands	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*
Fiji	76		82		89		95		100		100		100	
Finland	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*
France	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*
French Polynesia	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*
Gabon	74	*d*	82	*g*	89		87		91		98		24	
Gambia	34	*c*	30	*c*	47		54		60		80		28	
Georgia			98	*c*	100	*k*	100	*k*	100		100		100	
Germany	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*
Ghana	44	*e*	41	*k*	64	*e*	74		84	*d*	94	*d*	70	
Gibraltar	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*
Greece	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*
Greenland	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*
Grenada	86		88		90		92		95					

Country/region	Total electricity access rate (%)										Urban electricity access rate (%)		Rural electricity access rate (%)	
	2000		2005		2010		2015		2019		2019		2019	
Guam	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*
Guatemala	73	*h*	78		84		90		96		97		94	
Guinea	15		20	*d*	28		34		42		88		16	
Guinea-Bissau					6	*g*	20		31		54		13	
Guyana	74		78	*d*	83		88		92		97		90	
Haiti	34	*d*	35		37		41		45		80		1	
Honduras	67		69	*h*	81	*h*	90	*h*	93		100		83	
Hungary	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*
Iceland	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*
India	59		67		76	*g*	88	*d*	98		100		97	
Indonesia	86	*g*	85		94	*g*	98	*g*	99	*g*	100	*g*	98	
Iran (Islamic Republic of)	98	*d*	99		100		100	*k*	100		100		100	
Iraq					98		99		100		100		100	
Ireland	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*
Isle of Man	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*
Israel	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*
Italy	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*
Jamaica	84		88		92	*g*	95	*g*	99		100		99	
Japan	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*
Jordan	99		99		100	*k*	100		100		100		100	
Kazakhstan	99		100	*k*	100	*k*	100	*c*	100		100		100	
Kenya	15		25		19	*d*	42	*d*	70	*e*	91	*e*	62	
Kiribati			70	*e*	63	*e*	91	*e*	100		89		100	
Kosovo	100	*m*	100	*m*	99		100	*k*	100	*c*	100	*c*	100	*m*
Kuwait	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*
Kyrgyzstan	100		99	*c*	99	*i*	99	*k*	100		100		100	
Lao People's Democratic Republic	42		57	*e*	70		90	*e*	100		100		100	
Latvia	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*

Country/region	Total electricity access rate (%)										Urban electricity access rate (%)		Rural electricity access rate (%)	
	2000		2005		2010		2015		2019		2019		2019	
Lebanon			100		100		100		100		100		100	
Lesotho	4	*c*	10		17	*g*	32		45		76		32	
Liberia					5		16		28		46		8	
Libya	100	*k*	90		82		73		69		100			
Liechtenstein	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*
Lithuania	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*
Luxembourg	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*
Madagascar	13		15		12	*g*	21		27		79			
Malawi	5	*d*	7		9	*d*	11	*d*	11	*f*	46	*f*	4	
Malaysia					99		100		100		100		100	
Maldives	84	*e*	91		99		100		100		100		100	
Mali	10		18		27		38	*d*	48		91		15	
Malta	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*
Marshall Islands	69		76		89		93		97		96		100	
Mauritania			18	*f*	34		40	*c*	46		86			
Mauritius	99	*e*	99		100		99		100	*m*	100	*m*	100	*m*
Mexico	98	*h*	99	*h*	99	*h*	99	*d*	100		100		100	
Micronesia (Federated States of)	46	*e*	55		65	*e*	74		82		96		78	
Monaco	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*
Mongolia	67	*e*	86	*g*	79	*c*	88		99		100		97	
Montenegro	100	*m*	100	*c*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*
Morocco	70		78		93		97	*g*	100	*g*	100		99	
Mozambique	6		12		19		24	*d*	30		73		5	
Myanmar			47		49	*g*	61	*g*	68		93		58	
Namibia	37	*d*	40		45		52	*g*	55		75		35	
Nauru	99		99		99		99	*g*	100	*m*	100	*m*	100	*m*
Nepal	29		47		69	*k*	84		90	*c*	94	*c*	89	
Netherlands	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*

Country/region	Total electricity access rate (%)										Urban electricity access rate (%)		Rural electricity access rate (%)	
	2000		2005		2010		2015		2019		2019		2019	
New Caledonia	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*
New Zealand	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*
Nicaragua	73		74	*h*	78		83		88		100		71	
Niger	6	*c*	7	*g*	13		17	*g*	19		50		13	
Nigeria	43		47		48	*d*	53	*d*	55	*f*	84	*f*	26	
Niue							100		100		100			
North Macedonia	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*
Northern Mariana Islands	100	*m*	100		100	*m*	100	*m*	100	*m*	100	*m*	100	*m*
Norway	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*
Oman	100		100		100	*m*	100	*m*	100	*m*	100	*m*	100	*m*
Pakistan	70		71		71		71		74		100		59	
Palau	98		99	*e*	99		99		100	*m*	100	*m*	100	*m*
Panama	81	*e*	84		87	*e*	92		96		100		88	
Papua New Guinea	9		19		20	*g*	44		63		83		60	
Paraguay	89		95	*h*	97	*h*	99	*h*	100		100		100	
Peru	72	*h*	77	*h*	88	*h*	94	*h*	98		100		92	
Philippines	75		80		85		89	*f*	96		98		94	
Poland	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*
Portugal	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*
Puerto Rico	100		100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*
Qatar	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*
Republic of Korea	100		100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*
Republic of Moldova	100	*m*	99	*d*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*
Romania	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*
Russian Federation	100	*m*	100	*m*	100	*m*	96	*k*	100	*m*	100	*m*	100	*m*
Rwanda	6	*d*	5	*d*	10	*d*	23	*d*	38		93		26	
Saint Kitts and Nevis	95		96		100		100	*m*	100	*m*	100	*m*	100	*m*
Saint Lucia			92		94	*e*	97		100		97		100	
Saint Martin (French Part)	100		100		100	*m*	100	*m*	100	*m*	100	*m*	100	*m*

Country/region	Total electricity access rate (%)										Urban electricity access rate (%)		Rural electricity access rate (%)	
	2000		2005		2010		2015		2019		2019		2019	
Saint Vincent and the Grenadines	80		86		93		100		100		99		100	
Samoa	88		92		96		99		99	c	100		99	
San Marino	100	m	100	m	100	m	100	m	100	m	100	m	100	m
Sao Tome and Principe	53	c	56		61		67		75		78		69	
Saudi Arabia	100		100	m	100	m	100	m	100	m	100	m	100	m
Senegal	38	c	47	d	57	g	61	d	70	d	95	d	48	
Serbia	100	m	100	c	100	c	100	k	100	c	100	c	100	m
Seychelles	94		96		97	e	100	m	100	m	100	m	100	m
Sierra Leone			11	c	11	c	20		23	d	51	d	2	
Singapore	100	m	100	m	100	m	100	m	100	m	100	m	100	m
Sint Maarten (Dutch part)	100		100		100	m	100	m	100	m	100	m	100	m
Slovakia	100	m	100	m	100	m	100	m	100	m	100	m	100	m
Slovenia	100	m	100	m	100	m	100	m	100	m	100	m	100	m
Solomon Islands	5		19		34		55	d	70		77		68	
Somalia			13		21		29		36		66		11	
South Africa	72		81	g	83	g	85	g	85	g	88		79	
South Sudan					2	e	5		7		13		5	
Spain	100	m	100	m	100	m	100	m	100	m	100	m	100	m
Sri Lanka			78		85	g	94		100		100		100	
State of Palestine	100	g	100	k	100	g	100	k	100	c	100	c	100	
Sudan	23	c	33		38		47		54		81		39	
Suriname	95		95		91	c	95		98		99		96	
Sweden	100	m	100	m	100	m	100	m	100	m	100	m	100	m
Switzerland	100	m	100	m	100	m	100	m	100	m	100	m	100	m
Syrian Arab Republic			92		93	g	90		89		100		76	
Tajikistan	98	c	99	c	99		98	k	100		99		100	
Thailand	82	d	93		100	f	100	c	100	c	100	c	100	
Timor-Leste			34		38	d	67	e	95		100		92	

Country/region	Total electricity access rate (%)										Urban electricity access rate (%)		Rural electricity access rate (%)	
	2000		2005		2010		2015		2019		2019		2019	
Togo	17	*c*	27		31	*c*	45		52		92		24	
Tonga	86		89		93		100	*k*	98	*c*	100		98	
Trinidad and Tobago	91	*e*	98		100	*m*	100	*m*	100	*m*	100	*m*	100	*m*
Tunisia	95	*g*	99	*g*	100	*j*	100	*k*	100		100		100	
Turkey					100	*i*	100	*e*	100		100		100	
Turkmenistan	100	*d*	100		100	*i*	100	*c*	100	*c*	100	*c*	100	
Turks and Caicos Islands	96	*e*	96		100	*m*	100	*m*	100	*m*	100	*m*	100	*m*
Tuvalu			96		97		99		100		100		100	
Uganda	7		9	*d*	12	*g*	19	*d*	41	*d*	71	*d*	32	
Ukraine	100	*m*	100	*c*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*
United Arab Emirates	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*
United Kingdom of Great Britain and Northern Ireland	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*
United Republic of Tanzania	9		14		15	*d*	26		38	*g*	73	*g*	19	
United States of America	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*
United States Virgin Islands	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*	100	*m*
Uruguay	98		98		99	*g*	100	*h*	100	*g*	100	*g*	100	*m*
Uzbekistan	100		100		100		100		100		100		100	
Vanuatu	22		31		44	*k*	52		65		95		54	
Venezuela (Bolivarian Republic of)	99	*h*	99		99		100	*g*	100		100		100	
Viet Nam	88		96	*d*	97	*k*	100		99	*e*	100		99	
Yemen	49		55		61		67		73		93		61	
Zambia	17	*e*	23		22	*e*	31	*g*	43		80		14	
Zimbabwe	34		36		40		34	*d*	41		85		20	
World	75		78		83		87		90		97		81	
Northern America and Europe	100		100		100		99		100		100		100	

Country/region	Total electricity access rate (%)					Urban electricity access rate (%)	Rural electricity access rate (%)
	2000	2005	2010	2015	2019	2019	2019
Latin America and the Caribbean	92	94	96	97	98	100	93
Central Asia and Southern Asia	59	67	75	86	95	100	92
Eastern Asia and South-eastern Asia	89	92	96	97	98	99	97
Western Asia and Northern Africa	48	57	91	93	94	99	86
Sub-Saharan Africa	24	29	33	38	46	78	25
Oceania	80	82	82	87	92	99	76

Note: Unless otherwise noted, data are World Bank estimates based on the statistical model described in chapter 1.

a. Most surveys report data on the percentage of households with access to electricity rather than on the percentage of the population with access.

b. Rural data are calculated based on the urban and total population with access and are not based on a statistical model.

c. Based on Multi-Indicator Cluster Survey (MICS)

d. Based on Demographic and Health Survey (DHS)

e. Based on Census

f. Based on Living Standards Measurement Survey (LSMS)

g. Based on other National Surveys conducted by national statistical agencies

h. Based on Socio-Economic Database for Latin America and the Caribbean (SEDLAC)

i. Based on Europe and Central Asia Poverty Database (ECAPOV)

j. Based on Middle East and North Africa Poverty Database (MNAPOV)

k. Based on other official sources

l. Based on Multi-Tier Framework (MTF)

m. Data from assumption: Countries considered "developed" by the UN are assumed to have an electrification rate of 100%. Countries that are classified as High Income Countries (HIC) are also assumed to have an electrification rate of 100% from the time the country first became a HIC, unless survey data was collected.

SDG 7.1.2 ACCESS TO CLEAN FUELS AND TECHNOLOGIES FOR COOKING

Source: World Health Organization

Country or region	Clean cooking access rate (%)											
	2000			2010			2015			2019		
	Overall	Urban	Rural	Overall	Urban	Rural	Overall	Urban	Rural	Overall	Urban	Rural
Afghanistan	6	31	1	20	70	6	29	80	12	36	85	20
Albania	38	66	18	66	86	46	76	90	57	81	92	63
Algeria	97	100	92	99	100	98	99	100	98	99	100	99
American Samoa												
Andorra	100	100	100	100	100	100	100	100	100	100	100	100
Angola	41	81	8	44	78	7	47	78	8	50	77	8
Anguilla												
Antigua and Barbuda	100	100	100	100	100	100	100	100	100	100	100	100
Argentina	95	98	70	99	100	91	100	100	95	100	100	97
Armenia	79	94	54	96	99	92	98	100	95	98	100	96
Aruba												
Australia	100	100	100	100	100	100	100	100	100	100	100	100
Austria	100	100	100	100	100	100	100	100	100	100	100	100
Azerbaijan	70	96	44	93	99	86	96	99	92	97	99	94
Bahamas	100	100	100	100	100	100	100	100	100	100	100	100
Bahrain	100	100	100	100	100	100	100	100	100	100	100	100
Bangladesh	8	35	1	13	42	2	18	51	5	23	57	8
Barbados	100	100	100	100	100	100	100	100	100	100	100	100
Belarus	95	99	88	98	100	96	99	100	97	99	99	98
Belgium	100	100	100	100	100	100	100	100	100	100	100	100
Belize	80	94	67	83	96	73	83	96	73	82	95	73
Benin	1	1	0	4	8	1	4	8	1	4	7	1
Bermuda												
Bhutan	28	87	10	64	96	48	74	97	60	79	97	66
Bolivia (Plurinational State of)	63	92	18	76	97	39	83	98	52	86	99	57
Bosnia and Herzegovina	52	80	32	45	69	22	44	67	19	46	67	18

Country or region	Clean cooking access rate (%)											
	2000			2010			2015			2019		
	Overall	Urban	Rural	Overall	Urban	Rural	Overall	Urban	Rural	Overall	Urban	Rural
Botswana	45	71	19	56	78	29	55	74	28	53	69	26
Brazil	89	97	55	94	99	70	96	99	76	96	99	79
British Virgin Islands												
Brunei Darussalam	100	100	100	100	100	100	100	100	100	100	100	100
Bulgaria												
Burkina Faso	3	12	1	6	21	1	8	28	1	10	34	1
Burundi	0	1	0	0	0	0	0	0	0	0	0	0
Cabo Verde	63	90	31	70	91	33	75	93	40	78	93	44
Cambodia	4	15	1	11	45	4	19	60	9	31	70	20
Cameroon	10	22	1	20	37	2	22	40	2	22	38	2
Canada	100	100	100	100	100	100	100	100	100	100	100	100
Cayman Islands												
Central African Republic	1	1	0	0	1	0	0	1	0	0	1	0
Chad	3	5	3	2	10	0	3	13	0	4	15	0
Channel Islands												
Chile	100	100	100	100	100	100	100	100	100	100	100	100
China	43	68	25	54	78	28	60	81	32	64	83	37
China, Hong Kong Special Administrative Region												
China, Macao Special Administrative Region												
Colombia	78	93	33	87	97	42	91	98	55	94	99	67
Comoros	0	1	0	3	7	1	6	13	2	8	16	2
Congo	9	15	1	17	26	2	26	37	3	34	47	3
Cook Islands	79	98	25	81	99	20	79	99	16	78	99	12
Costa Rica	89	97	78	92	98	80	94	98	84	96	98	87
Côte d'Ivoire	18	37	3	18	36	1	23	47	1	30	60	1
Croatia	100	100	100	100	100	100	100	100	100	100	100	100
Cuba												

Country or region	Clean cooking access rate (%)											
	2000			2010			2015			2019		
	Overall	Urban	Rural	Overall	Urban	Rural	Overall	Urban	Rural	Overall	Urban	Rural
Curaçao												
Cyprus	100	100	100	100	100	100	100	100	100	100	100	100
Czechia	100	100	100	100	100	100	100	100	100	100	100	100
Democratic People's Republic of Korea	2	3	1	6	9	1	8	13	1	11	17	1
Democratic Republic of the Congo	1	3	0	3	10	0	4	11	0	4	10	0
Denmark	100	100	100	100	100	100	100	100	100	100	100	100
Djibouti	4	4	1	7	8	1	8	11	0	10	12	0
Dominica	81	94	59	84	95	67	84	94	69	83	94	69
Dominican Republic	84	95	67	87	95	69	89	95	71	91	96	76
Ecuador	89	99	74	94	99	84	94	99	85	94	99	84
Egypt	84	96	74	99	100	99	100	100	100	100	100	100
El Salvador	58	82	25	77	94	48	85	96	63	89	96	74
Equatorial Guinea	19	32	4	23	34	5	24	33	5	24	32	5
Eritrea	4	11	0	8	20	1	9	21	1	9	19	1
Estonia	100	100	100	100	100	100	100	100	100	100	100	100
Eswatini	24	60	10	39	80	23	48	86	32	55	89	40
Ethiopia	1	3	0	2	10	0	4	18	0	7	27	0
Faroe Islands												
Fiji	28	49	8	32	49	13	40	58	18	50	68	26
Finland	100	100	100	100	100	100	100	100	100	100	100	100
France	100	100	100	100	100	100	100	100	100	100	100	100
French Polynesia												
Gabon	65	80	15	80	90	30	86	93	39	88	94	45
Gambia	4	7	1	3	4	1	2	2	0	1	2	0
Georgia	48	86	10	66	93	35	79	96	60	88	97	77
Germany	100	100	100	100	100	100	100	100	100	100	100	100
Ghana	6	13	1	16	30	4	21	36	6	23	36	8
Gibraltar												

Country or region	Clean cooking access rate (%)											
	2000			2010			2015			2019		
	Overall	Urban	Rural	Overall	Urban	Rural	Overall	Urban	Rural	Overall	Urban	Rural
Greece	100	100	100	100	100	100	100	100	100	100	100	100
Greenland												
Grenada	92	94	92	93	95	92	91	95	90	89	95	88
Guam												
Guatemala	41	68	17	38	62	11	43	68	12	49	74	14
Guinea	1	1	0	1	1	0	1	2	0	2	4	0
Guinea-Bissau	1	4	0	1	3	0	1	2	0	1	2	0
Guyana	36	56	28	61	75	56	71	81	68	77	84	75
Haiti	3	6	1	4	7	1	4	7	1	4	7	1
Honduras	31	56	8	43	71	15	45	71	17	45	69	18
Hungary	100	100	100	100	100	100	100	100	100	100	100	100
Iceland	100	100	100	100	100	100	100	100	100	100	100	100
India	22	50	6	35	70	14	48	82	27	64	90	48
Indonesia	6	13	2	42	62	24	68	85	51	82	92	72
Iran (Islamic Republic of)	93	98	86	96	99	92	97	99	92	96	99	92
Iraq	74	83	58	95	98	90	98	99	96	99	99	98
Ireland	100	100	100	100	100	100	100	100	100	100	100	100
Isle of Man												
Israel	100	100	100	100	100	100	100	100	100	100	100	100
Italy	100	100	100	100	100	100	100	100	100	100	100	100
Jamaica	76	98	54	86	96	75	85	93	78	83	90	78
Japan	100	100	100	100	100	100	100	100	100	100	100	100
Jordan	100	100	99	100	100	100	100	100	100	100	100	100
Kazakhstan	84	96	68	93	98	86	96	99	93	98	99	96
Kenya	2	5	1	7	20	2	11	28	3	17	38	5
Kiribati	1	2	0	3	6	1	6	11	1	10	17	1
Kosovo												
Kuwait	100	100	100	100	100	100	100	100	100	100	100	100
Kyrgyzstan	53	86	34	72	93	60	76	94	66	77	95	66

Country or region	Clean cooking access rate (%)											
	2000			2010			2015			2019		
	Overall	Urban	Rural	Overall	Urban	Rural	Overall	Urban	Rural	Overall	Urban	Rural
Lao People's Democratic Republic	1	3	1	4	10	1	6	15	1	8	18	2
Latvia	100	100	100	100	100	100	100	100	100	100	100	100
Lebanon												
Lesotho	16	46	8	31	73	16	36	78	18	39	79	19
Liberia	1	1	0	0	0	0	0	0	0	0	0	0
Libya												
Liechtenstein												
Lithuania	100	100	100	100	100	100	100	100	100	100	100	100
Luxembourg	100	100	100	100	100	100	100	100	100	100	100	100
Madagascar	1	3	1	1	2	1	1	2	0	1	2	0
Malawi	2	12	0	2	11	1	2	11	1	2	8	0
Malaysia	98	99	95	98	99	95	97	99	94	96	98	93
Maldives	53	96	39	93	99	90	98	100	97	99	100	99
Mali	1	2	0	1	2	0	1	2	0	1	2	0
Malta	100	100	100	100	100	100	100	100	100	100	100	100
Marshall Islands	13	18	2	53	71	2	63	83	1	65	86	1
Mauritania	30	53	13	42	68	18	44	68	19	43	65	18
Mauritius	100	100	100	100	100	100	100	100	100	100	100	100
Mexico	83	98	47	85	95	52	85	93	53	85	92	57
Micronesia (Federated States of)	11	25	4	12	30	4	12	33	4	12	33	3
Monaco	100	100	100	100	100	100	100	100	100	100	100	100
Mongolia	23	41	2	35	50	7	44	62	11	52	70	14
Montenegro	67	83	44	63	75	41	62	72	41	62	72	44
Morocco	90	100	80	96	100	92	98	100	95	98	100	96
Mozambique	2	5	1	3	9	0	4	11	0	5	13	0
Myanmar	3	6	1	10	26	3	20	53	6	30	73	9
Namibia	34	76	11	41	76	11	44	74	12	46	72	13
Nauru	100	100	100	100	100	100	100	100	100	100	100	100

Country or region	Clean cooking access rate (%)											
	2000			2010			2015			2019		
	Overall	Urban	Rural	Overall	Urban	Rural	Overall	Urban	Rural	Overall	Urban	Rural
Nepal	6	24	3	21	65	11	28	67	14	31	65	16
Netherlands	100	100	100	100	100	100	100	100	100	100	100	100
New Caledonia												
New Zealand	100	100	100	100	100	100	100	100	100	100	100	100
Nicaragua	34	55	7	45	70	8	50	78	8	55	83	9
Niger	1	4	0	1	6	0	2	9	0	2	12	0
Nigeria	1	2	0	2	4	1	5	11	2	13	26	4
Niue	75	90	68	93	97	91	97	98	95	98	99	97
North Macedonia	57	70	40	67	85	43	72	89	49	76	90	56
Northern Mariana Islands												
Norway	100	100	100	100	100	100	100	100	100	100	100	100
Oman	100	100	100	100	100	100	100	100	100	100	100	100
Pakistan	24	66	4	36	83	11	43	87	18	49	88	26
Palau	100	100	100	100	100	100	100	100	100	100	100	100
Panama	100	100	100	100	100	100	100	100	100	100	100	100
Papua New Guinea	5	39	0	8	40	3	9	39	4	9	38	4
Paraguay	49	72	17	58	78	28	65	84	36	68	86	40
Peru	43	61	5	66	84	14	76	91	26	83	95	40
Philippines	38	56	20	40	61	21	42	64	23	47	69	27
Poland	100	100	100	100	100	100	100	100	100	100	100	100
Portugal	100	100	100	100	100	100	100	100	100	100	100	100
Puerto Rico												
Qatar	100	100	100	100	100	100	100	100	100	100	100	100
Korea, Republic of	100	100	100	100	100	100	100	100	100	100	100	100
Moldova, Republic of	64	96	40	91	98	86	95	99	92	96	99	94
Romania	100	100	100	100	100	100	100	100	100	100	100	100
Russian Federation	100	100	100	97	98	97	94	96	93	90	93	90
Rwanda	0	1	0	0	1	0	1	2	0	2	6	0
Saint Kitts and Nevis	100	100	100	100	100	100	100	100	100	100	100	100

Country or region	Clean cooking access rate (%)											
	2000			2010			2015			2019		
	Overall	Urban	Rural	Overall	Urban	Rural	Overall	Urban	Rural	Overall	Urban	Rural
Saint Lucia	86	79	91	96	94	96	96	96	97	97	97	97
Saint Martin (French Part)												
Saint Vincent and the Grenadines	96	95	98	96	96	97	95	95	97	94	95	96
Samoa	19	49	9	27	56	18	32	61	23	36	65	28
San Marino	100	100	100	100	100	100	100	100	100	100	100	100
Sao Tome and Principe	0	1	0	1	2	0	2	3	1	3	4	1
Saudi Arabia	100	100	100	100	100	100	100	100	100	100	100	100
Senegal	35	69	7	34	64	7	27	52	5	24	46	4
Serbia	59	84	32	67	86	44	67	85	45	66	83	44
Seychelles	100	100	100	100	100	100	100	100	100	100	100	100
Sierra Leone	0	0	0	0	0	0	0	1	0	1	1	0
Singapore	100	100	100	100	100	100	100	100	100	100	100	100
Sint Maarten (Dutch part)												
Slovakia	100	100	100	100	100	100	100	100	100	100	100	100
Slovenia	100	100	100	100	100	100	100	100	100	100	100	100
Solomon Islands	8	38	3	8	37	2	8	37	2	9	37	1
Somalia	0	0	0	1	2	0	2	3	0	3	5	0
South Africa	56	77	29	77	89	56	84	93	63	86	95	65
South Sudan	0	0	0	0	0	0	0	0	0	0	0	0
Spain	100	100	100	100	100	100	100	100	100	100	100	100
Sri Lanka	17	53	10	22	57	14	26	64	18	31	69	22
State of Palestine												
Sudan	8	18	6	33	55	23	46	64	36	53	67	45
Suriname	78	89	60	88	94	76	92	96	84	94	97	89
Sweden	100	100	100	100	100	100	100	100	100	100	100	100
Switzerland	100	100	100	100	100	100	100	100	100	100	100	100
Syrian Arab Republic	99	100	98	99	100	98	98	100	97	97	100	96

Country or region	Clean cooking access rate (%)											
	2000			2010			2015			2019		
	Overall	Urban	Rural	Overall	Urban	Rural	Overall	Urban	Rural	Overall	Urban	Rural
Tajikistan	36	79	20	70	95	60	77	97	70	82	97	76
Thailand	58	86	45	74	88	64	78	87	70	80	86	73
Timor-Leste	2	5	0	5	12	1	8	21	3	13	29	4
Togo	0	1	0	3	8	0	7	15	1	9	20	1
Tonga	36	79	24	60	88	51	69	91	62	76	93	71
Trinidad and Tobago	100	100	100	100	100	100	100	100	100	100	100	100
Tunisia	94	96	91	99	100	99	100	100	99	100	100	100
Turkey	90	99	78	94	99	83	95	100	84	95	100	84
Turkmenistan	99	100	99	100	100	100	100	100	100	100	100	100
Turks and Caicos Islands												
Tuvalu	20	26	14	50	69	29	63	86	35	69	92	36
Uganda	1	4	0	1	3	0	1	2	0	0	1	0
Ukraine	92	95	86	94	98	87	95	98	88	95	99	88
United Arab Emirates	100	100	100	100	100	100	100	100	100	100	100	100
United Kingdom of Great Britain and Northern Ireland	100	100	100	100	100	100	100	100	100	100	100	100
Tanzania, United Republic of	1	2	0	1	4	0	3	8	1	4	11	1
United States of America	100	100	100	100	100	100	100	100	100	100	100	100
United States Virgin Islands												
Uruguay	100	100	100	100	100	100	100	100	100	100	100	100
Uzbekistan	83	98	71	86	99	74	86	99	75	85	98	74
Vanuatu	16	60	4	12	39	3	9	29	2	8	22	2
Venezuela (Bolivarian Republic of)	95	99	71	97	99	82	97	99	86	97	99	87
Viet Nam	14	41	5	49	78	36	60	82	48	65	82	55
Yemen	56	94	42	60	94	44	61	94	43	61	93	42
Zambia	14	38	1	16	37	2	16	34	2	16	32	2

Country or region	Clean cooking access rate (%)											
	2000			2010			2015			2019		
	Overall	Urban	Rural	Overall	Urban	Rural	Overall	Urban	Rural	Overall	Urban	Rural
Zimbabwe	34	87	6	30	81	5	30	80	5	30	79	6
Australia and New Zealand	100	100	100	100	100	100	100	100	100	100	100	100
Central Asia and Southern Asia	26	57	9	37	73	16	48	82	26	60	87	43
Eastern Asia and South-eastern Asia	42	65	24	55	77	29	62	82	37	68	84	43
Latin America and the Caribbean	80	93	44	85	95	52	87	95	56	88	95	60
Northern America and Europe	98	99	96	99	99	96	98	99	96	98	99	96
Oceania excluding Australia and New Zealand	10	43	2	12	44	4	13	46	6	15	47	6
Sub-Saharan Africa	9	24	3	12	26	4	14	29	4	16	33	4
Western Asia and Northern Africa	81	92	66	89	97	79	91	97	82	92	97	83
World	50	76	25	57	81	29	61	83	35	66	84	42

Note:
Data source: Household Energy Database, WHO, January 2021.

Source: World Health Organization

SDG 7.2 – RENEWABLE ENERGY

Data provided by the IEA and UNSD

Country / region	Share in total final energy consumption (%)													Final consumption of renewable energy (PJ)			Total final energy consumption (PJ)	Source
	Renewable energy				Solid biofuels	Liquid biofuels	Biogases	Hydro	Tide	Wind	Solar	Geothermal	Municipal waste (renew)	Electricity consumption (1)	Heat raising (2)	Transport (3)		
	2000	2010	2015	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	
Afghanistan	54.2	14.9	20.3	21.4	10.4	0	0	11	0	0	0	0	0	14.4	13.5	0	130.1	a
Albania	41.4	37.1	38.6	38.3	7.5	5.3	0	24.8	0	0	0.6	0	0	21.9	7.2	4.7	88.2	b
Algeria	0.4	0.3	0.1	0.2	0.1	0	0	0	0	0	0.1	0	0	2.1	0.9	0	1583	b
American Samoa	0.0	0.0	1.5	2.9	0	0	0	0	0	0	2.9	0	0	0	0	0	0.5	a
Andorra	14.5	18.7	19.3	18.5	0.4	0	0	16.7	0	0	0	0	1.4	1.6	0	0	9	a
Angola	73.4	50.8	47.8	56.8	50.1	0	0	6.7	0	0	0	0	0	27.1	202.3	0	403.9	b
Anguilla	0.2	0.1	0.2	0.2	0.1	0	0	0	0	0	0.1	0	0	0	0	0	1.5	a
Antigua and Barbuda	0.0	0.0	0.5	0.9	0	0	0	0	0	0	0.9	0	0	0	0	0	4.1	a
Argentina	9.8	8.8	9.4	10.5	2.9	2.8	0	4.6	0	0.2	0	0	0	110.8	60.5	64	2236.7	b
Armenia	7.2	9.4	10.7	11.1	4.4	0	0	6.4	0	0	0.3	0	0	5.7	4.2	0.1	90	b
Aruba	0.2	5.5	6.7	8.0	0.3	0	0	0	0	7.7	0	0	0	0.5	0	0	6.8	a
Australia	8.4	8.2	9.3	9.6	5.1	0.2	0.2	1.4	0	1.4	1.4	0	0	127.2	178.5	8.7	3259.6	b
Austria	26.4	31.1	34.9	33.8	15.9	1.9	0.4	12.2	0	1.9	1.2	0.1	0.3	165.7	171.6	28.8	1081.7	b
Azerbaijan	2.1	4.4	2.3	2.0	0.5	0	0	1.3	0	0.1	0	0	0.1	4.9	1.7	0.1	338.8	b
Bahamas	0.0	1.7	1.5	1.0	1	0	0	0	0	0	0	0	0	0	0.3	0	27.6	a
Bahrain	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	201.7	b
Bangladesh	59.0	41.1	34.2	30.7	30.4	0	0	0.3	0	0	0.1	0	0	4.5	395.8	0	1303.4	b
Barbados	14.3	9.1	3.2	5.8	4.7	0	0	0	0	0	1.2	0	0	0.2	0.5	0	12	a
Belarus	5.6	7.3	6.8	7.2	6.9	0.1	0	0.1	0	0	0.1	0	0	2.1	48.8	0.2	707.8	b
Belgium	1.4	5.8	9.4	10.7	4.8	1.5	0.6	0.1	0	2.1	1.2	0	0.3	67.6	60.5	21.4	1402.7	b
Belize	34.6	32.9	32.7	40.1	32.4	0	0	7.7	0	0	0	0	0	2.5	3.1	0	14	a
Benin	70.3	47.2	49.9	44.0	43.9	0	0	0	0	0	0.1	0	0	0.1	80.9	0	184.2	b
Bermuda	0.0	0.4	0.5	0.4	0	0	0	0	0	0	0	0	0.3	0	0	0	5.9	a
Bhutan	91.4	90.8	86.7	81.1	69.6	0	0	11.5	0	0	0	0	0	7.9	47.4	0	68.2	a

Country / region	Share in total final energy consumption (%)													Final consumption of renewable energy (PJ)			Total final energy consumption (PJ)	Source
	Renewable energy				Solid biofuels	Liquid biofuels	Biogases	Hydro	Tide	Wind	Solar	Geothermal	Municipal waste (renew)	Electricity consumption (1)	Heat raising (2)	Transport (3)		
	2000	2010	2015	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	
Bolivia (Plurinational State of)	29.7	15.6	8.2	7.6	4.4	0	0	3	0	0.1	0.1	0	0	9.2	11.2	0	269.7	b
Bonaire, Sint Eustatius and Saba	0.0	0.0	3.0	3.2	0.1	0	0	0	0	2.8	0.3	0	0	0.1	0	0	4	a
Bosnia and Herzegovina	19.4	19.6	25.3	35.4	27.4	0	0	7.9	0	0.1	0	0	0	14.1	48.1	0.1	176	b
Botswana	36.6	30.3	28.2	28.2	28.2	0	0	0	0	0	0	0	0	0	23.9	0	84.8	b
Brazil	42.8	46.9	43.7	47.1	22	9.4	0	13.4	0	1.7	0.5	0	0	1495.8	1851.1	811.9	8836.9	b
British Virgin Islands	1.0	0.7	1.0	1.4	1.1	0	0	0	0	0.1	0.1	0	0	0	0	0	1.2	a
Brunei Darussalam	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	39.1	b
Bulgaria	8.0	14.2	17.8	19.5	12.1	1.7	0.2	2.9	0	0.8	1	0.4	0.4	21.3	50.7	7.1	404.8	b
Burkina Faso	85.4	81.5	72.7	67.0	66.5	0	0	0.3	0	0	0.2	0	0	0.8	111.6	0	167.9	a
Burundi	93.2	92.6	91.2	85.5	84.6	0	0	0.9	0	0	0	0	0	0.6	48.5	0	57.3	a
Cabo Verde	38.5	21.2	26.3	23.0	19.3	0	0	0	0	3.3	0.4	0	0	0.3	1.4	0	7.2	a
Cambodia	81.1	68.5	64.9	61.8	56	0	0	5.8	0	0	0	0	0	17.4	165.4	0	295.7	b
Cameroon	84.5	78.6	78.0	80.6	76.2	0	0	4.4	0	0	0	0	0	14	236.6	0	310.8	b
Canada	22.0	21.9	22.6	22.2	5	1.2	0.1	14.5	0	1.2	0.2	0	0	1231.7	367	109.1	7698.9	b
Cayman Islands	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	5.3	a
Central African Republic	85.1	86.6	84.2	80.9	78	0	0	3	0	0	0	0	0	0.5	12.8	0	16.4	a
Chad	88.7	81.6	85.3	85.3	85.3	0	0	0	0	0	0	0	0	0	61.2	0	71.8	a
Chile	31.4	27.0	25.1	25.5	16.2	0	0.1	6.5	0	1	1.7	0.1	0	119.7	170.1	1.9	1145.7	b
China	29.6	12.3	12.2	13.1	4.1	0.1	0.4	4.6	0	1.4	1.9	0.6	0	5417.4	4680.8	227.1	78676.8	b
China, Hong Kong Special Administrative Region	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0	0	0	0	0	0	0.3	0.2	0.2	371.3	b
China, Macao Special Administrative Region	0.2	5.4	7.4	14.0	0.1	0	0	0	0	0	0	0	13.9	4.5	0	0	32.3	a
Colombia	28.0	29.7	31.6	30.7	13.8	2.7	0	14.2	0	0	0	0	0	170.8	158.6	32.3	1177.4	b
Comoros	49.0	46.6	64.2	55.0	55	0	0	0	0	0	0	0	0	0	3.8	0	6.9	a

Country / region	Share in total final energy consumption (%)													Final consumption of renewable energy (PJ)			Total final energy consumption (PJ)	Source
	Renewable energy				Solid biofuels	Liquid biofuels	Biogases	Hydro	Tide	Wind	Solar	Geothermal	Municipal waste (renew)	Electricity consumption (1)	Heat raising (2)	Transport (3)		
	2000	2010	2015	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	
Congo	64.9	54.8	64.2	69.9	67.4	0	0	2.5	0	0	0	0	0	2	55	0	81.6	b
Cook Islands	0.0	0.0	1.5	4.4	0	0	0	0	0	0	4.4	0	0	0	0	0	0.8	a
Costa Rica	32.9	40.4	38.3	35.7	14.2	0	0	16.1	0	3.5	0.1	1.9	0	35.5	22.5	0	162.2	b
Côte d'Ivoire	63.7	75.3	64.8	63.5	61.1	0	0	2.5	0	0	0	0	0	7.5	182.1	0	298.5	b
Croatia	26.8	29.8	33.1	32.8	17.4	0.4	0.7	11.9	0	2.1	0.3	0.1	0	41.3	48.4	1.9	278.7	b
Cuba	34.4	14.6	20.1	20.9	17.6	3	0	0.1	0	0	0.1	0	0	2	61.8	0	306	b
Curaçao	0.1	0.5	1.6	3.0	0	0	0	0	0	2.8	0.2	0	0	0.8	0	0	24.9	b
Cyprus	3.1	6.6	10.5	12.1	2.1	0.6	0.7	0	0	1.1	5.7	0.1	1.8	1.6	5.8	0.4	64	b
Czechia	5.9	11.0	14.8	14.7	10.7	1.3	1.3	0.4	0	0.1	0.7	0	0.2	21.9	112.2	13.6	1003.5	b
Democratic People's Republic of Korea	8.7	13.5	23.1	33.7	17.5	0	0	16.2	0	0	0	0	0	34.5	37.2	0	212.9	b
Democratic Republic of the Congo	97.9	96.8	95.8	96.4	93	0	0	3.4	0	0	0	0	0	27.4	754.7	0	811.4	b
Denmark	10.7	21.2	33.0	35.3	20.2	1.6	0.8	0	0	8.8	1	0	2.9	75.5	119	9.9	578.9	b
Djibouti	31.4	32.5	28.2	27.8	27.8	0	0	0	0	0	0	0	0	0	2.1	0	7.7	a
Dominica	11.0	10.1	8.6	8.2	3.5	0	0	4.6	0	0	0	0	0	0.1	0.1	0	1.7	a
Dominican Republic	19.1	17.0	15.0	16.1	13	0	0	2.1	0	0.6	0.4	0	0	8.1	33.3	0	257.8	b
Ecuador	19.4	11.8	13.1	16.3	3.8	0.1	0	12.3	0	0	0	0	0	65.1	18.5	0.7	516	b
Egypt	7.8	5.3	5.1	4.7	2.7	0	0	1.7	0	0.3	0.1	0	0	47.4	60.7	0.1	2282.3	b
El Salvador	33.5	32.6	21.0	23.2	9.8	0	0.1	6.3	0	0	1.1	5.9	0	17.4	7.6	0	108	b
Equatorial Guinea	45.8	5.7	4.5	4.9	4.2	0	0	0.7	0	0	0	0	0	0.6	3.8	0	90.1	a
Eritrea	76.6	81.1	77.1	73.2	72.6	0	0	0	0	0	0.6	0	0	0.1	15.6	0	21.6	b
Estonia	19.8	25.4	27.6	28.8	25.8	0.6	0.4	0	0	1.1	0.1	0	0.8	4.3	29.9	0.7	121.2	b
Eswatini	62.2	63.7	66.6	66.1	61.3	0	0	4.8	0	0	0	0	0	4.7	21.8	0	40.1	a
Ethiopia	95.6	94.1	91.6	89.9	88	0	0	1.8	0	0.1	0	0	0	32.7	1496.5	0.2	1700.8	b
Falkland Islands (Malvinas)	1.5	4.6	4.7	5.0	1.2	0	0	0	0	3.7	0	0	0	0	0	0	0.5	a
Faroe Islands	2.8	3.4	7.5	5.9	0	0	0	3.7	0	2.2	0	0	0	0.6	0	0	9.6	a

Country / region	Share in total final energy consumption (%)													Final consumption of renewable energy (PJ)			Total final energy consumption (PJ)	Source
	Renewable energy				Solid biofuels	Liquid biofuels	Biogases	Hydro	Tide	Wind	Solar	Geothermal	Municipal waste (renew)	Electricity consumption (1)	Heat raising (2)	Transport (3)		
	2000	2010	2015	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	
Fiji	52.2	28.0	32.7	27.9	19.6	0	0	8.1	0	0	0.1	0	0	1.8	4.3	0	22	a
Finland	31.7	33.6	43.2	44.2	33.1	1.5	0.6	5.5	0	2.4	0	0	1.1	134.9	303.3	16.7	1028.9	b
France	9.3	12.0	13.5	15.3	6.8	2.5	0.3	3.1	0	1.4	0.6	0.1	0.4	304.4	427.4	149.4	5777.2	b
French Guiana	23.8	29.4	0.0	0.0	..	..	..	..	..	..	..	..	..	..	..	..	..	a
French Polynesia	9.9	8.3	8.0	7.6	0.4	0	0	5.8	0	0	1.3	0	0	0.6	0	0	8.9	a
Gabon	72.8	85.8	81.9	89.9	88.1	0	0	1.8	0	0	0	0	0	3.2	154.9	0	175.8	b
Gambia	62.9	56.0	52.9	52.4	52.3	0	0	0	0	0	0.1	0	0	0	5.2	0	10	a
Georgia	47.3	39.1	28.1	27.9	6.6	0	0	20.7	0	0.2	0.1	0.4	0	34.4	12.1	1.1	170.4	b
Germany	3.7	11.6	14.6	15.8	5.1	1.4	2	0.6	0	3.8	2	0.1	0.8	636.2	564.1	128.4	8412.5	b
Ghana	71.6	51.9	44.0	42.0	34.8	0	0	7.1	0	0	0	0	0	23.4	114	0	327.4	b
Gibraltar	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	8.1	b
Greece	7.8	11.4	17.5	17.9	6	1.1	0.3	3.1	0	3.4	3.9	0.1	0	53.8	50.2	6.9	620.9	b
Greenland	9.2	10.1	13.1	11.5	0	0	0	11.2	0	0	0	0	0.3	0.9	0	0	8.1	a
Grenada	10.5	10.5	12.3	10.4	10.4	0	0	0	0	0	0	0	0	0	0.3	0	3.3	a
Guadeloupe	2.6	3.0	0.0	0.0	..	..	..	..	..	..	..	..	..	..	..	..	..	a
Guam	0.0	0.0	1.3	3.0	0	0	0	0	0	0	3	0	0	0.2	0	0	5.6	a
Guatemala	62.7	67.2	63.4	64.1	60.8	0	0	2.9	0	0.2	0.1	0.2	0	22.8	286.8	0	483.1	b
Guernsey	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	1.3	a
Guinea	85.5	75.7	76.2	69.9	67.6	0	0	2.3	0	0	0	0	0	3.5	103	0	152.4	a
Guinea-Bissau	91.2	87.8	87.2	86.8	86.7	0	0	0	0	0	0.1	0	0	0	24.5	0	28.2	a
Guyana	29.8	30.3	24.9	16.8	16.7	0	0	0	0	0	0.1	0	0	0.1	4.7	0	28.4	a
Haiti	80.8	79.0	76.1	76.2	75.9	0.2	0	0.2	0	0	0	0	0	0.3	108.4	0	142.6	b
Honduras	55.2	52.1	52.7	50.1	42.3	0	0	4.6	0	1.3	1.4	0.4	0	16.6	75.8	0	184.7	b
Hungary	5.2	13.5	15.6	13.5	10.4	1.1	0.3	0.1	0	0.4	0.4	0.6	0.2	16.1	76.3	8.6	746.6	b
Iceland	60.7	75.4	77.1	78.2	0.7	0.6	0.1	34.7	0	0	0	42.2	0	66.2	37.1	1.2	133.7	b
India	51.6	41.1	34.4	31.7	28.3	0.2	0	1.8	0	0.8	0.6	0	0	806.5	6518.1	49.2	23269.1	b

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	Renewable energy				Solid biofuels	Liquid biofuels	Biogases	Hydro	Tide	Wind	Solar	Geothermal	Municipal waste (renew)	Electricity consumption (1)	Heat raising (2)	Transport (3)		
	2000	2010	2015	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	
Indonesia	45.6	34.8	27.0	20.9	16.9	2	0	1.1	0	0	0	0.7	0	159.5	1010.8	118.7	6178.2	b
Iran (Islamic Republic of)	0.4	0.9	0.9	1.0	0.3	0	0	0.7	0	0	0	0	0	49.2	21.1	0.1	7073.7	b
Iraq	0.3	1.7	0.8	0.5	0.1	0	0	0.4	0	0	0	0	0	3.5	0.9	0	922.5	b
Ireland	2.0	5.2	9.1	10.7	2	1.4	0.2	0.5	0	5.9	0.1	0	0.6	32.2	11.1	6.5	463.6	b
Isle of Man	0.0	1.9	2.2	2.1	0	0	0	0.4	0	0	0	0	1.8	0	0	0	2.3	a
Israel	6.0	8.6	3.7	3.7	0.2	0	..	..	0	0.1	3.5	0	0	5.3	16	0	571.7	b
Italy	5.1	12.8	16.6	17.1	6.7	1.5	0.8	3.8	0	1.4	2	0.6	0.3	402.7	328.5	68.8	4685.5	b
Jamaica	9.4	9.0	11.8	8.7	5.6	1.6	0	0.5	0	0.8	0.1	0	0	1.4	5.3	1.5	94.7	b
Japan	3.8	4.8	6.3	7.4	2.2	0.2	0	2.5	0	0.2	2	0.1	0.1	562.7	178.5	28.5	10420.2	b
Jersey	0.0	7.4	15.9	17.4	0	0	0	0	0	0	0	0	17.4	1.1	0	0	6.3	a
Jordan	2.1	3.0	3.2	7.2	1.2	0	0	0	0	0.9	5.2	0	0	6.7	12	0	259.6	b
Kazakhstan	2.5	1.4	1.7	1.9	0.1	0	0	1.6	0	0.1	0.1	0	0	29	2.1	1.2	1741.5	b
Kenya	78.9	76.5	72.0	72.3	68.7	0	0	1.5	0	0.1	0	2	0	26.1	489.2	0	713	b
Kiribati	56.5	48.5	45.8	41.1	40.1	0	0	0	0	0	1	0	0	0	0.5	0	1.3	a
Kuwait	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0.2	0	0	594.1	b
Kyrgyzstan	35.2	25.6	23.3	23.2	0.1	0	0	23.2	0	0	0	0	0	39.2	0.1	0.1	170.1	b
Lao People's Democratic Republic	81.5	64.9	53.9	41.9	34	0	0	7.8	0	0	0	0	0	11.8	51.1	0	150	a
Latvia	35.8	33.1	38.1	41.3	32.5	1	1.4	5.1	0	0.3	0	0	0.9	12.3	55.5	1.8	168.6	b
Lebanon	4.9	5.7	4.2	4.7	2.9	0	0	0.5	0	0	1.3	0	0	1.4	8.9	0	217.4	b
Lesotho	56.7	53.0	44.9	38.4	32.1	0	0	6.3	0	0	0	0	0	2.9	14.8	0	46.1	a
Liberia	90.8	88.6	84.0	87.2	86.9	0	0	0.3	0	0	0	0	0	0.3	75.8	0	87.3	a
Libya	2.0	2.4	2.9	2.6	2.6	0	0	0	0	0	0	0	0	0	10.8	0	412	b
Liechtenstein	53.9	52.3	55.5	56.8	7.4	0	0.8	33.7	0	0	14.9	0	0	1.4	0.3	0	3	a
Lithuania	17.2	21.5	29.0	33.5	21.5	1.4	1	2.4	0	6.3	0.5	0	0.4	27.5	45	3.5	226.6	b
Luxembourg	6.8	3.7	9.1	16.0	3.4	3.3	1.4	1.4	0	3.9	1.9	0	0.7	16.2	3.4	5.5	156.8	b
Madagascar	83.4	86.7	80.0	81.6	80.2	0	0	1.3	0	0	0	0	0	3.3	193.3	0	241	a

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	Renewable energy				Solid biofuels	Liquid biofuels	Biogases	Hydro	Tide	Wind	Solar	Geothermal	Municipal waste (renew)	Electricity consumption (1)	Heat raising (2)	Transport (3)		
	2000	2010	2015	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	
Malawi	82.6	81.2	80.8	73.2	65.9	0	0	7.3	0	0	0	0	0	5.1	44.9	0	68.3	a
Malaysia	4.4	2.0	3.4	5.3	0.1	0.9	0.1	4.1	0	0	0.1	0	0	91	0	18.5	2062.7	b
Maldives	2.3	1.4	1.4	1.1	0.8	0	0	0	0	0	0.3	0	0	0.1	0.2	0	18.5	a
Mali	83.5	79.2	79.9	76.6	74.4	0	0	2.2	0	0	0	0	0	3.3	107.9	0	145.3	a
Malta	0.0	1.2	6.0	7.5	0.3	1.9	0.3	0	0	0	4.9	0	0	0.9	0.3	0.4	21.1	b
Marshall Islands	19.6	13.3	11.3	11.7	11.4	0	0	0	0	0	0.4	0	0	0	0.2	0	1.7	a
Martinique	1.7	2.5	0.0	0.0	..	..	..	..	..	..	..	..	..	..	..	..	..	a
Mauritania	44.4	34.0	28.6	25.1	23.8	0	0	0	0	0.6	0.8	0	0	0.8	14.1	0	59.3	a
Mauritius	20.4	13.6	11.5	9.2	7.2	0	0.2	1.2	0	0.1	0.5	0	0	2.2	1	0	34.7	b
Mayotte	16.2	10.0	0.0	0.0	..	..	..	..	..	..	..	..	..	..	..	..	..	a
Mexico	12.2	9.4	9.2	9.6	6.2	0	0	2	0	0.8	0.4	0.3	0	165.7	316.8	0.6	5018.8	b
Micronesia (Federated States of)	2.0	1.8	1.4	1.8	1.1	0	0	0	0	0.2	0.5	0	0	0	0	0	1.4	a
Mongolia	5.7	4.5	3.6	3.4	2.4	0	0	0.2	0	0.7	0.1	0	0	1.6	3.8	0	162.8	b
Montenegro	0.0	49.1	43.0	40.6	20.7	0	0	18.6	0	1.3	0	0	0	6	6.3	0	30.5	b
Montserrat	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	a
Morocco	15.3	13.9	11.2	10.8	7.6	0	0	0.8	0	1.9	0.5	0	0	21.2	50.5	0.2	663.5	b
Mozambique	93.6	84.3	80.7	65.9	48	0	0	18	0	0	0	0	0	38.3	102.1	0	212.9	b
Myanmar	80.2	84.9	70.7	60.1	55.4	0	0	4.7	0	0	0	0	0	38.4	457	0	824.2	b
Namibia	34.7	31.0	28.8	30.3	10.9	0	0	18.7	0	0.1	0.6	0	0	14.8	8.5	0	76.7	b
Nauru	0.0	0.1	0.1	0.7	0	0	0	0	0	0	0.7	0	0	0	0	0	0.5	a
Nepal	88.3	87.3	85.0	75.0	69	0	2.1	4	0	0	0	0	0	23.4	415.6	0	585	b
Netherlands	1.7	3.9	5.7	7.4	2	1.3	0.4	0	0	1.9	0.7	0.2	0.8	62.9	54.7	22.6	1897.9	b
New Caledonia	7.5	4.8	5.1	4.4	0.3	0	0	2.9	0	0.4	0.8	0	0	1.4	0.2	0	38.1	a
New Zealand	29.0	31.7	31.2	31.0	8.3	0	0.2	15.1	0	1.2	0.1	6.1	0	116.4	53.1	0.3	547	b
Nicaragua	58.4	54.4	50.0	50.2	44.8	0	0	1.1	0	2.1	0.1	2.1	0	7.9	46.4	0	108.2	b
Niger	87.6	80.7	78.9	78.0	77.8	0	0	0	0	0	0.2	0	0	0.2	100.2	0	128.8	b

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	Renewable energy				Solid biofuels	Liquid biofuels	Biogases	Hydro	Tide	Wind	Solar	Geothermal	Municipal waste (renew)	Electricity consumption (1)	Heat raising (2)	Transport (3)		
	2000	2010	2015	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	
Nigeria	86.2	86.5	82.3	79.7	79.4	0	0	0.3	0	0	0	0	0	16.9	4631.2	0	5835.4	b
Niue	0.6	26.7	22.4	23.3	0.4	0	0	0	0	0	22.9	0	0	0	0	0	0.1	a
North Macedonia	19.4	22.4	24.0	20.9	10.5	0	0.3	9.2	0	0.5	0.1	0.2	0	7.7	8.2	0	76.3	b
Northern Mariana Islands	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	1.1	a
Norway	60.2	56.4	58.1	60.8	4.6	2.1	0.2	51.8	0	1.4	0	0	0.8	404.1	41.6	19.8	765.5	b
Oman	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	829.9	b
Pakistan	51.1	47.4	45.9	41.7	38.6	0	0	2.9	0	0.2	0.1	0	0	124.5	1474	0	3829.5	b
Palau	0.0	0.0	0.0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	2.1	a
Panama	27.7	20.6	21.9	24.4	6.7	0	0	16	0	1.2	0.5	0	0	25.9	9.8	0	146.3	b
Papua New Guinea	66.4	55.3	50.7	49.6	46.2	0	0	2.3	0	0	0	1.1	0	4.1	56.2	0	121.8	a
Paraguay	70.4	63.6	60.5	59.2	40.2	2.5	0	16.5	0	0	0	0	0	45	109.3	6.9	272.2	b
Peru	38.6	32.2	27.4	27.9	13.2	2	0	11.7	0	0.6	0.5	0	0	105.5	111	14.8	829	b
Philippines	34.8	28.8	25.9	23.2	16.7	1.6	0	2.1	0	0.3	0.3	2.3	0	68.1	228.4	20	1363.4	b
Poland	6.9	9.5	11.9	11.3	8	1.3	0.3	0.2	0	1.3	0.1	0	0.1	62.9	228.4	39.8	2939.3	b
Portugal	20.1	27.8	27.2	27.6	12.9	1.8	0.2	5.7	0	5.8	1.1	0.1	0.1	86	81.1	11.9	648.3	b
Puerto Rico	0.7	0.6	1.8	1.4	0	0	0	0.2	0	0.6	0.5	0	0	0.7	0	0	49.2	a
Qatar	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	680.7	b
Republic of Korea	0.7	1.3	2.7	3.2	1.2	0.6	0.1	0.2	0	0.1	0.6	0.2	0.3	74.7	73.2	27.3	5500.8	b
Republic of Moldova	5.7	19.8	24.7	25.7	24.9	0	0.1	0.7	0	0.1	0	0	0	1.1	32.3	0	130.1	b
Réunion	11.7	16.4	0.0	0.0	..	..	..	..	..	..	..	..	..	..	..	..	..	a
Romania	16.4	24.1	23.7	23.0	14.8	1.3	0.1	4.6	0	1.7	0.5	0.1	0	65.1	144.5	14	970.2	b
Russian Federation	3.5	3.3	3.2	3.2	0.6	0	0	2.6	0	0	0	0	0	422	106	51.1	18206.4	b
Rwanda	86.8	90.7	86.7	85.7	84.2	0	0	1.4	0	0	0.1	0	0	1.2	68.8	0	81.7	a
Saint Helena	7.1	9.2	13.2	13.1	3.7	0	0	0	0	5.7	3.7	0	0	0	0	0	0.1	a
Saint Kitts and Nevis	26.6	1.0	1.7	1.7	0	0	0	0	0	1.2	0.4	0	0	0	0	0	1.9	a
Saint Lucia	24.1	13.2	11.5	10.2	9.9	0	0	0	0	0	0.3	0	0	0	0.5	0	5.5	a

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	Renewable energy				Solid biofuels	Liquid biofuels	Biogases	Hydro	Tide	Wind	Solar	Geothermal	Municipal waste (renew)	Electricity consumption (1)	Heat raising (2)	Transport (3)		
	2000	2010	2015	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	
Saint Pierre and Miquelon	0.6	1.6	1.0	1.1	1.1	0	0	0	0	0	0	0	0	0	0	0	0.5	a
Saint Vincent and the Grenadines	8.5	5.1	4.3	4.9	2	0	0	2.7	0	0	0.2	0	0	0.1	0.1	0	2.8	a
Samoa	59.7	41.3	37.5	36.6	32.1	0	0	3	0	0	1.5	0	0	0.2	1.5	0	4.5	a
Sao Tome and Principe	54.7	43.8	40.2	37.8	37	0	0	0.8	0	0	0.1	0	0	0	0.8	0	2.1	a
Saudi Arabia	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0.5	0.3	0	4947.2	b
Senegal	47.5	50.3	39.9	36.6	35.4	0	0	1	0	0	0.2	0	0	1.6	37.5	0	106.6	b
Serbia	22.1	20.6	21.3	21.1	12.4	0	0.2	8.3	0	0.1	0	0.1	0	29.6	44.3	0.4	351.3	b
Seychelles	1.5	0.7	1.3	1.2	0.5	0	0	0	0	0.5	0.2	0	0	0	0	0	5.3	a
Sierra Leone	91.3	84.9	78.5	79.6	79.3	0	0	0.3	0	0	0	0	0	0.2	42.7	0	53.8	a
Singapore	0.3	0.5	0.6	0.7	0.2	0	0	0	0	0	0.2	0	0.4	3.5	0	0.2	510.5	b
Sint Maarten (Dutch part)	0.0	0.0	0.0	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	7.6	a
Slovakia	3.7	10.3	13.4	12.4	6.4	1.5	0.9	3	0	0	0.6	0	0	19.9	25.4	6.7	418.8	b
Slovenia	15.9	19.5	20.8	21.0	10.6	1.5	0.3	7	0	0	0.6	1	0	15.7	24.3	3.4	206.9	b
Solomon Islands	55.3	45.1	48.6	48.5	48.3	0	0	0	0	0	0.1	0	0	0	3.2	0	6.7	a
Somalia	93.3	93.6	94.5	94.9	94.9	0	0	0	0	0	0	0	0	0	109.8	0	115.7	a
South Africa	16.3	11.8	10.3	10.3	8.9	0	0	0.1	0	0.7	0.6	0	0	35.5	252.2	0.5	2786.5	b
South Sudan	0.0	0.0	26.7	33.2	33.1	0	0	0	0	0	0.1	0	0	0	5.5	0	16.7	b
Spain	7.9	14.4	16.3	17.4	5.5	2.1	0.2	3.2	0	4.7	1.6	0	0.1	322.3	191.3	76	3390.4	b
Sri Lanka	64.2	61.8	52.9	51.4	46	0	0	5.1	0	0.3	0.1	0	0	22.8	191.4	0	416.8	b
State of Palestine	17.5	14.1	11.0	12.7	3.8	0	0	0	0	0	8.9	0	0	2.9	5.3	0	64.4	a
Sudan	80.4	61.3	63.0	61.4	55.9	0	0	5.6	0	0	0	0	0	29.3	294.1	0	526.6	b
Suriname	23.6	22.1	11.6	19.2	5.1	0	0	14	0	0	0.1	0	0	3.1	1.1	0	22.2	b
Sweden	40.0	45.8	52.9	52.5	26.8	5.6	0.5	13.7	0	3.7	0.1	0	2.1	251.1	352.7	67.2	1278.6	b
Switzerland	18.2	20.6	24.0	24.2	5.3	0.9	0.4	14.8	0	0.1	1.2	0	1.5	115.2	50.4	13.5	740.1	b
Syrian Arab Republic	2.0	1.4	0.6	0.9	0.1	0	0	0.8	0	0	0	0	0	2	0.2	0	231.8	b
Tajikistan	62.4	61.8	48.1	39.5	0	0	0	39.5	0	0	0	0	0	47.7	0	0	121	b

Country / region	Share in total final energy consumption (%)													Final consumption of renewable energy (PJ)			Total final energy consumption (PJ)	Source
	Renewable energy				Solid biofuels	Liquid biofuels	Biogases	Hydro	Tide	Wind	Solar	Geothermal	Municipal waste (renew)	Electricity consumption (1)	Heat raising (2)	Transport (3)		
	2000	2010	2015	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	
Thailand	22.0	22.7	22.7	23.7	18.3	2.6	1.1	0.9	0	0.2	0.5	0	0.2	111.5	557.8	81.5	3165	b
Timor-Leste	0.0	34.8	18.4	18.4	18.2	0	0	0.1	0	0	0.1	0	0	0	0.8	0	4.3	a
Togo	77.1	65.8	81.0	75.1	75	0	0	0.1	0	0	0	0	0	0.1	64.7	0	86.3	b
Tonga	2.5	1.0	1.9	1.7	0.9	0	0	0	0	0	0.8	0	0	0	0	0	1.5	a
Trinidad and Tobago	0.8	0.4	0.4	0.5	0.4	0	0	0	0	0	0	0	0	0	0.5	0	105.4	b
Tunisia	14.2	12.6	12.5	11.9	10.6	0	0	0	0	0.4	0.9	0	0	1.8	38.5	0	339.5	b
Turkey	17.3	14.2	13.3	11.9	1.7	0.2	0.2	4.4	0	1.5	1.5	2.5	0	292.9	188.1	7.8	4116.4	b
Turkmenistan	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0	0.4	0	756	b
Turks and Caicos Islands	0.7	0.5	0.6	0.5	0.5	0	0	0	0	0	0	0	0	0	0	0	1.4	a
Tuvalu	0.0	0.0	5.3	9.9	0	0	0	0	0	0	9.9	0	0	0	0	0	0.1	a
Uganda	95.0	93.2	91.1	90.3	89	0	0	1.3	0	0	0	0	0	10.5	656	0	737.8	a
Ukraine	1.3	2.9	4.1	6.9	5.1	0.1	0.1	1.4	0	0.2	0.1	0	0	33.1	104.5	3.6	2043.7	b
United Arab Emirates	0.1	0.1	0.1	0.3	0.1	0	0	0	0	0	0.2	0	0	4.2	1.9	0	2353.1	b
United Kingdom of Great Britain and Northern Ireland	1.0	3.7	8.6	11.0	4.1	1.1	0.7	0.4	0	3.7	0.9	0	0.3	355.3	143.5	59.9	5058.3	b
United Republic of Tanzania	93.7	88.6	83.5	83.7	82.7	0	0	0.9	0	0	0	0	0	7.6	626.6	0	758.1	b
United States of America	5.4	7.4	9.0	10.1	3.5	2.7	0.1	1.5	0	1.4	0.6	0.2	0.1	2346.4	2192.5	1574.6	60487.2	b
United States Virgin Islands	0.0	0.0	4.1	3.4	0	0	0	0	0	0	3.4	0	0	0.1	0	0	1.9	a
Uruguay	38.7	53.2	59.4	60.7	42.2	1.6	0	9.5	0	6.9	0.6	0	0	40.3	75.3	2.7	195	b
Uzbekistan	0.7	1.3	1.7	1.5	0	0	0	1.5	0	0	0	0	0	17.6	0.2	0.5	1224.9	b
Vanuatu	48.7	38.4	35.5	30.8	28.6	0.3	0	0.8	0	0.5	0.6	0	0	0.1	0.8	0	2.9	a
Venezuela (Bolivarian Republic of)	15.3	13.8	15.3	14.6	1.9	0	0	12.6	0	0	0	0	0	137.8	21.1	0	1091.1	b
Viet Nam	58.0	34.8	30.7	23.5	13.8	0	0	9.7	0	0.1	0	0	0	239.9	338.4	0	2461.6	b
Wallis and Futuna Islands	0.0	0.4	0.6	0.7	0	0	0	0.5	0	0	0.2	0	0	0	0	0	0.2	a
Yemen	1.2	1.0	2.4	4.3	3.1	0	0	0	0	0	1.2	0	0	1	2.6	0	85.5	b
Zambia	89.9	89.9	85.5	85.1	75.4	0	0	9.7	0	0	0	0	0	39.3	305.4	0.1	405.2	b

Country / region	Share in total final energy consumption (%)													Final consumption of renewable energy (PJ)			Total final energy consumption (PJ)	Source
	Renewable energy				Solid biofuels	Liquid biofuels	Biogases	Hydro	Tide	Wind	Solar	Geothermal	Municipal waste (renew)	Electricity consumption (1)	Heat raising (2)	Transport (3)		
	2000	2010	2015	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	
Zimbabwe	69.3	82.1	81.4	81.4	77.2	0.4	0	3.8	0	0	0	0	0	17	334.2	1.7	433.7	b
World	17.2	16.4	16.9	17.1	10.3	1	0.2	3.4	0	1	0.8	0.3	0.1	19820.7	40247.7	4108	375053.4	c
Northern America (M49) and Europe (M49)	7.4	10.1	12.0	12.7	4.8	1.8	0.3	3.2	0	1.5	0.6	0.2	0.2	7928.2	6765.7	2564	135678.3	c
Northern America (M49)	7.3	9.1	10.8	11.6	3.6	2.5	0.1	3.1	0	1.4	0.6	0.2	0.1	3668.4	2557.6	1674.2	68200.6	c
Europe (M49)	7.4	11.0	13.2	13.8	5.9	1.1	0.5	3.3	0	1.7	0.7	0.2	0.3	4204	4207.7	909.1	67477.7	c
Latin America and the Caribbean (MDG=M49)	28.5	29.2	28.5	30.1	15.4	4	0	9.1	..	1	0.4	0.1	..	2680.3	3572.4	937.8	23915.6	c
Central Asia (M49) and Southern Asia (MDG=M49)	37.5	30.6	27.2	25.4	22.5	0.1	0	1.9	0	0.5	0.4	0	0	1190.1	9079.7	52.2	40707.5	c
Central Asia (M49)	3.6	2.8	3.2	3.4	0.1	0	0	3.3	0	0	0	0	0	131.5	2.8	4	4013.4	c
Southern Asia (MDG=M49)	42.9	34.4	29.9	27.8	24.9	0.1	0	1.7	0	0.5	0.4	0	0	1057.4	9077	48.6	36694.1	c
Eastern Asia (M49) and South-eastern Asia (MDG=M49)	23.2	13.4	13.2	13.6	5.7	0.3	0.3	4.1	0	1	1.6	0.5	0	6956.4	7783.4	518	112431.7	c
Eastern Asia (M49)	19.8	10.5	11.0	12.0	3.7	0.2	0.3	4.2	0	1.2	1.8	0.5	0	6158.2	4973.7	276.4	95377	c
South-eastern Asia (MDG=M49)	38.4	29.9	25.8	22.6	16.8	1.4	0.2	3.5	0	0.1	0.1	0.4	0	798.4	2809.7	241.5	17054.7	c
Western Asia (M49) and Northern Africa (M49)	8.3	6.2	5.4	5.2	2.5	0	0	1.3	0	0.4	0.5	0.5	0	451.7	716.5	8.2	22546.3	c
Western Asia (M49)	6.1	4.5	3.9	3.7	0.6	0	0.1	1.4	0	0.4	0.7	0.6	0	356.9	261.4	7.4	16739.3	c
Northern Africa (M49)	14.8	11.1	9.9	9.5	7.8	0	0	1.2	0	0.3	0.2	0	0	95	455.6	0.7	5807	c
Sub-Saharan Africa (M49)	72.5	70.9	68.7	67.7	65.6	0	0	1.7	..	0.1	0.1	0.1	..	374.3	12003.3	5	18294.9	c
Oceania (M49)	13.2	12.8	13.6	13.8	6.9	0.1	0.2	3.3	0	1.3	1.2	0.8	0	245.5	298.7	10.9	4028.5	c
Oceania (M49) excluding Australia and New Zealand (M49)	48.3	38.4	36.1	34.2	30.2	0	0	2.9	0	0.1	0.4	0.6	0	8.7	67.1	0	221.9	c
Australia and New Zealand (M49)	11.4	11.4	12.3	12.6	5.6	0.1	0.2	3.3	0	1.3	1.2	0.8	0	236.5	231.6	10.9	3806.6	c

Country / region	Share in total final energy consumption (%)													Final consumption of renewable energy (PJ)			Total final energy consumption (PJ)	Source
	Renewable energy				Solid biofuels	Liquid biofuels	Biogases	Hydro	Tide	Wind	Solar	Geothermal	Municipal waste (renew)	Electricity consumption (1)	Heat raising (2)	Transport (3)		
	2000	2010	2015	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	
Least Developed Countries (LDCs)	84.0	76.0	73.4	70.5	66.9	0	0.1	3.4	0	0	0	0	0	387.1	7448.9	0.2	11116.8	c
Small island developing States (SIDS)	25.4	17.7	17.9	18.1	16	0.6	0	0.9	0	0.2	0.2	0.1	0.1	34.4	319.6	2.4	1966.8	c
Landlocked developing countries (LLDCs)	43.5	41.9	44.4	43.8	39.1	0.1	0.1	4.4	0	0	0	0	0	459.1	4115.1	17.5	10489.2	c
Africa (M49)	60.7	56.4	54.7	53.6	51.7	0	0	1.6	..	0.2	0.1	0.1	..	465.6	12458.8	5.5	24102	c
Asia (M49)	25.1	16.6	15.5	15.4	9.2	0.3	0.2	3.3	0	0.8	1.2	0.4	0	8473.5	17125.8	568	169878.6	c
Americas (m49)	11.8	14.3	15.6	16.5	6.7	2.9	0.1	4.8	0	1.3	0.5	0.1	0	6434.5	6129.8	2612.4	92116.2	c
Caribbean (M49)	25.4	18.0	20.3	21.3	19	1	..	0.7	..	0.4	0.2	..	..	14.8	211.1	1.6	1069.6	c
Central America (M49)	18.1	16.4	16.5	17.1	12.5	0	0	2.9	0	0.8	0.4	0.4	0	294.3	768.8	1	6225.2	c
Eastern Africa (M49)	88.1	87.4	84.5	83.6	80.2	0	0	3	..	0	0	0.3	..	190.5	4503.4	1.9	5618.3	c
Eastern Europe (M49)	4.3	5.7	6.3	6.4	3.4	0.3	0.1	2.2	0	0.2	0.1	0	0	674.8	932.4	144.1	27571.3	c
Melanesia (M49)	54.5	43.3	40.1	37.9	33.8	0	0	3.1	0	0.1	0.2	0.7	0	7.7	64.8	0	191.4	c
Micronesia (M49)	5.1	5.5	6.0	6.8	5.4	0	0	0	0	0	1.4	0	0	0.2	0.7	0	13.8	c
Middle Africa (M49)	88.0	78.3	76.0	79.2	75.5	0	0	3.8	0	0	0	0	0	74.4	1482	0	1964	c
Northern Europe (M49)	15.4	19.1	25.7	27.5	11.9	1.8	0.6	7.8	0	3.5	0.5	0.5	0.8	1383.4	1132	189	9843.3	c
Polynesia (M49)	25.5	14.8	15.1	14.6	9	0	0	3.9	0	0	1.6	0	0	0.9	1.5	0	16.7	c
South America (M49)	32.9	34.6	33.2	35.4	16.3	5.8	0	11.8	..	1	0.4	0	..	2350.7	2592.5	935.8	16620.8	c
Southern Africa (M49)	18.5	13.7	12.1	12.0	10.5	0	0	0.3	0	0.6	0.6	0	0	42.9	321.1	0.6	3034.2	c
Southern Europe (M49)	8.7	15.4	18.1	19.0	7.6	1.6	0.5	4.5	0	2.8	1.7	0.3	0.1	1002	838	174.4	10591.2	c
Western Africa (M49)	83.3	81.9	77.7	75.0	74.2	0	0	0.7	0	0	0	0	0	58.4	5696.8	0	7678.5	c
Western Europe (M49)	6.7	11.8	14.3	15.6	5.8	1.8	1.1	2.4	0	2.5	1.3	0.1	0.7	1348.1	1328.9	364	19471.9	c
Developing regions (MDG)	32.9	23.6	22.1	22.0	15.3	0.7	0.2	3.8	0	0.8	0.9	0.3	0	11067.6	33023.8	1500.1	207062.1	c
Developed regions (MDG)	7.2	9.7	11.6	12.3	4.6	1.7	0.3	3.2	0	1.5	0.8	0.2	0.2	8754.9	7197.8	2602.3	150540.8	c
Northern Africa (MDG)	7.1	5.3	4.6	4.3	3	0	0	0.8	0	0.4	0.2	0	0	67.3	161.5	0.5	5280.4	c
Sub-Saharan Africa (MDG)	72.7	70.6	68.5	67.5	65.3	0	0	1.8	..	0.1	0.1	0.1	..	403.1	12297.4	5.1	18821.6	c

Country / region	Share in total final energy consumption (%)													Final consumption of renewable energy (PJ)			Total final energy consumption (PJ)	Source
	Renewable energy				Solid biofuels	Liquid biofuels	Biogases	Hydro	Tide	Wind	Solar	Geothermal	Municipal waste (renew)	Electricity consumption (1)	Heat raising (2)	Transport (3)		
	2000	2010	2015	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	
Eastern Asia (MDG)	25.4	11.5	11.6	12.5	3.9	0.2	0.4	4.4	0	1.3	1.8	0.6	0	5582.6	4795.1	248.3	84956.8	c
Western Asia (MDG)	5.7	3.9	3.6	3.5	0.6	0	0.1	1.2	0	0.4	0.6	0.7	0	308.5	221.2	6.8	15504.4	c
Oceania (MDG)	48.3	38.4	36.1	34.2	30.2	0	0	2.9	0	0.1	0.4	0.6	0	8.7	67.1	0	221.9	c
Caucasus and Central Asia (MDG)	4.7	3.9	4.1	4.3	0.4	0	0	3.7	0	0	0	0	0	170.4	20.8	5	4612.7	c

REFERENCE

a. Source: Energy Balances, UN Statistics Division (2020)

b. Source: IEA (2020), World Energy Balances

c. Sources: IEA (2020), World Energy Balances; Energy Balances, UN Statistics Division (2020)

DEFINITIONS

Final consumption of renewable energy

(1) Electricity consumption: Covers final consumption of renewable electricity in all sectors excluding transport

(2) Heat raising: Covers final consumption of renewable energy for heat raising purposes (excluding electricity) in manufacturing, construction and non fuel mining industries, household, commerce and public services, agriculture, forestry, fishing and not elsewhere specified.

(3) Transport: Covers final consumption of renewable energy (including electricity) in the transport sector.

NOTES

Allocation of renewable electricity and heat to final energy consumption.

To establish the contribution of each technology to the final consumption, the aggregated figures for electricity and commercial heat have to be allocated to the relevant technology. This can be done based on the proportions exhibited in production data, attributing the losses proportionally (GTF 2013). For instance, if total final consumption table reports 150 TJ for biogases, while total final consumption of electricity is 400 TJ and heat 100 TJ, and the share of biogases in total electricity output is 10 percent and 5 percent in heat, the total reported number for biogases consumption will be 195 TJ (150 TJ+400TJ*10%+100TJ*5%).

SDG 7.3 – ENERGY EFFICIENCY

Data provided by the IEA and UNSD

Country / region								
	2000	2010	2015	2018	2000-2010	2010-2015	2015-2018	Source
Afghanistan	1.4	2.2	1.8	1.8	5.1%	-4.3%	-0.8%	*a*
Albania	4.0	2.8	2.6	2.5	-3.7%	-1.2%	-1.5%	*b*
Algeria	4.3	4.5	5.1	5.3	0.6%	2.7%	0.9%	*b*
American Samoa	..	..	..	..	..	..	..	*a*
Andorra	..	..	..	..	..	..	..	*a*
Angola	3.7	2.6	2.9	3.0	-3.4%	1.8%	1.8%	*b*
Anguilla	..	..	..	..	..	..	..	*a*
Antigua and Barbuda	3.1	4.1	4.0	3.6	2.7%	-0.4%	-3.7%	*a*
Argentina	3.7	3.3	3.4	3.3	-1.2%	0.6%	-0.5%	*b*
Armenia	6.8	3.9	4.0	3.4	-5.4%	0.5%	-4.8%	*b*
Aruba	14.4	16.2	3.3	3.1	1.2%	-27.4%	-2.2%	*a*
Australia	6.1	5.3	4.6	4.3	-1.4%	-2.6%	-2.3%	*b*
Austria	3.2	3.3	3.0	2.8	0.2%	-1.8%	-2.2%	*b*
Azerbaijan	14.5	3.7	4.2	4.3	-12.6%	2.3%	0.5%	*b*
Bahamas	2.3	2.1	2.3	2.8	-0.8%	1.7%	7.3%	*a*
Bahrain	10.2	9.5	8.9	8.2	-0.7%	-1.3%	-2.6%	*b*
Bangladesh	3.1	3.0	2.8	2.5	-0.6%	-1.4%	-3.9%	*b*
Barbados	3.8	4.6	3.8	3.8	1.8%	-3.4%	-0.7%	*a*
Belarus	12.9	7.0	6.1	6.3	-5.9%	-2.8%	1.2%	*b*
Belgium	5.5	4.8	3.9	3.8	-1.4%	-3.8%	-1.1%	*b*
Belize	6.8	5.5	6.0	5.9	-2.1%	1.7%	-0.8%	*a*
Benin	4.9	6.0	5.8	6.1	2.1%	-0.7%	1.4%	*b*
Bermuda	..	..	..	..	..	..	..	*a*
Bhutan	18.4	10.1	8.7	8.3	-5.8%	-3.0%	-1.6%	*a*
Bolivia (Plurinational State of)	3.5	4.1	4.1	4.0	1.4%	0.1%	-0.6%	*b*
Bonaire, Sint Eustatius and Saba	..	..	..	..	..	..	..	*a*
Bosnia and Herzegovina	6.7	6.6	5.9	6.5	-0.2%	-2.3%	3.4%	*b*

Country / region	2000	2010	2015	2018	2000-2010	2010-2015	2015-2018	Source
Botswana	4.0	3.2	3.2	3.0	-2.2%	-0.2%	-2.1%	*b*
Brazil	3.9	3.8	4.0	3.9	-0.1%	1.0%	-0.8%	*b*
British Virgin Islands	..	..	..	..	..	..	..	*a*
Brunei Darussalam	4.3	5.2	4.3	6.0	1.7%	-3.4%	11.2%	*b*
Bulgaria	9.4	5.8	5.5	5.0	-4.7%	-0.9%	-3.3%	*b*
Burkina Faso	5.5	5.4	4.9	4.6	-0.1%	-1.8%	-2.4%	*a*
Burundi	10.4	7.9	7.4	7.7	-2.6%	-1.4%	1.5%	*a*
Cabo Verde	2.6	3.0	2.6	2.7	1.6%	-2.7%	1.1%	*a*
Cambodia	7.9	5.7	5.4	5.1	-3.1%	-1.4%	-1.7%	*b*
Cameroon	6.2	4.7	4.7	4.5	-2.8%	0.4%	-2.1%	*b*
Canada	9.3	7.1	6.9	6.9	-2.6%	-0.5%	-0.3%	*b*
Cayman Islands	1.9	2.1	1.9	1.9	1.2%	-1.8%	-0.1%	*a*
Central African Republic	5.8	4.0	5.6	5.1	-3.6%	6.7%	-3.2%	*a*
Chad	8.2	3.8	3.0	3.5	-7.3%	-4.7%	5.3%	*a*
Chile	4.5	3.7	3.5	3.6	-2.1%	-1.0%	0.9%	*b*
China	10.9	8.9	7.2	6.3	-1.9%	-4.2%	-4.3%	*b*
China, Hong Kong Special Administrative Region	2.3	1.6	1.5	1.3	-3.8%	-1.0%	-4.8%	*b*
China, Macao Special Administrative Region	1.1	0.5	0.6	0.5	-7.3%	3.8%	-6.6%	*a*
Colombia	3.0	2.4	2.5	2.3	-2.2%	1.1%	-3.3%	*b*
Comoros	2.1	2.4	2.7	3.1	1.1%	2.3%	5.4%	*a*
Congo	3.1	4.6	6.4	6.9	4.1%	6.5%	3.0%	*b*
Cook Islands	..	..	..	..	..	..	..	*a*
Costa Rica	2.5	2.6	2.4	2.1	0.4%	-2.0%	-3.9%	*b*
Côte d'Ivoire	4.2	4.6	4.0	3.5	0.9%	-3.1%	-4.5%	*b*
Croatia	4.3	3.8	3.4	3.2	-1.3%	-2.0%	-2.6%	*b*
Cuba	..	..	..	..	..	..	..	*b*
Curaçao	22.2	20.2	22.3	13.9	-1.0%	2.0%	-14.5%	*b*
Cyprus	3.9	3.2	2.9	2.8	-1.9%	-2.1%	-1.5%	*b*
Czechia	6.7	5.4	4.6	4.3	-2.2%	-3.1%	-2.1%	*b*

Country / region	2000	2010	2015	2018	2000-2010	2010-2015	2015-2018	Source
Democratic People's Republic of Korea	..	..	..	..	..	..	..	*b*
Democratic Republic of the Congo	16.5	14.9	14.9	13.8	-1.0%	0.0%	-2.4%	*b*
Denmark	3.0	2.9	2.3	2.2	-0.3%	-4.8%	-1.0%	*b*
Djibouti	5.8	4.6	2.4	2.0	-2.4%	-11.9%	-5.8%	*a*
Dominica	2.5	3.0	3.1	2.9	1.9%	0.9%	-1.9%	*a*
Dominican Republic	3.9	2.6	2.2	2.1	-4.1%	-3.0%	-2.3%	*b*
Ecuador	3.3	3.5	3.3	3.1	0.6%	-1.3%	-1.6%	*b*
Egypt	3.2	3.6	3.5	3.6	1.2%	-0.9%	1.2%	*b*
El Salvador	3.5	3.9	3.4	3.3	1.2%	-2.8%	-1.2%	*b*
Equatorial Guinea	1.6	2.4	3.3	3.7	4.2%	6.8%	4.2%	*a*
Eritrea	..	..	..	..	..	..	..	*b*
Estonia	7.9	6.8	5.6	5.6	-1.6%	-3.8%	0.3%	*b*
Eswatini	7.3	5.4	4.8	4.5	-2.9%	-2.5%	-2.2%	*a*
Ethiopia	21.4	12.7	9.2	7.9	-5.1%	-6.2%	-5.0%	*b*
Falkland Islands (Malvinas)	..	..	..	..	..	..	..	*a*
Faroe Islands	..	..	..	..	..	..	..	*a*
Fiji	2.8	2.4	2.3	2.1	-1.6%	-0.9%	-3.4%	*a*
Finland	6.6	6.2	5.5	5.4	-0.5%	-2.5%	-0.9%	*b*
France	4.3	4.0	3.7	3.4	-0.8%	-1.8%	-2.5%	*b*
French Guiana	..	..	..	..	..	..	..	*a*
French Polynesia	..	..	..	..	..	..	..	*a*
Gabon	3.0	9.1	7.2	6.6	11.6%	-4.5%	-3.0%	*b*
Gambia	3.1	2.9	3.3	3.0	-0.6%	2.3%	-3.5%	*a*
Georgia	6.0	3.6	4.2	3.8	-5.1%	3.4%	-2.9%	*b*
Germany	4.0	3.6	3.1	2.8	-1.1%	-3.0%	-2.8%	*b*
Ghana	5.0	3.4	3.1	2.7	-3.7%	-2.4%	-4.4%	*b*
Gibraltar	..	..	..	..	..	..	..	*b*
Greece	3.6	3.1	3.2	3.0	-1.5%	0.6%	-2.0%	*b*
Greenland	..	..	..	..	..	..	..	*a*

Country / region								
	2000	2010	2015	2018	2000-2010	2010-2015	2015-2018	Source
Grenada	2.5	2.8	2.5	2.5	1.4%	-2.6%	0.8%	*a*
Guadeloupe	..	..	..	..	..	..	..	*a*
Guam	..	..	..	..	..	..	..	*a*
Guatemala	4.0	4.1	4.2	4.3	0.3%	0.1%	0.8%	*b*
Guernsey	..	..	..	..	..	..	..	*a*
Guinea	9.1	7.7	6.4	5.5	-1.6%	-3.8%	-4.6%	*a*
Guinea-Bissau	11.2	10.5	9.7	8.7	-0.6%	-1.6%	-3.6%	*a*
Guyana	8.0	6.5	5.3	5.2	-2.1%	-4.2%	-0.4%	*a*
Haiti	8.3	10.0	9.3	9.8	1.9%	-1.3%	1.6%	*b*
Honduras	4.7	4.9	5.0	4.6	0.5%	0.5%	-2.9%	*b*
Hungary	5.2	4.5	3.9	3.7	-1.4%	-3.0%	-1.8%	*b*
Iceland	11.4	15.2	13.7	13.0	2.9%	-2.1%	-1.7%	*b*
India	6.8	5.6	4.9	4.4	-1.9%	-2.8%	-3.6%	*b*
Indonesia	5.4	4.2	3.3	3.2	-2.5%	-5.0%	-0.8%	*b*
Iran (Islamic Republic of)	7.8	8.4	10.0	9.1	0.8%	3.6%	-3.2%	*b*
Iraq	5.5	5.7	5.4	6.6	0.4%	-1.3%	7.1%	*b*
Ireland	3.2	2.5	1.7	1.4	-2.4%	-7.7%	-5.2%	*b*
Isle of Man	..	..	..	..	..	..	..	*a*
Israel	3.9	3.7	2.9	2.7	-0.5%	-4.5%	-2.8%	*b*
Italy	2.9	2.9	2.6	2.5	-0.2%	-1.9%	-1.7%	*b*
Jamaica	5.9	3.8	3.9	4.1	-4.3%	0.6%	1.8%	*b*
Japan	4.8	4.4	3.6	3.4	-1.0%	-3.9%	-1.5%	*b*
Jersey	..	..	..	..	..	..	..	*a*
Jordan	4.6	3.7	3.9	3.9	-2.3%	1.2%	-0.2%	*b*
Kazakhstan	9.8	8.6	5.4	6.8	-1.3%	-8.7%	7.8%	*b*
Kenya	6.4	5.9	5.8	5.4	-0.8%	-0.3%	-2.5%	*b*
Kiribati	5.0	6.7	5.7	6.0	3.0%	-3.2%	1.5%	*a*
Kuwait	6.9	7.0	6.6	6.8	0.1%	-1.1%	1.2%	*b*
Kyrgyzstan	6.4	5.1	5.8	5.9	-2.3%	2.6%	0.3%	*b*
Lao People's Democratic Republic	3.8	3.3	3.8	5.8	-1.3%	2.9%	14.6%	*a*

Country / region	2000	2010	2015	2018	2000-2010	2010-2015	2015-2018	Source
Latvia	5.3	4.3	3.4	3.4	-2.0%	-4.5%	-0.5%	*b*
Lebanon	3.7	2.8	3.3	3.4	-2.9%	3.3%	0.9%	*b*
Lesotho	14.5	11.4	8.2	8.0	-2.4%	-6.4%	-0.7%	*a*
Liberia	10.1	13.5	13.0	13.6	3.0%	-0.8%	1.5%	*a*
Libya	7.4	6.1	11.1	7.5	-1.9%	12.7%	-12.4%	*b*
Liechtenstein	..	..	..	..	..	..	..	*a*
Lithuania	6.2	4.0	3.3	3.2	-4.3%	-3.7%	-0.9%	*b*
Luxembourg	3.3	3.2	2.5	2.4	-0.3%	-5.2%	-1.6%	*b*
Madagascar	6.0	6.1	6.7	7.8	0.1%	1.9%	5.4%	*a*
Malawi	7.4	5.4	4.7	4.7	-3.1%	-2.8%	0.0%	*a*
Malaysia	5.5	5.2	4.7	4.5	-0.4%	-2.1%	-1.5%	*b*
Maldives	1.7	2.3	2.4	2.6	2.6%	1.3%	2.7%	*a*
Mali	4.8	4.9	5.2	4.8	0.1%	1.4%	-3.1%	*a*
Malta	2.6	2.7	1.6	1.4	0.1%	-10.3%	-4.5%	*b*
Marshall Islands	9.1	10.4	10.6	10.1	1.3%	0.5%	-1.8%	*a*
Martinique	..	..	..	..	..	..	..	*a*
Mauritania	2.5	2.7	2.9	3.4	0.7%	1.9%	4.4%	*a*
Mauritius	3.0	2.6	2.4	2.2	-1.3%	-1.8%	-3.1%	*b*
Mayotte	..	..	..	..	..	..	..	*a*
Mexico	3.6	3.7	3.3	3.0	0.2%	-2.2%	-3.1%	*b*
Micronesia (Federated States of)	5.2	4.1	5.6	5.6	-2.4%	6.6%	-0.5%	*a*
Mongolia	9.2	8.1	5.9	6.4	-1.3%	-6.2%	2.6%	*b*
Montenegro	..	4.6	3.7	3.4	..	-4.1%	-2.3%	*b*
Montserrat	..	..	..	..	..	..	..	*a*
Morocco	3.6	3.5	3.3	3.2	-0.4%	-1.2%	-1.0%	*b*
Mozambique	26.8	12.5	13.3	11.5	-7.4%	1.2%	-4.7%	*b*
Myanmar	10.5	3.7	3.4	3.7	-10.0%	-1.4%	2.5%	*b*
Namibia	3.6	3.6	3.4	3.5	0.0%	-1.5%	1.5%	*b*
Nauru	16.2	8.7	5.4	5.1	-6.0%	-9.3%	-1.4%	*a*
Nepal	7.8	6.7	6.2	6.4	-1.5%	-1.5%	1.0%	*b*
Netherlands	4.1	4.0	3.4	3.1	-0.3%	-3.4%	-2.1%	*b*

Country / region	2000	2010	2015	2018	2000-2010	2010-2015	2015-2018	Source
New Caledonia	..	..	..	..	..	..	..	*a*
New Zealand	5.8	4.8	4.7	4.2	-1.9%	-0.5%	-3.7%	*b*
Nicaragua	5.2	4.7	4.5	4.5	-1.0%	-1.0%	0.2%	*b*
Niger	5.8	5.5	5.5	5.2	-0.6%	0.0%	-2.0%	*b*
Nigeria	10.0	6.8	6.1	6.6	-3.8%	-2.3%	2.9%	*b*
Niue	..	..	..	..	..	..	..	*a*
North Macedonia	5.4	4.4	3.6	3.3	-2.2%	-3.9%	-3.1%	*b*
Northern Mariana Islands	..	..	..	..	..	..	..	*a*
Norway	4.4	4.6	3.8	3.5	0.6%	-3.8%	-2.6%	*b*
Oman	4.1	7.3	8.2	7.8	6.0%	2.3%	-1.9%	*b*
Pakistan	5.8	5.1	4.7	4.6	-1.2%	-1.6%	-0.5%	*b*
Palau	11.1	10.7	8.6	9.2	-0.4%	-4.2%	2.1%	*a*
Panama	2.3	1.9	1.5	1.4	-2.0%	-3.7%	-3.2%	*b*
Papua New Guinea	5.9	5.6	4.9	4.6	-0.4%	-2.9%	-2.2%	*a*
Paraguay	3.6	3.1	3.0	3.4	-1.3%	-0.7%	4.0%	*b*
Peru	3.3	2.5	2.6	2.6	-2.7%	0.4%	0.3%	*b*
Philippines	4.8	3.0	2.9	2.8	-4.5%	-1.0%	-1.5%	*b*
Poland	6.0	4.6	3.8	3.7	-2.6%	-4.0%	-0.7%	*b*
Portugal	3.3	2.9	2.9	2.6	-1.2%	-0.5%	-2.6%	*b*
Puerto Rico	0.1	0.2	0.5	0.5	7.5%	14.8%	1.1%	*a*
Qatar	8.5	6.1	6.2	6.9	-3.3%	0.5%	3.6%	*b*
Republic of Korea	7.3	6.1	5.8	5.5	-1.7%	-1.3%	-1.7%	*b*
Republic of Moldova	8.1	6.4	5.3	5.1	-2.4%	-3.7%	-1.3%	*b*
Réunion	..	..	..	..	..	..	..	*a*
Romania	5.6	3.6	2.8	2.5	-4.4%	-4.7%	-3.5%	*b*
Russian Federation	12.1	8.4	7.8	8.1	-3.6%	-1.6%	1.6%	*b*
Rwanda	7.8	5.6	4.5	3.9	-3.3%	-3.9%	-4.7%	*a*
Saint Helena	..	..	..	..	..	..	..	*a*
Saint Kitts and Nevis	3.1	2.7	2.6	2.6	-1.2%	-1.3%	0.4%	*a*
Saint Lucia	3.1	3.2	3.0	2.9	0.4%	-0.9%	-1.9%	*a*

Country / region	2000	2010	2015	2018	2000-2010	2010-2015	2015-2018	Source
Saint Pierre and Miquelon	..	..	..	..	..	..	..	*a*
Saint Vincent and the Grenadines	2.4	2.7	2.7	2.7	1.1%	0.0%	-0.6%	*a*
Samoa	5.3	3.7	4.3	4.2	-3.4%	2.8%	-0.5%	*a*
Sao Tome and Principe	4.6	4.0	3.7	3.5	-1.4%	-1.8%	-1.1%	*a*
Saudi Arabia	4.7	6.1	5.8	5.6	2.6%	-0.8%	-1.5%	*b*
Senegal	4.3	4.8	4.2	3.6	1.1%	-2.5%	-4.6%	*b*
Serbia	8.5	6.2	5.6	5.3	-3.1%	-2.0%	-1.9%	*b*
Seychelles	2.9	3.3	2.8	2.9	1.2%	-2.9%	0.7%	*a*
Sierra Leone	11.1	6.6	6.0	5.4	-5.1%	-1.8%	-3.5%	*a*
Singapore	3.5	2.5	2.7	2.9	-3.3%	1.6%	2.2%	*b*
Sint Maarten (Dutch part)	..	..	8.3	9.5	..	..	4.4%	*a*
Slovakia	8.6	5.3	4.3	4.2	-4.7%	-4.2%	-1.1%	*b*
Slovenia	5.1	4.5	3.9	3.7	-1.3%	-2.6%	-2.1%	*b*
Solomon Islands	7.9	7.3	5.5	4.9	-0.7%	-5.7%	-3.7%	*a*
Somalia	..	..	..	..	..	..	..	*a*
South Africa	10.1	8.8	7.6	7.7	-1.3%	-3.0%	0.5%	*b*
South Sudan	..	..	..	..	..	..	..	*b*
Spain	3.6	3.1	2.9	2.8	-1.6%	-1.4%	-0.9%	*b*
Sri Lanka	3.1	2.2	1.9	1.8	-3.4%	-2.5%	-3.3%	*b*
State of Palestine	2.8	2.8	3.1	2.9	0.1%	1.4%	-2.3%	*a*
Sudan	7.3	4.6	4.7	4.5	-4.5%	0.5%	-1.8%	*b*
Suriname	4.6	3.3	4.0	4.1	-3.3%	3.7%	1.0%	*b*
Sweden	5.4	4.7	3.7	3.9	-1.5%	-4.8%	1.6%	*b*
Switzerland	2.5	2.2	1.9	1.7	-1.4%	-3.0%	-2.5%	*b*
Syrian Arab Republic	..	..	..	..	..	..	..	*b*
Tajikistan	11.6	5.4	4.8	5.0	-7.4%	-2.0%	1.1%	*b*
Thailand	4.9	5.1	5.1	4.5	0.4%	0.0%	-3.8%	*b*
Timor-Leste	..	1.4	2.0	2.0		7.8%	0.2%	*a*
Togo	14.0	16.6	12.2	11.3	1.7%	-6.0%	-2.5%	*b*
Tonga	3.0	2.9	2.8	3.0	-0.1%	-1.2%	2.9%	*a*

Country / region	2000	2010	2015	2018	2000-2010	2010-2015	2015-2018	Source
Trinidad and Tobago	19.5	21.6	19.8	19.5	1.0%	-1.7%	-0.6%	*b*
Tunisia	4.3	4.0	3.9	3.9	-0.7%	-0.7%	-0.1%	*b*
Turkey	3.3	3.1	2.6	2.6	-0.7%	-2.9%	-0.6%	*b*
Turkmenistan	29.9	21.7	16.0	13.3	-3.2%	-5.9%	-5.9%	*b*
Turks and Caicos Islands	2.1	3.4	3.3	3.3	4.8%	-0.4%	-0.1%	*a*
Tuvalu	3.4	3.9	2.7	3.0	1.3%	-7.3%	3.7%	*a*
Uganda	13.4	10.7	10.3	10.1	-2.2%	-0.8%	-0.5%	*a*
Ukraine	15.8	10.3	8.1	7.5	-4.2%	-4.7%	-2.4%	*b*
United Arab Emirates	4.1	5.5	5.3	4.4	2.9%	-0.8%	-5.8%	*b*
United Kingdom of Great Britain and Northern Ireland	4.2	3.2	2.6	2.4	-2.5%	-4.2%	-2.9%	*b*
United Republic of Tanzania	12.3	8.3	7.0	6.2	-3.8%	-3.3%	-4.1%	*b*
United States of America	6.7	5.5	4.9	4.7	-2.0%	-2.4%	-1.5%	*b*
United States Virgin Islands	..	..	..	..	..	..	..	*a*
Uruguay	2.9	2.9	3.0	3.0	-0.3%	0.9%	-0.3%	*b*
Uzbekistan	31.0	15.5	8.7	8.7	-6.7%	-10.9%	0.3%	*b*
Vanuatu	3.6	3.5	3.5	3.8	-0.3%	-0.2%	2.6%	*a*
Venezuela (Bolivarian Republic of)	..	..	..	..	..	..	..	*b*
Viet Nam	5.1	5.5	5.1	4.8	0.7%	-1.3%	-2.0%	*b*
Wallis and Futuna Islands	..	..	..	..	..	..	..	*a*
Yemen	..	..	..	..	..	..	..	*b*
Zambia	12.7	8.7	8.5	8.6	-3.7%	-0.5%	0.4%	*b*
Zimbabwe	10.2	14.1	11.6	11.0	3.3%	-3.8%	-1.6%	*b*
World	6.2	5.6	5.0	4.8	-1.0%	-2.2%	-1.7%	*c*
Northern America (M49) and Europe (M49)	5.9	5.0	4.4	4.3	-1.8%	-2.3%	-1.2%	*c*
Northern America (M49)	6.9	5.7	5.1	4.8	-2.0%	-2.2%	-1.4%	*c*
Europe (M49)	5.2	4.5	3.9	3.8	-1.5%	-2.6%	-1.1%	*c*
Latin America and the Caribbean (MDG=M49)	3.7	3.6	3.5	3.4	-0.4%	-0.4%	-1.6%	*c*

Country / region	2000	2010	2015	2018	2000-2010	2010-2015	2015-2018	Source
Central Asia (M49) and Southern Asia (MDG=M49)	7.1	6.1	5.3	4.9	-1.6%	-2.5%	-2.7%	c
Central Asia (M49)	16.7	11.0	7.3	7.9	-4.1%	-7.9%	2.7%	c
Southern Asia (MDG=M49)	6.5	5.7	5.2	4.7	-1.3%	-1.9%	-3.2%	c
Eastern Asia (M49) and South-eastern Asia (MDG=M49)	7.0	6.7	5.7	5.2	-0.5%	-3.1%	-3.0%	c
Eastern Asia (M49)	7.6	7.4	6.2	5.6	-0.3%	-3.2%	-3.3%	c
South-eastern Asia (MDG=M49)	5.2	4.3	3.8	3.7	-1.7%	-2.4%	-1.4%	c
Western Asia (M49) and Northern Africa (M49)	4.4	4.6	4.4	4.3	0.4%	-0.7%	-1.0%	c
Western Asia (M49)	4.5	4.8	4.5	4.3	0.7%	-1.3%	-1.1%	c
Northern Africa (M49)	4.2	4.1	4.2	4.1	-0.2%	0.6%	-0.5%	c
Sub-Saharan Africa (M49)	9.0	7.2	6.4	6.4	-2.3%	-2.1%	-0.1%	c
Oceania (M49)	6.0	5.2	4.6	4.3	-1.5%	-2.3%	-2.4%	c
Oceania (M49) excluding Australia and New Zealand (M49)	5.1	4.8	4.3	4.0	-0.4%	-2.2%	-2.3%	c
Australia and New Zealand (M49)	6.1	5.2	4.6	4.3	-1.5%	-2.3%	-2.5%	c
Least Developed Countries (LDCs)	7.7	5.6	5.3	5.0	-3.1%	-1.3%	-1.5%	c
Small island developing States (SIDS)	4.0	3.5	3.4	3.3	-1.1%	-0.7%	-0.6%	c
Landlocked developing countries (LLDCs)	11.5	8.1	6.4	6.5	-3.5%	-4.6%	0.9%	c
Africa (M49)	7.0	6.0	5.6	5.6	-1.6%	-1.1%	-0.3%	c
Asia (M49)	6.7	6.3	5.5	5.1	-0.6%	-2.8%	-2.7%	c
Americas (m49)	6.0	5.0	4.6	4.4	-1.8%	-1.8%	-1.4%	c
Caribbean (M49)	..	..	..	..	..	..	..	
Central America (M49)	3.6	3.6	3.3	3.0	0.2%	-2.1%	-2.8%	c
Eastern Africa (M49)	11.2	8.8	7.8	7.2	-2.4%	-2.2%	-2.6%	c
Eastern Europe (M49)	10.3	7.2	6.3	6.3	-3.5%	-2.6%	0.1%	c
Melanesia (M49)	5.0	4.8	4.3	4.0	-0.3%	-2.4%	-2.5%	c

Country / region								
	2000	2010	2015	2018	2000-2010	2010-2015	2015-2018	Source
Micronesia (M49)	8.0	7.6	7.2	7.4	-0.6%	-0.9%	0.5%	c
Middle Africa (M49)	6.5	5.2	5.6	5.7	-2.2%	1.4%	0.7%	c
Northern Europe (M49)	4.4	3.7	2.9	2.8	-1.8%	-4.3%	-2.0%	c
Polynesia (M49)	..	..	..	..	..	..	..	
South America (M49)	3.7	3.5	3.6	3.5	-0.7%	0.5%	-0.9%	c
Southern Africa (M49)	9.7	8.4	7.2	7.3	-1.4%	-3.1%	0.4%	c
Southern Europe (M49)	3.4	3.1	2.9	2.7	-0.8%	-1.5%	-1.4%	c
Western Africa (M49)	8.1	6.3	5.6	5.7	-2.5%	-2.3%	0.9%	c
Western Europe (M49)	4.1	3.7	3.3	3.0	-0.9%	-2.7%	-2.5%	c
Developing regions (MDG)	6.4	6.0	5.4	5.0	-0.6%	-2.2%	-2.4%	c
Developed regions (MDG)	5.8	4.9	4.3	4.2	-1.7%	-2.5%	-1.3%	c
Northern Africa (MDG)	3.9	4.0	4.2	4.1	0.2%	0.6%	-0.3%	c
Sub-Saharan Africa (MDG)	8.9	7.0	6.4	6.3	-2.4%	-2.0%	-0.2%	c
Eastern Asia (MDG)	9.8	8.4	6.9	6.1	-1.5%	-3.8%	-4.0%	c
Western Asia (MDG)	4.4	4.9	4.6	4.4	1.1%	-1.3%	-1.0%	c
Oceania (MDG)	5.1	4.8	4.3	4.0	-0.4%	-2.2%	-2.3%	c
Caucasus and Central Asia (MDG)	15.5	9.1	6.6	7.1	-5.1%	-6.4%	2.4%	c

REFERENCE

a. Source: Energy Balances, UN Statistics Division (2019)

b. Source: IEA (2019), World Energy Balances

c. Source: IEA (2019), World Energy Balances; Energy Balances, UN Statistics Division (2019)

DEFINITIONS

Energy intensity: Energy intensity is defined as the energy supplied to the economy per unit value of economic output.

SDG7.A.1 INTERNATIONAL FINANCIAL FLOWS TO DEVELOPING COUNTRIES IN SUPPORT OF CLEAN ENERGY

Source: International Renewable Energy Agency, Organisation for Economic Co-operation and Development

Country / region	International Commitments (2018 USD Millions)			
	2000	2010	2015	2018
Afghanistan	0.03	37.07	5.01	72.49
Algeria		0.41	0.89	0.05
Angola		0.02	0.02	0.12
Anguilla		0.05		
Antigua and Barbuda			7.29	
Argentina		1.07	111.67	497.82
Armenia		94.70	23.64	28.22
Azerbaijan	4.80	190.37	78.94	
Bahamas				0.11
Bangladesh	3.09	0.19	7.89	241.14
Barbados			0.08	0.05
Belize			0.02	16.54
Benin		0.17	583.81	1.92
Bhutan	5.10	23.25	128.23	0.12
Bolivia (Plurinational State of)	0.09	5.24	1.99	83.50
Botswana	0.03	10.07		0.01
Brazil	128.39	146.86	2.28	385.43
Burkina Faso	0.13	1.37	27.22	35.90
Burundi		13.39	2.51	10.00
Cabo Verde		71.19	3.28	
Cambodia		701.39	8.21	16.06
Cameroon		55.65	2.10	698.11
Central African Republic			9.62	3.80
Chad			0.02	
Chile	0.45	3.26	110.49	
China	247.45	78.65	93.54	325.50
Colombia		3.50	23.08	147.04
Comoros			1.00	
Congo	0.16			21.03
Cook Islands			18.41	

Country / region	International Commitments (2018 USD Millions)			
	2000	2010	2015	2018
Costa Rica	0.10	7.51	443.46	29.63
Côte d'Ivoire	14.19	0.91	0.84	31.98
Cuba	0.82	4.30	78.95	7.36
Democratic People's Republic of Korea			0.00	0.67
Democratic Republic of the Congo		0.42	0.62	0.08
Djibouti		12.69	0.92	31.00
Dominica				1.70
Dominican Republic	11.37	79.79	0.08	0.37
Ecuador	2.27	2,899.85	31.63	0.95
Egypt	10.61	1,031.20	245.03	107.86
El Salvador		57.31	78.09	59.49
Equatorial Guinea			0.02	
Eritrea		0.06	115.57	0.03
Eswatini			1.06	
Ethiopia	1.54	94.01	325.05	34.69
Fiji			1.71	6.00
Gabon		6.13	13.31	0.02
Gambia				129.23
Georgia		8.27	7.03	47.24
Ghana	4.23	24.98	62.57	28.54
Grenada			1.78	
Guatemala		9.45	0.02	11.72
Guinea	0.21		1.24	1,175.48
Guinea-Bissau		0.02		4.67
Guyana		1.20	1.49	31.05
Haiti	0.84	2.36	49.57	0.78
Honduras	34.04	131.12	373.74	85.43
India	493.09	315.53	929.76	2,133.78
Indonesia	2.31	46.92	387.78	1,076.35
Iran (Islamic Republic of)	61.11	0.00	0.20	0.07
Iraq		155.58		

Country / region	International Commitments (2018 USD Millions)			
	2000	2010	2015	2018
Jamaica	5.31	0.18	61.16	72.97
Jordan		6.77	169.58	92.06
Kazakhstan		1.39	49.28	334.02
Kenya	0.09	737.87	558.56	257.55
Kiribati		1.00		0.90
Kyrgyzstan	8.59	1.59	0.02	0.08
Lao People's Democratic Republic		10.65	87.41	401.83
Lebanon		1.72	38.04	6.44
Lesotho		0.04	0.04	69.90
Liberia			252.13	6.52
Madagascar			4.87	5.41
Malawi	6.96	14.93	62.38	16.84
Malaysia	138.61	0.14	0.18	0.05
Maldives	5.01	9.54	6.31	5.90
Mali	3.59	0.02	9.60	21.59
Marshall Islands			4.21	
Mauritania			0.12	0.01
Mauritius		2.07	9.76	
Mexico	2.41	47.98	211.11	387.84
Micronesia (Federated States of)			4.14	10.20
Mongolia	5.31	11.97	0.88	91.38
Montserrat			2.04	
Morocco	0.28	8.42	240.26	836.34
Mozambique	0.05	96.15	65.55	1.93
Myanmar		0.09	58.97	18.87
Namibia	0.11	48.33		43.70
Nauru			8.91	
Nepal	12.03	23.73	15.50	15.59
Nicaragua	0.03	134.67	68.56	20.14
Niger	0.19			29.20
Nigeria		0.58	46.76	96.64

Country / region	International Commitments (2018 USD Millions)			
	2000	2010	2015	2018
Niue			0.01	
Pakistan	0.04	268.77	4,192.78	101.09
Palau			5.27	
Panama		9.37	47.59	0.06
Papua New Guinea			8.62	0.14
Paraguay		0.09		133.00
Peru	1.11	7.96	86.23	70.94
Philippines	12.30	7.31	23.16	181.38
Residual/unallocated ODA: Central Asia and Southern Asia	3.57	17.13	53.83	23.96
Residual/unallocated ODA: Eastern and South-eastern Asia		7.12	0.56	2.77
Residual/unallocated ODA: Latin America and the Caribbean	2.34	10.34	114.53	242.85
Residual/unallocated ODA: Oceania excl. Aus. and N. Zealand		0.83	2.03	0.36
Residual/unallocated ODA: Sub-Saharan Africa	10.58	24.66	154.36	172.74
Residual/unallocated ODA: Western Asia and Northern Africa		7.48	37.90	14.43
Réunion			1.66	
Rwanda	0.15	2.19		16.14
Saint Helena			1.45	
Saint Lucia			0.01	
Samoa		0.21	0.01	
Sao Tome and Principe		0.13	0.37	
Senegal	0.16	1.11	33.14	52.95
Seychelles			0.04	
Sierra Leone		9.45		0.24
Solomon Islands			6.97	21.06
Somalia			0.33	3.47
South Africa	0.38	265.36	725.35	358.63
South Sudan			0.07	0.29
Sri Lanka	1.56	43.83	0.46	206.09
State of Palestine	0.04	1.41	23.35	37.50
Sudan		86.86	0.03	2.52
Suriname				0.29