



The Case for Transparency in Power Project Contracts:

A proposal for the creation of global disclosure standards and PPA Watch

Mohamed Rali Badissy, Charles Kenny, and Todd Moss¹

Revised Version: August 17, 2022 (update of original from September 1, 2021)

Summary

The purpose of a nation's power sector is to deliver reliable electricity at the lowest cost and for the greatest benefit. At the heart of a private electricity generation project is the Power Purchase Agreement (PPA), a complex, multi-decade contract that contains key provisions such as price, payment guarantees, and myriad other obligations by the offtaker utility and/or host-government. Despite the fundamental nature of these contracts and their impacts on everything from energy access to public finances, these contracts are often negotiated and signed in secret, with even the most basic terms shielded from meaningful oversight. This opacity has amplified risks and, in a growing number of cases, contributed to costly and damaging outcomes, such as overpayment, overcapacity, unsustainable debts, and grid instability. Drawing on examples from enhanced transparency in public budgets, sovereign debt, and extractive industries, we propose that regulators, developers and funders of power projects in publicly-regulated markets agree to a framework of disclosure standards that increase relative to the potential impact of an agreement on public finances. The objective is to create incentives for better contracting practices, improve power sector governance, reduce project transaction costs, and ultimately, to scale up delivery of affordable and sustainable power for the benefit of the public. Transparency around PPAs would support the efforts of governments, investors, and development finance institutions to accelerate energy market development and to reap the benefits of competitive pricing. Greater disclosure would also provide crucial

¹ Mohamed Rali Badissy is Assistant Professor of Law at Penn State Dickinson Law and a Fellow of the Energy for Growth Hub; Charles Kenny is Senior Fellow at the Center for Global Development and an advisory board member of the Energy for Growth Hub; Todd Moss is Executive Director of the Energy for Growth Hub and a nonresident fellow at the Center for Global Development. We are grateful to Mariel Ferragamo and Grace Tamble for assistance in editing and to the many people who provided feedback on earlier drafts of this paper including Rob Mosbacher, Rose Mutiso, Murefu Barasa, Andy Herscowitz, Sally Mtambo, Ben Attia, Andrew Alli, Priscilla Atansah, Mimi Alemayehou, Wikus Kruger, Katie Auth, Rushaiya Ibrahim-Tanko, and multiple anonymous reviewers. Any errors in fact or judgment are solely those of the authors.

information for citizens to hold their own governments accountable for the contracts they sign on behalf of the public.

Introduction

Improved energy infrastructure is a necessary – and costly – prerequisite to development. The International Energy Agency (IEA) predicts a 4.6 percent compound annual growth rate of demand for electricity in Sub-Saharan Africa between now and 2030, suggesting the need to quickly [double current capacity](#) and catalyze tens of billions in new investment to satisfy future demand.

Attracting private capital to the sector and increasing the number of independent power projects (IPPs) is a central part of the strategy to meet the demands for power and investment capital.² The World Bank's Private Participation in Infrastructure [database](#) reports nearly \$1 trillion in investment in electricity projects with private participation since 1990, while IPPs accounted for about 24 percent of installed power generation between 1990-2013 in Sub-Saharan Africa (excluding South Africa).

Any successful IPP requires a Power Purchase Agreement (PPA), a long-term contract between the power generator and the power customer.³ Typically, the customer is an electric utility – in many countries, a publicly-owned utility – often backed by an explicit or implicit financial guarantee from the government to fulfill the PPA's financial terms if the utility fails to pay. As the primary source of revenue, PPAs are a fundamental necessity to attract project financing and make private investment in power projects possible. However, despite their ubiquitous nature, PPAs are not all the same and, in many places, the contractual details (or even the existence of the PPA) are not publicly disclosed by project developers, funders, utilities, or host governments.

This paper makes the case for greater transparency around power project contracts – and specifically for publishing PPAs or at least establishing minimum disclosure standards for PPAs – to improve both economic and policy outcomes from power projects. Furthermore, it points to evidence that transparency is both feasible and likely to be effective in raising the bar for consumers, governments, investors, and donors. We propose that basic project information be released at when the contract becomes effective, followed by publication of the PPA (redacted where absolutely necessary) within one year of financial close. We provide a list of core contract

² Note IPP normally refers to 'producer' not 'project.'

³ A PPA is just one of many contracts that are part of a power project. We focus specifically on PPAs here because of its primacy to the process. Any effective transparency regime would require related agreements to be disclosed as well.

terms that should be reported in detail and made publicly available, and we also suggest additional information the government should release to help the marketplace for private investment in power projects grow and function efficiently. Finally, we highlight the importance of the Energy for Growth Hub's [PPA Watch](#) initiative, which provides a methodology for objective assessment of power market transparency across the world, within the broader global transparency and open government ecosystem.

The Problem

While IPPs are an important vehicle for private investment in vital energy infrastructure, they are also costly, complex, and long-term projects with multiple linkages to sovereign balance sheets and the wider economy. Examples of problematic IPPs (and/or the accumulated effects of multiple IPPs) can involve:

- *Overpaying.* Poorly negotiated PPAs can lock in high costs for generated electricity compared to national or global comparators.
- *Overcapacity.* Transmission and distribution companies are often obligated to pay for the full capacity of a power project, even if they do not use or need the power, which can result in costly oversupply.
- *Debt risk.* When utilities are unable to maintain their payment obligations under PPAs and require government payments or bailouts, this can be a significant drain on public resources.
- *Systemic imbalances.* Obligations under individual PPAs can combine to create challenges for utilities to match power production profiles with demand trends. In the absence of ways to manage imbalances, blackouts or huge inefficiencies can occur, such as excess capacity during low demand periods (e.g., where hydropower is a major part of the power mix, mid-day in the rainy season) and insufficient capacity during high demand (e.g., evening in the dry season).
- *Governance risk.* Corruption and/or the suspicion of corruption from opaque deals negotiated behind closed doors can affect public confidence, especially those involving significant financial commitments from governments.
- *Dispute risk.* Demand shocks from the pandemic and recession have led to a surge in force majeure declarations, raising questions about contract details and obligations.
- *Investment risk.* Contract cancellations, forced renegotiations, effective expropriations, and other legal conflicts place a significant burden on firms and raise the risk premium of investing in the very markets that need capital the most. This harms both investors (by reducing potential opportunities) and host governments (by raising the risk-adjusted cost of capital).

Recent examples of these problems in practice are, unfortunately, common.

- Ghana signed at least 46 PPAs during the 2011-16 period. The current government (who came to power in December 2016) is now [paying an estimated \\$450m per year](#) for power and gas that it does not need or use under contracts that remain undisclosed. The government [canceled eleven PPAs](#) signed by the previous administration and seeks to renegotiate many others, embroiling all parties in costly and protracted legal disputes.⁴
- Tanzania's experience with IPPs up to 2016 involved four projects, all of which were renegotiated and involved equity turnover. The country's ITPL oil/gas power project led to power which cost six times that produced by the country's gas IPP, as well as 20 years of court cases. In 2018, the government-owned utility Tanesco was forced to pay \$150m to Standard Chartered Bank in connection with the deal.
- Kenya is experiencing major grid instability and imbalances, in part because PPA obligations necessitate dispatch of variable wind power over more stable geothermal. A whistleblower also recently [leaked a PPA](#) for a controversial coal power project in Kenya. In June 2020, Kenya reportedly [planned to invoke force majeure](#) on at least ten power producers in response to a sharp decline in demand.⁵ In September 2021, President Uhuru Kenyatta ordered the cancellation of all ongoing and incomplete PPAs and [established a Presidential PPA Taskforce](#) to address concerns over high electricity prices.
- Nigeria [signed 14 solar PPAs](#) at a price of \$0.11/kWh, but a prolonged implementing process led to the government demanding renegotiation.
- Across the world, governments – such as Jordan, Panama, Honduras, and Vietnam – find themselves hamstrung by poorly negotiated PPAs that weigh on utility/state finances and displace potential new investments.

These problems have significant development and financial effects. Moreover, problem projects and rising risks threaten future project investment because potential investors and/or governments lack confidence in their ability to sign fair contracts that generate returns over the long term while providing affordable, efficient power to consumers.

The challenge is particularly urgent as dynamic technological innovation (especially for renewables) quickly changes what is considered a 'good deal.' Renewable power project costs are falling rapidly, making it especially important that decision-makers in small, lower-income countries have the information needed to judge contract value for money – and that civil

⁴ For further detail, see Ishmael Ackah, Katie Auth, John Kwakye, Todd Moss, "[A Case Study of Ghana's Power Purchase Agreements](#)," Institute of Economic Affairs, Accra and Energy for Growth Hub, Washington DC, March 2021.

⁵ For further detail, see Murefu Barasa, "[Enhancing Public Participation in Kenya's Power Purchase Agreement Process](#)," EED Advisory, Nairobi and Energy for Growth Hub, Washington DC, October 2021.

society has the information to hold public officials accountable for delivering that value to consumers.

How transparency can help

Governments and firms worldwide are recognizing the benefits of procurement and contracting transparency, particularly involving contracts that are large and long-term with significant public obligations. These transparency initiatives have realized benefits in a variety of areas:

- *Sovereign debt disclosure.* The [IMF and World Bank](#) insist that borrowing clients publicly report all accumulated debts. Accurate and comprehensive debt data are considered a cornerstone to sound borrowing and lending practices. (Notably, this does not yet apply to contingent liabilities like PPAs despite the fact they may create substantial public obligations.)
- *Procurement transparency.* Countries including Brazil, [Slovakia, Georgia](#), Chile, Colombia, and the United Kingdom proactively publish government contracts and a considerable amount of ancillary information. There is [growing evidence](#) linking this routine publication with improved competition and prices. (Because of state support or state ownership of utilities, PPAs are very often a form of public procurement.)
- *Oil and mining contracts.* The [Extractive Industries Transparency Initiative](#) is moving towards a model of mandating members to publish entire, unredacted [contracts](#) between governments and industry covering all oil, gas, and mining contracts – a decision that affects 53 implementing countries worldwide.

More transparent PPAs might similarly help produce more favorable outcomes in the power sector. Governments and utilities are often criticized for failing to deliver power at a reasonable price due to the inability of customers, both residential and commercial, to rationalize the price they pay with input costs. Transparency around PPA terms and pricing provides decision-makers, such as energy ministry officials or utility regulators, with objective data to defend their decisions to the public and explain the value produced by well-negotiated power contracts.⁶

Electricity production uses similar technologies worldwide, so this data on contract models and costing from analogous negotiations elsewhere can help spread better practice and help set expectations regarding reasonable costs and terms. These benefits of transparency are also reflected in the global effort to standardize PPAs to expedite contract negotiations and ensure

⁶ The authors have intentionally focused on “value” rather than the more simplistic focus on “price” since there are a number of scenarios where comparatively higher power prices may nevertheless deliver tremendous value to customers, such as grid-edge/off-grid and resilient power projects.

inclusion of critical terms based on recent growth in areas such as renewable energy and battery storage.⁷ This will help improve future negotiations both by strengthening contract structuring, and by setting expectations of firms, investors, citizens and governments to uphold market norms for power projects. The more information that is known about an individual project, the more benefit it will provide for purposes of comparison. In an open competitive market, IPP costs (and the terms included in any related PPA) would allow clearer benchmarking.

At the sectoral level, transparency regarding system capacity and pricing models will allow outside parties to reconcile predicted energy demand with the pipeline of power projects, thus reducing the risks of overcapacity and focusing utilities' negotiations on value rather than volume.

In a nutshell: Transparency of PPAs would allow citizens to know who their governments are paying, how much, and what they are expected to deliver. It is the right of taxpayers to know how their money is being spent and what future obligations are being taken on their behalf – which is a claim on future tax revenue. In addition, citizens as well as civil society and private firms can act as independent watchdogs to ensure governments are getting value for money. Transparency also helps reassure any involved parties that the contracting process is fair.

Despite clear evidence that competitive tenders for IPPs produce the greatest value, many IPPs continue to be developed based on [unsolicited proposals](#) agreed through direct negotiations rather than open competition.⁸ Such projects, especially when final contract terms are kept shielded from the public, frequently raise concerns over governance and probity. Since not all procurement is likely to move to open bidding, the continuation of unsolicited proposals underscore the importance that contracts are disclosed. Transparency allows for some level of benchmarking against power projects from peer markets to provide comparisons to projects that share similar technology, scale and market risks.

Transparency is ultimately a risk-reduction tool for both project developers and utilities/governments. IPPs tend to have decades-long life-spans that considerably outlast the term of any individual government. Transparency will uncover concerns about deal terms that should allow firms to better judge political risk from government turnover and/or ensure deals have broad and durable support across major political groups, rather than benefiting a narrow elite that may or may not be in power for the duration of the contract life.

⁷ A sample of PPA standardization efforts include Power Africa's *Understanding* Handbooks Series (<https://cldp.doc.gov/understanding>); Open Solar Contracts (<https://opensolarcontracts.org>); Scaling Solar (<https://www.scalingsolar.org>).

⁸ Eberhard et al, "Independent Power Projects in Sub-Saharan Africa: Investment trends and policy lessons", <http://www.gsb.uct.ac.za/files/InvestmentTrendsPolicyLessons.pdf>.

To be clear, greater PPA disclosure is not a replacement for sound planning, improved governance, competitive procurement, or better contract processes. Transparency around key facets of PPA contracts would instead help create positive incentives in support of these objectives – and ultimately better outcomes for consumers, governments, and investors.

For which projects should information about IPPs/PPAs be disclosed?

The starting principle should be maximum transparency in the maximum number of circumstances, with disclosure as the default expectation. There may be legitimate questions about disclosure requirements for contracts between two private parties, but in the case of the power sector, there is typically a public sector actor, as well as a public regulator demanding disclosure and consultation around rate setting, siting and so on. Transparency should therefore apply any time there is a real or potential public financial obligation, even between two ostensibly private parties (e.g., if the utility is a privately-owned for-profit firm). This would need not apply to a strictly private captive power arrangement, such as between an IPP and a private company.

The World Bank's [Framework for Disclosure in Public-Private Contracts](#) already suggests a detailed list of recommended disclosures for all public-private partnerships (PPPs) including PPAs from pre-tender documents that incorporate project pipeline details, tenders and requests for proposals, draft contracts and project reports, and aspects of the contract covering financial information, government support, tariffs, performance metrics, termination and renegotiation.

For power projects specifically, contracts and key contracting information can be released without raising commercial confidentiality or classification concerns. In particular, feed-in tariffs which involve standard (public) contracting terms and published prices for renewable power that providers 'fed in' to the public grid (e.g., the UK [scheme](#)) are almost completely transparent.

Even for bespoke power purchase agreements that remain common in larger independent power projects, there are a number of PPA contract models online, with a library of examples provided by the [World Bank](#). There are also some examples of final (unredacted) contracts, including the [National Grid and Cape Wind Associates](#) contract for an offshore wind farm. Furthermore, competitive processes [guarantee](#) at least a minimum level of transparency owing to information released in requests for proposals and qualification, evaluation and award processes. As a result, these open, competitive approaches tend to [lead to lower prices](#).

South Africa's Renewable Energy IPP Procurement Program (REIPPPP) utilized (a) a standard PPA, (b) an Implementation Agreement with the Department of Energy covering sovereign

guarantees as well as penalties and rewards around economic development commitments, and (c) Direct Agreements covering step-in rights for lenders, all of which were non-negotiable and public. Firms submitted bids on the basis of price and development impact (covering factors including local inputs and employment) evaluated by a public scoring system that released price and development impact score. The transparency around the development of South Africa's REIPPPP PPA was so effective that it produced a non-negotiable contract with broad support from developers, bankers, and civil society organizations, all of which significantly shortened the contracting process and delivered historically low power prices.

More broadly, a transparent domestic power sector in the U.S. has created a data-rich ecosystem regarding PPAs even though they are frequently between private suppliers and offtakers (i.e., do not involve a government agency as a major contracting party). Detailed information is available regarding wind patterns, capacity factors, finance, ownership, installation, location height and size, suppliers and actual generation, installed project costs, operation and maintenance (O&M) costs, levelized PPA prices for wind, gas, and solar as well as details on tax and credits. The U.S. Department of Energy uses this information to produce [reports](#) on the state of the wind technologies market, its competitiveness and what policymakers and potential purchasers can expect in terms of costs, and producers in terms of revenues.⁹ The Lawrence Berkeley National Lab [uses](#) this data to compile reports on a range of solar utility PPA features including details of technological choices, installed prices, capacity factors, PPA prices and levelized PPA price of electricity.¹⁰ Figure 1 displays an example of the insight those data provide.

⁹ This information is collected from a variety of sources, including from Energy Information Administration data collection from power producers, SEC filings, state and federal regulatory agencies and incentive programs, DOE turbine verification programs, data from Treasury Grant forms, and Federal Energy Regulatory Commission filings. SEC usually [exclude pricing](#) information in filings, but this information is frequently available from other sources. The Australian State of Victoria, which regularly publishes the full text of government contracts, [does so for power purchase](#) for *government* use, but excludes the pricing schedules. Ukraine publishes full details of government power procurement (including prices) with independent power producers.

¹⁰ The lab struggled to find actual operations and maintenance costs, although these would not appear in a PPA.

Figure 1: US Levelized PPA Price/MWh ([source](#))

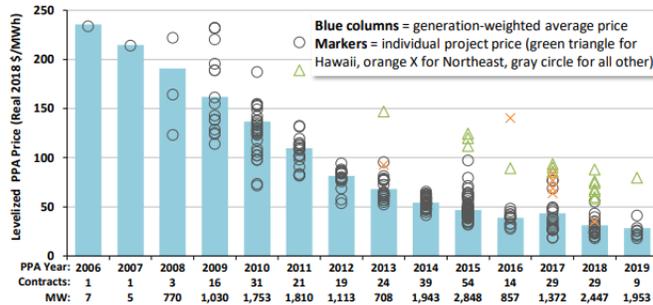


Figure 20. Levelized PV PPA Prices by Contract Vintage⁴⁶

In short, if the purpose of the power sector is to deliver reliable electricity at the lowest cost and for the greatest benefit of a national economy, contracts should be in the public realm as often as possible. At minimum, any involvement of a government agency as a counterparty or a potential public sector obligation indicates transparency standards should be an assumption rather than an exception. Even in instances of two private parties, there is a strong case for some transparency in the public interest. If implemented effectively, transparency in the contracting process benefits both the private sector through increased market data to inform investment decisions and the public sector by demonstrating the long-term value secured for power customers.

What specific information should be disclosed?

The foundational principle of PPA transparency is that independent observers should be able to understand and verify who is being paid, how much, and for which services. This should apply both *ex-ante* according to contract details (what is in the contract itself) and *ex-post* during the actual life of the contract (how is the project performing against the contract).

Must-Have: the contract + core details

Disclosure should, ideally, include putting into the public domain *the entire power purchase agreement* and subsequent amendments/addendums or linked ‘direct agreements’ between the offtaker and producer. These documents can be redacted where absolutely necessary for commercial confidentiality (see below), but the default should be maximum disclosure.

In addition to the PPA itself, publicly-available data should disclose *core details of the PPA* covering the following (see also Annex B):

1. *Basic information released upon signing* including project location, effective dates, signatories to the PPA, award process, technology, installed capacity and expected generation capacity factor, and agreed project milestones.
2. *Contract terms released within one year of financial close*, including payments, such as signature bonuses, fixed and variable payment formulas (see more below), tax and public-sector finance provisions, government and international financing, public guarantees, performance and related penalties, and termination, force majeure, and decommissioning.

Clarity over key provisions covering payments and costs under different scenarios

At the heart of any PPA is a formula governing the purchase obligation: payments from the offtaker (buyer) to the power producer (seller) made under certain terms. These terms differ between two major types of technologies: dispatchable and non-dispatchable. Dispatchable technologies include gas, diesel, oil, and coal plants that can generate power up to capacity on demand. Non-dispatchable technologies such as solar and wind fluctuate in the amount of power available, determined in part by factors such as local weather. (The distinction between these two sources is fading as renewable energy projects begin to integrate energy storage resources to provide some level of dispatchability.) Even though their terms may differ, projects of all technologies should be equally subject to divulge the relevant information as outlined below.

For dispatchable technologies, the two key components are a capacity charge (how much power a plant could deliver to the grid if demanded by the offtaker) and an energy charge (for energy actually dispatched). These charges are important factors affecting payments, and thus should be incorporated in disclosure as follows:

- *Capacity charges.* The capacity charge often involves weighted payments for availability of power during peak periods.¹¹ The PPA may also lay out downward adjustments in the case that the company cannot deliver on declared capacity.

¹¹ [Badissy et al](#) suggest a model formula for capacity payments for hour 'i' includes an hourly capacity payment (which may adjust over the life of the agreement), hourly fixed operations and maintenance charge, a period weighting factor that varies by hour reflecting the importance of capacity and the average capacity declared available during that hour. Every term but the last should be laid out in the power purchase agreement. (The last could be made public on a lagged ongoing basis).

- *Energy charges.* The energy charge may be linked to fuel costs and variable O&M costs. Some PPAs involve an associated or integrated fuel contract that may lay out the price or formula for fuel and any ‘take or pay’ requirements for gas.

For non-dispatchable technologies, additional PPA provisions that often generate criticism (and public backlash), making them important to disclose are:

- *‘Take or pay’ and/or curtailment charges.* PPAs for variable sources such as wind and solar often specify the price per kilowatt hour delivered to the grid and that payment is required regardless of whether the electricity is used by the consumer, creating the potential for large payments for unused power. Contracts may include a specific ‘curtailment formula’ based on power that could have been delivered given meteorological conditions but was not taken by the offtaker (‘deemed generation’). The curtailment formula involves a power curve which predicts on the basis of project design the net electrical output that the project should be able to generate under particular weather conditions (e.g., solar insolation, wind speed, and direction) as measured by meteorological masts and solar meters. These power curves are frequently updated during the life of the plant to reflect actual generation capacity.

Other relevant public interests

Power systems are a public good and key provisions that affect public finances and welfare should also be in the public domain. These include:

- *Special taxation.* Tax treatment will only sometimes be covered in PPAs or in separate agreements involving the IPP – it may be in a separate agreement or not subject to a contract at all. However, this can have a significant impact on the financial performance of a project. Certainly, any non-standard tax treatment should be released.
- *Guarantees.* Any government or multinational guarantee of payments or exchange risk will significantly alter risks for the investor and should be disclosed alongside direct government or multilateral financing.
- *Performance and penalty clauses.* These can allocate risk, including transmission/interconnection risk and cover penalties to power producers who cannot deliver contracted power.
- *Social or environmental conditions.* Contracts or related documents usually also include specific environmental and social conditions, including emissions levels, water quality/use, carbon credit ownership linked to renewable production, as well as local content requirements and resettlement terms. These terms and conditions will be of

particular interest to varied relevant groups and is an area where outside verification has a particularly important role.

- *Transfers of Interest and Beneficial Ownership.* It is increasingly common for power projects to be developed by one party, then sold to another after the project becomes operational. Tracking these transfers of interest and understanding the beneficial ownership of the IPP (which is often a special-purpose vehicle) are essential for utilities/regulators to maintain their oversight ability and manage issues such as taxation or tort liability.
- *Exit and closure terms.* Finally, the contracting parties should disclose terms around expiration, transfer, and remedies in event of default and/or failure to deliver, with a particular focus on dispute resolution jurisdiction and rules (national courts, UNCITRAL arbitration, etc).

Nice-to-Have: information on the wider sector and procurement ecosystem

In addition to individual contracts and core details, best practice would build on existing transparency efforts and regularly publish documents covering (see also Annex B):

1. Any existing legal framework that dictates PPA disclosure, such as a law or policy, parliamentary oversight or approval, or securities filings.
2. Market-level information such as demand forecasts and sector planning documents, the IPP selection process, and relevant procurement plans.
3. Surrounding agreements to PPAs such as relevant:
 - concession agreements providing the producer the right to develop and operate the power plant;
 - grid interconnection agreements;
 - fuel supply and transportation agreements;
 - related fuel contract terms;
 - operation and maintenance and service agreements;
 - government financing agreements, including loan and equity agreements with third parties;
 - any sovereign support and/or credit support agreements with governments and multinational institutions.
4. Ongoing payments, such as regular information regarding capacity, fuel price, service quality, and energy provision to enable independent verification.

Responsibility for disclosure

The publication of PPAs should be mandated by governments at a policy level and overseen by state agencies or trusted third parties. Only governments can overcome the short-term collective action incentives that deter individual investors or project developers from voluntary disclosure. At the same time, investors, especially development finance institutions that measure their success in more than purely financial returns, could encourage governments to move toward greater transparency and provide the PPA contract data for their own projects (see below).

Timing of release

Greater transparency should facilitate the process of building infrastructure, not become an additional barrier to that development. The timing of PPA publication and the release of contract information is therefore critical. Transparency *during negotiations* could have harmful effects. However, a commitment to disclosure *known to all parties ahead of time* would help to create positive incentives, even if the actual release of final information would happen in sequence, with basic project data published on signature while contract terms, additional agreements, and the PPA itself could all be released within one year after financial close (See Annex B).

Scope of disclosure coverage

The prevalence of opaque PPAs means there are hundreds of undisclosed contracts in force. Whether governments decide to disclose past contracts would be a matter of negotiation between contract parties, but such a step may raise the political costs of moving toward greater transparency by igniting opposition. Thus, this proposal does not specifically call for backward-looking investigations of past contracts, but rather setting forward-looking standards for all new contracts.

Format of release and usability

The format of disclosure also matters. Scanned PDFs are not nearly as accessible as a combination of standardized data format and searchable documentation.

Reasonable exclusions

What does not need to be disclosed? A limited set of legitimate commercially-confidential information can be redacted. Experience from procurement transparency suggests the amount of information needed to protect commercial competitiveness is [relatively small](#). Exclusions might consist of private financing arrangements of the parties, costs of finance from commercial lenders, the estimated return on investment, and any internal financial or management information included in the contract. Note that debt obligations and related cost assumptions for government and/or multinational financing should not be redacted.

PPA transparency in the global open ecosystem

Any PPA transparency initiative should build on the substantial other transparency efforts underway, specifically the work of the Open Contracting Partnership and the World Bank. Governments and lenders should agree to a minimum standard of disclosure, with some core group of first-movers helping to generate momentum. A full list of potential allies involves:

- *The Open Government Partnership*. Over half of OGP members have [an active open contracting commitment](#) (in either a 2017-2019 or 2018-2020 action plan), with eleven specific commitments in infrastructure and transportation, making it the most significant policy area for open contracting under the OGP.
- *The Open Contracting Partnership*. OCP, an independent nonprofit group, has provided support to a number of OGP participants and others in terms of improving transparency and utility of information along the entire procurement chain, including in infrastructure.
- *The Extractive Industries Transparency Initiative (EITI)* mandates member countries to commit to contract transparency, by publicly disclosing the full text of any contract, license, concession, or other agreement governing the exploitation of oil, gas, and mineral resources.
- *World Resources Institute*. WRI, a global environmental research organization, has an [electricity governance initiative](#).
- *Civil society organizations* already promoting transparency, openness, and good governance. Nongovernmental and citizen groups advocating for public accountability, whether specifically in the electricity sector or not, could help to provide the bottom-up pressure for disclosure, particularly where power is unreliable or expensive and in markets like Ghana or Kenya, where secret PPAs have sparked considerable controversy.
- *Government agencies, especially the ministries of finance and energy*. Finance ministries often bear the financial and management burden of PPAs that go unpaid by the utility. Energy ministries have a strong interest in accelerating deployment of new generation facilities.

- *The World Bank, Asian Development Bank, African Development Bank, and other multilateral banks.* MDBs already support IPPs as advisors or investors and may be interested to build on their significant work around [transparency in PPPs](#).
- *The International Monetary Fund.* The IMF sets standards for public financial management and sovereign debt transparency while often providing lead analysis for debt sustainability.
- *Bilateral and multilateral DFIs.* The IFC and other DFIs (DFC, CDC Group, DEG, KfW, Proparco, FinDev Canada, NorFund, etc.) that back public-private partnerships could develop, implement, and promote routine disclosure principles for power-sector PPPs — [the Four Ps](#), perhaps. These institutions have financed billions of dollars of projects and have a small library of PPAs from the past decade that if disclosed, could establish a robust benchmark for balanced and durable power project agreements.
- *The Millennium Challenge Corporation.* This US government agency provides grants to high-performing countries that have exhibited strong governance standards. The MCC has been involved in the power sector [in a number of compact countries](#) and this proposal would fit squarely within its mandate.
- *The G20 or G7.* These fora of major economies have regularly promoted sustainable infrastructure standards. For instance, Japan has led on the creation of principles for quality infrastructure investment at [the G7](#) in 2016 and [the G20](#) in 2019, while the United States worked closely with Japan and Australia on a proposed [Blue Dot Network](#) for infrastructure governance.
- *Commercial Lenders and Institutional Investors.* This important group of equity and debt providers often base their investment decisions on threshold issues around project and market risk since they are seeking stable long-term returns. Government disclosure of existing PPAs reduces risk perceptions by providing the depth of financial data needed to demonstrate that a market has sufficiently “matured” to satisfy their risk-limits.

Conclusion: An independent *PPA Watch* could help to raise awareness and generate momentum

There is no need for an elaborate apparatus or a new multinational organization. In June 2022, the Energy for Growth Hub launched [PPA Watch](#), an initiative that tracks and scores PPA disclosure by aggregating publicly available information on power contracts in countries worldwide as part of an effort to bring attention to the issue and gather momentum for establishing new disclosure norms.

PPA Watch works in partnership with local civil society organizations to collect public data about PPA implementation over the life of projects and share information that can be used to pressure their own governments to meet minimum disclosure standards. This initiative is not only a

resource for citizen groups, but also for governments and investors by helping to raise the bar on contracting governance, creating incentives for better practice, and enriching the information available in a competitive marketplace. In so doing, PPA Watch's ultimate objective is to support efforts to deliver cheaper and more reliable electricity to people and businesses.

Annex A: Likely Objections to PPA Transparency with Informed Responses

1. *Disclosure will hurt participating firms and clear the field for companies/actors subject to lower disclosure standards.* Bringing markets up to global transparency norms raises the bar for all and serves to clarify the benefits of an open economic model. Companies and countries should encourage global adoption of transparency standards through engagement with their own governments and international agencies financing and signing PPAs.
2. *Disclosure will put near-term projects at risk.* Once a critical mass accepts basic disclosure and a norm is established, the outliers will become obvious. This should help to identify the high-quality investors from those that prefer to operate in opaque environments – which should be a red flag to governments.
3. *PPAs cannot be published because they are commercially confidential.* Data with legitimate confidentiality requirements may be kept private. Recent experience with government procurement transparency suggests the amount of information needing protection will be limited.
4. *Transparency will only complicate project negotiations.* The commitment to eventual disclosure of final details should be agreed ahead of time, but the actual disclosure of contract information would only need to happen after the project is underway, such as within one year after the commencement of operations date. Public and commercial scrutiny provides an incentive for parties to conclude sustainable deals that lead to a more stable business environment. Governments are in a better position to negotiate fair deals when they have access to contracts other than their own. Contract publication can reduce risks of negotiating contracts that deviate from legal and fiscal frameworks.
5. *Price disclosure will create confusion.* This proposal puts the decision of sharing pricing data or pricing formulas on the offtaker or their government, not on the financier/investor. Regardless, pricing information is already publicly available in many markets and in all open auctions. Misguided comparisons (e.g., solar pricing across very different markets) are already happening using oversimplified price information or anecdotally via the press. Transparency will better inform that debate. Over time, greater public discussion about energy options and pricing is healthy for a competitive marketplace – and ultimately better for high-quality investors.
6. *The World Bank already does this.* The Bank’s Framework for Disclosure in Public-Private Partnership Projects already suggests good practice is to release all of this information. The Bank also collects data in the Private Participation in Infrastructure (PPI) Project Database covering some elements of project deals. But much of this information is limited or disclosed irregularly. Making it regular and a standard for accessing responsible development finance resources would help to set a global norm.

7. *The G20 already does this.* The G20 supports transparency but has not yet taken operational steps to close the electricity contract secrecy loophole. The G20's Principles for Quality Infrastructure Investment include a commitment to, "Greater transparency, including in terms of financing and official support [to] help ensure equal footing in the procurement process." But the G20 has not yet specifically committed to contract disclosure.

Annex B: Proposed Project Disclosure and Contract Terms

At the time of signing: Basic project information

1. **Project name & location:** _____
2. **Status:** operating under construction signed proposed other _____
3. **Award process:** competitively bid directly negotiated other _____
4. **Signatories:**
Generator: known _____ unknown
Offtaker: known _____ unknown
5. **Dates:** PPA signing _____ commissioning _____ term _____
6. **Technology:** hydro solar wind geothermal HFO diesel gas coal hybrid _____ other _____
7. **Installed capacity** _____ MW and **projected average capacity factor** _____%
8. **Government guarantees** none direct via utility other _____

Within one year of financial close: Publish the PPA in full (redacted where necessary) or at least disclose core terms, including

9. **Government financing:** amount US\$ _____
Terms: grant loan. If loan term _____ rate _____ grace period _____
10. **Official international financing:** amount total US\$ _____
Number of agencies: ____
Each agency: Name: _____ Type: grant loan equity guarantee
Financing terms: _____
11. **Ownership:** government _____ %, firms _____ %
Names of all owners with % _____
12. **Special terms:** tax holidays _____ accelerated depreciation _____
13. **Inclusion of specific clauses** related to
 arbitration _____
 governing jurisdiction _____
 limits on transfer of interest _____
 disclosure of transfer of interest required? yes no
 restrictions on future changes to taxes? yes no _____
 restrictions on future changes to regulations? yes no _____
14. **Payment obligations for the offtaker**
 take-or-pay peaker alternative _____
Pricing formula undisclosed disclosed _____

15. **Termination costs** (force majeure or breach of contract)

16. **Other payment obligations** resulting from disruption of project operations

Additional data for disclosure: Market environment information

1. Legal obligation to disclose any PPA information:

- law to disclose
- policy to disclose
- parliamentary oversight
- parliamentary approval of guarantees
- securities filings
- Other _____

2. Public availability of any market information:

- National demand forecasts
- Sector planning documents
- IPP selection process
- Related procurement plans
- Other _____

3. Public disclosure of any relevant surrounding agreements:

- construction contracts
- concession agreements
- grid connection agreements
- fuel contracts
- government financing agreements
- sovereign support/other credit support agreements
- Other _____

4. Clarity on payment obligations for the offtaker

Hypothetical prices paid per available kWh if

(a) zero power is supplied to the offtaker _____ \$/kWh

(b) all power is supplied to the offtaker _____ \$/kWh