

WBG SCORECARD FY24-FY30 METHODOLOGY NOTE

WBG Client Context & Vision Indicators



The purpose of this note is to ensure the rigor, transparency, and reproducibility of the WBG client context and vision indicators included in the new WBG Scorecard FY24-FY30, as well as their alignment with the WBG’s vision. Technical teams were asked to provide a sufficiently detailed methodology so that anyone who reads this note can understand its rationale, theory of change, data sources, and method of calculation.

Definitions included in this template are aligned to the WBG Scorecard paper endorsed by the Board on Dec 19th, 2023. The methods notes are living documents and will be subject to updating and revision pending operational inputs and implementation lessons over time.

OVERVIEW			
INDICATOR NAME	Percentage of population with access to electricity		
SUB-INDICATORS	N/A		
VISION / CLIENT CONTEXT	<input type="checkbox"/> Vision indicator <input checked="" type="checkbox"/> Client context indicator		
OUTCOME AREA	<table border="0"> <tr> <td> <input type="checkbox"/> Protection for the Poorest <input type="checkbox"/> Healthier Lives <input type="checkbox"/> Green and blue planet and resilient populations <input type="checkbox"/> Sustainable food systems <input checked="" type="checkbox"/> Affordable, reliable, and sustainable energy for all <input type="checkbox"/> Digital services <input type="checkbox"/> More and Better Jobs </td> <td> <input type="checkbox"/> No Learning Poverty <input type="checkbox"/> Effective Macroeconomics and Fiscal Management <input type="checkbox"/> Inclusive and equitable water and sanitation services <input type="checkbox"/> Connected Communities <input type="checkbox"/> Digital connectivity <input type="checkbox"/> Gender equality and youth inclusion <input type="checkbox"/> Better Lives for People in Fragility, Conflict, and Violence <input type="checkbox"/> More private investments </td> </tr> </table>	<input type="checkbox"/> Protection for the Poorest <input type="checkbox"/> Healthier Lives <input type="checkbox"/> Green and blue planet and resilient populations <input type="checkbox"/> Sustainable food systems <input checked="" type="checkbox"/> Affordable, reliable, and sustainable energy for all <input type="checkbox"/> Digital services <input type="checkbox"/> More and Better Jobs	<input type="checkbox"/> No Learning Poverty <input type="checkbox"/> Effective Macroeconomics and Fiscal Management <input type="checkbox"/> Inclusive and equitable water and sanitation services <input type="checkbox"/> Connected Communities <input type="checkbox"/> Digital connectivity <input type="checkbox"/> Gender equality and youth inclusion <input type="checkbox"/> Better Lives for People in Fragility, Conflict, and Violence <input type="checkbox"/> More private investments
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SDG ALIGNMENT	<p>See https://sdgs.un.org/ for further details on SDGs:</p> <table border="0"> <tr> <td> <input type="checkbox"/> 1. No Poverty <input type="checkbox"/> 2. Zero Hunger <input type="checkbox"/> 3. Good Health and Well-being <input type="checkbox"/> 4. Quality Education <input type="checkbox"/> 5. Gender Equality <input type="checkbox"/> 6. Clean Water and Sanitation <input checked="" type="checkbox"/> 7. Affordable and Clean Energy <input type="checkbox"/> 8. Decent Work and Economic Growth <input type="checkbox"/> 9. Industry Innovation and Infrastructure </td> <td> <input type="checkbox"/> 10. Reduced Inequalities <input type="checkbox"/> 11. Sustainable Cities and Communities <input type="checkbox"/> 12. Responsible Consumption and Production <input type="checkbox"/> 13. Climate Action <input type="checkbox"/> 14. Life Below Water <input type="checkbox"/> 15. Life on Land <input type="checkbox"/> 16. Peace, Justice and Strong Institutions <input type="checkbox"/> 17. Partnerships for the Goals </td> </tr> </table> <p>List of specific UN targets (if applicable):</p>	<input type="checkbox"/> 1. No Poverty <input type="checkbox"/> 2. Zero Hunger <input type="checkbox"/> 3. Good Health and Well-being <input type="checkbox"/> 4. Quality Education <input type="checkbox"/> 5. Gender Equality <input type="checkbox"/> 6. Clean Water and Sanitation <input checked="" type="checkbox"/> 7. Affordable and Clean Energy <input type="checkbox"/> 8. Decent Work and Economic Growth <input type="checkbox"/> 9. Industry Innovation and Infrastructure	<input type="checkbox"/> 10. Reduced Inequalities <input type="checkbox"/> 11. Sustainable Cities and Communities <input type="checkbox"/> 12. Responsible Consumption and Production <input type="checkbox"/> 13. Climate Action <input type="checkbox"/> 14. Life Below Water <input type="checkbox"/> 15. Life on Land <input type="checkbox"/> 16. Peace, Justice and Strong Institutions <input type="checkbox"/> 17. Partnerships for the Goals
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UNIT OF MEASURE	<input type="checkbox"/> Number of people <input type="checkbox"/> Number of countries <input type="checkbox"/> USD <input type="checkbox"/> GW <input type="checkbox"/> Hectares <input type="checkbox"/> tCO2eq/year <input checked="" type="checkbox"/> Other: Percentage		
LEGACY INDICATOR NAME	<input type="checkbox"/> WB Old Scorecard indicator <input checked="" type="checkbox"/> WBG Old Scorecard indicator: [Population with access to electricity (%)] <input type="checkbox"/> N/A		
RATIONALE			
DEFINITION	<p>The percentage of the population that has access to consistent sources of electricity. The access rate is calculated when the primary source of lighting is provided by the local electricity provider, solar systems, mini-grids, or stand-alone systems. Other lighting sources, such as generators, candles, batteries, etc., are not considered due to their limited working capacities and their usual role as backup sources for lighting.</p>		

DEVELOPMENT RELEVANCE

The indicator is relevant to the World Bank's vision and mission, pursuing universal access to affordable, reliable, sustainable, and modern energy. As the official SDG 7.1.1 indicator, the data have been updated annually and reported to the UN SDG Global Database platform and the World Development Indicators. The database has provided electrification trends at the country, regional, and global levels since 2000. The data have been used in several World Bank energy projects as basic information to identify the electrification situation in client countries and monitor its progress. To increase accuracy in the data reporting, data are validated each year by the World Bank's country leads in the energy field.

Access to electricity is an essential component of sustainable development. It plays a crucial role in our daily activities and is a key enabler of operating factories, running shops, growing crops, and delivering goods to consumers. Reliable and secure access to electricity has a wide range of social and economic impacts, including reducing the burden of household tasks, facilitating the development of income-generating activities, and promoting economic growth and prosperity.

LIMITATIONS

Data for the indicator primarily comes from national household surveys and censuses to better understand the status of electrification on the demand side. Since the household surveys are conducted in two or three-year intervals, it is challenging to present country-level trends on an annual basis. Household surveys could also experience sampling errors during the process of field implementation, which may affect data quality. Lastly, as the data generally relies on the binary measurement of having or not having access to electricity in the survey questionnaires, capturing attributes of quality, reliability, and affordability of electricity access has been a challenge. However, the development and piloting of the Multi-Tier Framework for Measuring Energy Access¹ allows for the capturing of these broader dimensions of service quality and attributes of affordability and reliability of energy access.

DATA AND CALCULATION

DATA SOURCE(S)

The UN Statistical Commission designated the World Bank as the custodian agency to monitor SDG 7.1.1 Proportion of population with access to electricity with the International Energy Agency (IEA) and UN-Energy.² Electrification information is collected along with socioeconomic data primarily from nationally representative household surveys, including Demographic and Health Surveys (DHS), Multi-Indicator Cluster Surveys (MICS), Living Standards Measurement Surveys (LSMS), Multi-tier Framework (MTF), and other surveys implemented by national statistical agencies, as well as occasionally censuses.

Aggregates are constructed as population-weighted averages using population totals from the WDI, which is sourced from the following: (1) United Nations Population Division. World Population Prospects: 2022 Revision. (2) Census reports and other statistical publications from national statistical offices, (3) Eurostat: Demographic Statistics, (4) United Nations Statistical Division. Population and Vital Statistics Report (various years), (5) U.S. Census Bureau: International Database, and (6) Secretariat of the Pacific Community: Statistics and Demography Programme.

METHOD OF CALCULATION (CORE)

The original survey data results remain for all available years, but the missing values, caused by infrequent publication of survey results, get filled in using a multilevel nonparametric modeling approach; if no survey data exist for a particular year, potential access improvements are assumed to be similar to regional trends. This approach was originally developed by the World Health Organization to estimate clean fuel usage and adapted to extrapolate electricity access rates. This modeling approach reflects the hierarchical structure of data at country and regional levels. In the modeling, economies classified as "High Income" based on the World Bank Country and Lending Groups are assumed to attain universal access for the years the countries belong to that category.

The model is run two times for urban areas to ensure that recent progress in electricity access since 2010 is not overshadowed by earlier trends. Then, the rural data are back-calculated as below to

¹ Multi-Tier Framework for Measuring Energy Access: <https://mtfenergyaccess.esmap.org/>

² The data are publicly available at Energy Sector Management Assistance Program (ESMAP) at <https://trackingsdg7.esmap.org/> and via World Development Indicators (WDI) at <http://wdi.worldbank.org/>.

ensure that the population number with access in both urban and rural areas adds up to the total population with access:³

$$\text{Rural electricity access rate} = \frac{(\text{Total rate} - \text{Total population}) - (\text{Urban rate} - \text{Urban population})}{\text{Rural population}}$$

In addition, WDI data are annually reviewed by country and regional teams, GPs and CCSAs, and Executive Director Offices during the Bank-wide review, in addition to routine checks every WDI update.

METHOD OF CALCULATION (DISAGGREGATION)

Regional and global data are weighted by population by summing up all available values across countries listed in the respective reference information. For the FCS disaggregation, the indicator relies on the WB classification of fragile and conflict-affected situations (FCS) updated annually.⁴ The data will be disaggregated based on the results reported in the FCS countries. For the disaggregation by Small Island Developing States (SIDS) and Least Developed Countries (LDC), the indicator uses the classifications defined by the United Nations (UN).⁵ For the disaggregation by country income group, the indicator relies on the WB classification.⁶

VERSION

Version 1. Revised March 28, 2024

³ More details on the methods of calculation can be found in the UN metadata repository for SDG indicators: <https://unstats.un.org/sdgs/metadata/files/Metadata-07-01-01.pdf>

⁴ WB List of FCS countries: <https://www.worldbank.org/en/topic/fragilityconflictviolence/brief/harmonized-list-of-fragile-situations>.

⁵ WB List of Small Stated: <https://www.worldbank.org/en/country/smallstates/overview>; UN List of SIDS: <https://www.un.org/ohrlls/content/list-sids>; UN List of LDC: <https://www.un.org/ohrlls/content/list-ldcs>.

⁶ WB Classification of Country and Lending Groups: <https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups>.