



Private Participation in Renewable Energy Database

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Acronyms Used in the Private Participation in Renewable Energy Database:

ADB	Asian Development Bank	IADB	Inter-American Development Bank
AFIDB	African Development Bank		
BCIE	Central American Bank for Economic Integration	IIC	Inter-American Investment Corporation
BLT	Build, Lease, Transfer	IBRD	International Bank for Reconstruction and Development
BOAD	Banque Ouest Africaine de Développement	IDB	Islamic Development Bank
BOT	Build, Operate, Transfer	IFC	International Finance Corporation
BOO	Build, Operate, Own		
BNDES	Brazilian Development Bank	IPP	Independent Power Producer
BROT	Build, Rehabilitate, Operate, Transfer	MIGA	Multilateral Investment Guarantee Agency
CAF	Corporación Andina de Fomento	PPA	Power Purchase Agreement
EBRD	European Bank for Reconstruction and Development		
EIB	European Investment Bank		

Advanced Development: The status of projects which are yet to reach financial closure. Projects expected to be commissioned within two years or that have a contractual indication of the likelihood of achieving project completion, such as an approved Environmental Impact Assessment, Equipment Supply contract, a Power Purchase Agreement (PPA) or other similar milestones. See also Pipeline project.

Amount of Development Bank Support: The resources committed by a multilateral agency to the project (i.e. equity, guarantees, loan, quasi-equity, risk management, or debt syndication). See Development Bank Support.

Canceled Project: See Status.

Capacity: It is the size of a project measured in Megawatts (MW). The capacity quoted is usually the installed megawatts (MW) expected when the project becomes fully operational. While investment figures are either reported on total commitment basis in the year of financial closure or annual flows for some projects, capacity size information is cumulative.

Contract Period: The length of time measured in years that a contract agreement is in effect. This can be the length of a concession or the length of a Power Purchase Agreement (PPA).

Contract Termination Year: Date at which the final phase of the contract arrangement is completed, and at which the terms of the contract cease to bind the public and private parties. For canceled projects, the contract termination year is the year at which the contract was terminated (see Status) and not the year in which the contract was initially set to expire.

Country: The low- or middle-income country(ies) in which the project is developed and provides services to the public.

Country IDA Status: The World Bank Group, classifies low- and middle- income countries based on the per capita income and ability to borrow on market terms. There are three categories:

- IDA: Countries that are eligible for IDA resources on the basis of low per capita income and lack of creditworthiness to borrow on market terms
- Blend: This category is used to classify countries that are eligible for IDA resources on the basis of per capita income but also have limited creditworthiness to borrow from IBRD
- Non-IDA: Countries that are only eligible to borrow from IBRD based on per capita income

Data in the Private Participation in Renewable Energy Database currently uses the [World Bank Group classification](#) by IDA status of each low- and middle-income country published in 2012.

Country Income Group: The World Bank Group classifies developing economies in three groups based on per capita income:

- low-income
- lower-middle-income
- upper-middle-income

Data on the Private Participation in Renewable Energy Database currently use the [World Bank Group classification](#) by income group of each developing economy published in 2012.

Cross-Border Project: A project that has been implemented in more than one country. The country designation field of a cross-border project lists all countries in which the project has been implemented.

Development Stage: The status of the project related to financial closure. The project is either reported as having reached financial closure, or is considered under “Advanced Development”. See Financial Closure and Advanced Development.

Development Bank Support: This is financial support that a multilateral institution has given to a project, and is recorded in millions of US dollars in the year it is committed. The types of financial support tracked are:

Equity - multilateral institutions are allowed to invest in equity except for IADB, IBRD and IDA

Guarantees - two types of guarantees are covered:

- political risk coverage against currency inconvertibility, expropriation, war/civil disturbance and breach of contract
- partial credit guarantees, which turn medium-term finance into a longer-term arrangement by guaranteeing longer maturity or by offering liquidity guarantees.

Loan - direct loan using the multilateral institution funds (also referred to as A-loan)

Quasi-equity - these products have both debt and equity characteristics and some of them are convertible debt, subordinated loan investments, and preferred stock and income note investments (also referred to as C-loan)

Risk management - the risk management products, or derivatives, allow project companies to hedge currency, interest rate, or commodity price exposure. Some of them are currency and interest rate swap, options and forward contracts and derivatives.

Syndication - a multilateral institution arranges the financing with the resources of other investors, but

the institution is always the lender-of-record (also referred to as B-loan)

Financial Closure: The period of time after a loan or other financing agreement has been entered when all conditions have been fulfilled (or waived) and all documents have been properly filed and executed. After the financial closure, the sponsor has access to credit for a project and drawdowns are allowed. Under the database research methodology, in cases of limited information, the financial closure status can also be awarded to projects with over 25 percent of construction completed.

Financial Closure Year: The year in which private sponsors agreed to a legally binding agreement to invest funds or provide services.

Government support: Hosting governments provide financial support to or reduce the financial risk of a project in many ways. The forms of government support tracked by the Renewable Energy Database are the following:

Cash subsidy - This is when a government agrees to provide cash subsidy to a project. It can be a total lump sum or a fixed amount per new connection, and payments can be either in installments or all at once. Cash subsidies are included in the "investments in physical assets" total for projects in which the private party takes some investment risk/decisions: concessions, divestitures and greenfields.

Payment Guarantee - This is when a government agrees to fulfill the obligations of a purchaser (typically a state-owned-enterprise) with respect to the private entity in the case of non-performance by the purchaser. The most common example of this is when a government guarantees the fixed payment of an off-take agreement (e.g. Power Purchase Agreement (PPA), Water Purchase Agreement (WPA)) between a private entity and the state-owned enterprise.

Debt Guarantee - This is when a government secures the borrowings of a private entity. That is, a government guarantees repayment to creditors in the case of a default by a private entity.

Revenue Guarantee - This is when a government sets a minimum variable income for the private operator; typically this income is from user fee payments by end-use customers. This form of guarantee is most common in roads with minimum traffic or revenue set by a government.

Exchange Rate Guarantee - This is when a government protects a private entity from fluctuations in the value of the local currency. For example, the government will agree to reimburse the private entity for losses in debt service if the value of the local currency dips by, say, 20 percent or greater.

Construction Cost Guarantee - This is when a government protects a private entity from potential cost overruns in the construction phase of a project.

Investment in physical assets: Resources which the project company commits to invest in facilities during the contract period. Investments can be either in new facilities or in the expansion and modernization of existing facilities. The total cost of developing or expanding the facility during the contract period is entered as investment data in the year of financial closure (for which data are typically available). Annual investments on facility expansion and modernization are entered as investment data in the year of investment when information is publicly available. Investments are recorded in millions of US dollars in either the year of financial closure or year of investment as indicated above.

Payments to the government: Resources which the project company spends to acquire government assets such as state-owned enterprises or rights to provide services in a specific area. Investments are recorded in millions of US dollars.

Percentage Private: The percentage of the project company that is owned by private sponsors. Data on private shares are cumulative and reflects annual changes. The private share data is entered for all years available in the project history table. For the years in which there is no change in the private share, the latest available value is used.

Pipeline project: Projects which are yet to reach financial closure. Pipeline projects are expected to be commissioned within two years or have a contractual indication of the likelihood of achieving project completion, such as an approved Environmental Impact Assessment, Equipment Supply contract, a Power Purchase Agreement (PPA) or other similar milestones. See also Advanced Development.

Primary Sector: For the Renewable Energy database this is always energy.

Project Company: This is the corporate entity created to manage the project. It is usually incorporated in the host country and in some cases the project company is quoted as the project name.

Project Location: This is the area where the facilities are located.

Project Name: This is the most commonly occurring or recent name of the project in English. If a project has no clear name, the Project Name is constructed as follows: <Sponsor> <Location> <Technology>. See Related Names.

Region: This is the region to which the low- or middle-income country in which the project belongs, based on [World Bank Group classification](#).

Renewable Energy project: renewable energy (RE) projects are those that generate electricity from energy sources that are naturally replenishing, and that are generally accepted in academic and professional communities. Renewable energy sources include: biomass, hydro, geothermal, solar, wind, ocean thermal, wave action and tidal action. See Technology/Fuel.

Related Names: All names other than the project name by which the project is referred to, including abbreviated names, acronyms, old or other names. When small projects are grouped together, this field is used to record the names of individual generation plants included in the group.

Segment: The infrastructure services provided by a project. In the Renewable Energy Database, the segment is always: Electricity Generation. In exceptional cases it can also include transmission. See Subsector, Sector, and Technology/Fuel.

Sponsor: Sponsors are private entities that have an equity participation of at least 15 percent in the project in the year of data update. A foreign state-owned enterprise is also considered a private entity. If no single sponsor has equity participation of at least 15 percent, the database identifies the sponsor as "Others".

Status: Infrastructure projects tracked by the Private Participation in Renewable Energy Database are:

- **under development** projects which have not yet reached financial closure
- **under construction** projects for which assets are being built
- **operational projects** that have started providing services to the public
- **concluded projects** for which the contract period has expired and was neither renewed nor extended by either the government or the operator
- **canceled projects** from which the private sector has exited in one of the following ways:
 - selling or transferring its economic interest back to the government before fulfilling the contract terms.
 - removing all management and personnel from the project.
 - ceasing operation, service provision, or construction for 15 percent or more of the license or concession period, following the revocation of the license or repudiation of the contract.
- **distressed** projects where the government or the operator has either requested contract termination or are in international arbitration.

Subsector: For the Renewable Energy database this is always electricity.

Sub-Type of Private Participation in Infrastructure: The database identifies sub-categories for each of the four types of projects:

Management and Lease Contracts - A private entity takes over the management of a state-owned enterprise for a fixed period while ownership and investment decisions remain with the state. There are

two subclasses of management and lease contracts:

- management contract - The government pays a private operator to manage the facility. The operational risk remains with the government.
- lease contract - The government leases the assets to a private operator for a fee. The private operator takes on the operational risk.

Concessions - A private entity takes over the management of a state-owned enterprise for a given period during which it also assumes significant investment risk. The database classifies concessions according to the following categories:

- Rehabilitate, operate, and transfer (ROT): A private sponsor rehabilitates an existing facility, then operates and maintains the facility at its own risk for the contract period.
- Rehabilitate, lease or rent, and transfer (RLT): A private sponsor rehabilitates an existing facility at its own risk, leases or rents the facility from the government owner, then operates and maintains the facility at its own risk for the contract period.
- Build, rehabilitate, operate, and transfer (BROT): A private developer builds an add-on to an existing facility or completes a partially built facility and rehabilitates existing assets, then operates and maintains the facility at its own risk for the contract period.

Greenfield Projects - A private entity or a public-private joint venture builds and operates a new facility for the period specified in the project contract. The facility may return to the public sector at the end of the concession period. The database classifies greenfield projects under the following categories:

- Build, lease, and transfer (BLT): A private sponsor builds a new facility largely at its own risk, transfers ownership to the government, leases the facility from the government and operates it at its own risk up to the expiry of the lease. The government usually provides revenue guarantees through long-term take-or-pay contracts.
- Build, operate, and transfer (BOT): A private sponsor builds a new facility at its own risk, operates the facility at its own risk, and then transfers the facility to the government at the end of the contract period. The private sponsor may or may not have the ownership of the assets during the contract period. The government usually provides revenue guarantees through long-term take-or-pay contracts.
- Build, own, and operate (BOO): A private sponsor builds a new facility at its own risk, then owns and operates the facility at its own risk. The government usually provides revenue guarantees through long-term take-or-pay contracts.
- Merchant: A private sponsor builds a new facility in a liberalized market in which the government provides no revenue guarantees. The private developer assumes construction,

operating, and market risk for the project.

- Rental: Electricity utilities or governments rent mobile power plants from private sponsors for periods ranging from 1 year to 15 years. A private sponsor places a new facility at its own risk, owns and operates the facility at its own risk during the contract period. The government usually provides revenue guarantees through short term purchase agreements.

Divestitures - A private entity buys an equity stake in a state-owned enterprise through an asset sale, public offering, or mass privatization program. The database classifies divestitures in two categories:

- Full: The government transfers 100% of the equity in the state-owned company to private entities (operator, institutional investors, and the like).
- Partial: The government transfers part of the equity in the state-owned company to private entities (operator, institutional investors, and the like). The private stake may or may not imply private management of the facility.

Total Activity: the combination of projects in the pipeline as well as those that reached financial closure in a given time period (usually annual). Used to indicate overall activity in a region, country or technology sector.

Technology/Fuel: This field can represent the following main energy source:

- Biogas, Biomass, enhanced geothermal, geothermal, hydro small, hydro large, other, solar PV, solar CPV, solar CSP, tidal, waste, wave, wind offshore, wind onshore.

The category “Other” refers to technologies not classified in the categories mentioned above. Hydropower is differentiated between small and large hydropower. The generally accepted range for small hydro is between 10 and 50 MW. In the Renewable Energy database, below 50MW is considered a small hydropower plant, based on practical reasons related to data collection. This is not the official position of the World Bank Group. For users of the database, the size of projects are reported on individually and researchers can make their own differentiation from the dataset provided. For Snapshots, the following technology classifications apply:

- Biogas, biomass and waste are bundled and reported under “bioenergy”.
- Geothermal and enhanced geothermal are bundled and reported under “geothermal”
- Solar PV, solar CPV and solar CSP are bundled and reported under “solar”
- Wind offshore and wind onshore are bundled and reported under “wind”
- Wave and tidal are currently not separately reported on.

Total Investment: It is the sum of investment in physical assets and payments to the government. Investments are recorded in millions of US dollars. In reports this number is corrected for US CPI.

Type of PPI: The database classifies private infrastructure projects in four categories:

- management and lease contracts
- concessions (or management and operation contracts with major private capital expenditure)
- greenfield projects
- divestitures

The definitions of Types of Private Participation can be found under subtype.

Year of Capacity: The year in which capacity was financed or achieved depending on how a project expands capacity. For projects whose capacity expands in discrete phases, year of capacity is usually the year of financial closure.

Year of Investment: The year in which investments are committed to the project or in which the transactions take place.

Year of Development Bank Support: The year in which the development bank support was committed to the project. See Development Bank Support.

Year of Percentage Private: Year in which the percentage ownership of the project company by private sponsors changed.