

PPPs in **energy infrastructure**:  
regional experiences in light of  
the **global energy crisis**

**SUMMARY PAPER**



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## EXECUTIVE SUMMARY

The world is going through a major energy emergency that has seen the price of basic rights, such as heating homes, soar to levels that many people simply cannot afford. A combination of factors, including the war in Ukraine, financial speculation in commodities by investors and profiteering by energy companies, have added to the impact of the ongoing Covid-19 pandemic.<sup>1</sup> While access to energy has always been an issue associated with emerging and developing countries, developed countries now face the unprecedented threat of unaffordable energy prices. However, even with the widening gulf of inequality in developed countries,<sup>2</sup> it is apparent that developing countries are in a far worse situation. A major impact of the energy crisis is food insecurity. According to the Food and Agriculture Organization (FAO) of the United Nations' 2022 Global Report on Food Crises (GRFC 2022), in 2021 alone, around 193 million people in 53 countries experienced acute food insecurity.<sup>3</sup> This figure is set to rise unless the drivers of food insecurity, including energy prices, are effectively regulated.

In response to this growing crisis, and with the implementation of the Sustainable Development Goals (SDGs) in mind, specifically SDG-7, which aims to “ensure access to affordable, reliable, sustainable and modern energy for all”, the use of public-private partnerships (PPPs) for gas, wind, hydroelectric power, solar energy and coal projects has been the preferred model for the UN and other international financial institutions (IFIs). A recent example of energy PPP implementation is the United Nations Economic Commission for Europe's (UNECE) 6<sup>th</sup> International PPP Forum. The forum reinstated its ongoing support for the global promotion of PPPs as a means for achieving sustainable infrastructure.<sup>4</sup>

At the same time, the support, endorsement and promotion of PPPs by IFIs and other multilateral institutions has been consistently critiqued by civil society organisations (CSOs) for a lack of evidence on the grounds of cost effectiveness, efficiency and transparency, as well as extensive cases of human rights abuses.<sup>5</sup>

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1 The rise in food prices is a combination of drivers, including the impact of war in Ukraine, supply disruptions and energy costs; however, attention to the role of corporate profiteering and financial speculation is key. See Lighthouse Reports (2022), *The Hunger Profiteers*, <https://www.lighthousereports.nl/investigation/the-hunger-profiteers/> and *The Wire* (2022), *Betting on Hunger: Market Speculation Is Contributing to Global Food Insecurity*, <https://thewire.in/economy/speculation-is-contributing-to-global-food-insecurity-significantly>

2 IMF (2022) *How Europe Can Protect the Poor from Surging Energy Prices*, <https://blogs.imf.org/2022/08/03/how-europe-can-protect-the-poor-from-surging-energy-prices/>

3 FAO (2022) *The Global Report on Food Crises 2022*, <https://www.fao.org/documents/card/en/c/cb9997en/>

4 UNECE (2022) 6th UNECE International PPP Forum concluded on the need to deliver green, circular, inclusive and resilient infrastructure projects to meet the SDGs, <https://unece.org/media/Economic-Cooperation-and-Integration/news/367442>

5 EPSU and Eurodad (2020), *Why public-private partnerships are still not delivering*, <https://www.eurodad.org/why-public-private-partnerships-are-still-not-delivering/>; Eurodad (2018), *History RePPeated – How public-private partnerships are failing*, <https://www.eurodad.org/historyrepppeated/>; Kate Bayliss, Maria Jose Romero & Elisa Van Waeyenberge (2021), *Uneven outcomes from private infrastructure finance: evidence from two case studies*, *Development in Practice*, 2021.31:7, 934–945, DOI: 10.1080/09614524.2021.1938513; Hall, David (2015), *Why Public Partnerships Don't Work. The many advantages of the public alternative*. Public Services International (PSI) PSIRU, [http://www.world-psi.org/sites/default/files/documents/research/rapport\\_eng\\_56pages\\_a4\\_lr\\_0.pdf](http://www.world-psi.org/sites/default/files/documents/research/rapport_eng_56pages_a4_lr_0.pdf)

Following an abundance of research and advocacy by CSOs and activists from around the world, this report provides a critical analysis of the role and operation of energy PPP projects, based on analyses of eight PPP energy case reports from countries of the Global South: Africa: Cameroon, Ghana, Kenya, Zimbabwe; Asia: India, Indonesia, The Philippines; Latin America: Peru.

The findings from these eight show that energy projects are capital intensive and costly, and are mired in a series of risks and problems, while sometimes showing a limited record of success. The implementation of energy PPP projects in these countries has heightened the existing contradictions of inadequate management, regulation and opportunities associated with profiteering, especially at a time when the needs of people should be first. Energy projects, by default, are capital intensive and require a large amount of financing, even in the public sector however, the use of PPPs creates additional problems and risks.

These problems can be summarised as follows:

- Energy PPP projects are extremely risky, expensive and complex to negotiate. This means that hidden indebtedness, inherent to the PPP model, and the transfer of high costs to consumers are often not taken into account in calculations. These costs can aggravate existing fiscal constraints that governments are facing and the ability to deliver on other public services.
- The issue of the high costs of PPPs is additionally exacerbated due to the unequal position of developing countries in the financial markets, which creates structural obstacles for their economic growth. The currencies of developing countries are at the bottom of the global hierarchy of currencies and remain disadvantaged due to fluctuating exchange rates.
- The overwhelming prevalence of foreign ownership of investors in PPP projects is another concern. Procurement contracts, expertise, accounting and auditing companies are dominated by foreign companies with limited involvement of the domestic private sector, which then repatriates profits to developed countries. All too often these companies often receive extensive tax benefits in developing countries, which compounds the issue of profit repatriation.
- Energy PPPs are mired in numerous cases of non-transparency and corrupt practices. Limited public scrutiny is also accompanied by a lack of informed consultation with civil society organisations. The use of financial intermediaries, including private equity funds, further complicates the question of accountability, owing to the complicated design and opaque business models.
- The quest for profit and a reorientation of domestic laws, including flexibilization of environmental laws, to cater for favourable outcomes for private investors has meant that ecological damage is a recurrent consequence of PPPs. Displacement of indigenous populations, land grabbing and damage to local environment and livelihoods are common issues. Many countries have enacted PPP laws for the first time and most of these laws became operational in the mid-2000s. These laws are still evolving and cannot guarantee the

protection of domestic interests, including the fundamental human rights of the citizens, including free, prior and informed consent.

## POLICY RECOMMENDATIONS

- The overwhelming evidence of problems associated with energy PPPs shows that this financing model is expensive, risky and unsustainable in the long-run. In conjunction with the need to publicly recognise the financial and other significant risks that PPPs entail, IFIs and multilateral organisations need to reconsider the promotion of energy PPPs.
- Public financing models are a viable substitute and show a proven record of sustainability and affordability, especially in energy infrastructure. This alternative model, if adequately implemented, is the most efficient solution to avoid the problem of indebtedness, environmental damage and human rights abuses, as well as lack of transparency and public accountability. To make this possible, debt cancellation of public external debt payments, the establishment of a multilateral framework for debt crisis prevention and resolution, effectively curbing international tax dodging (including corporate tax avoidance and evasion), and enhancing domestic spending through prioritising progressive taxation and other long-term internal and external finances (such as concessional and non-concessional finances) can be a concrete way forward.
- The World Bank should ensure that PPP projects are accountable, democratic and designed in the interest of the citizens of recipient countries. Informed consultation and broad civil society participation and monitoring, including by local communities, trade unions and other stakeholders, should form the main pillars of any infrastructure project. Projects should uphold the right to free, prior and informed consent, and ensure the right to redress for any affected communities. The rights of affected communities should be paramount in deliberations, planning, execution and monitoring of all projects.
- Public participation in energy PPP projects should also be enshrined in domestic PPP policies to ensure that the voices of communities directly impacted by the projects are listened to. Contracts and performance reports of social and economic infrastructure projects should also be proactively disclosed.

The citizens of the world face one of the biggest energy crises in modern memory, which threatens the lives of the most vulnerable. Governments and international institutions must prioritise progressive public sector solutions that actually address the needs of the citizens. Public-private partnerships are a highly questionable model that ultimately profit the private sector, with the public sector taking all the risk. Now is not the time to take these gambles.

## METHODOLOGY

This report highlights eight energy PPP projects, which cover different energy sources, including gas, wind, hydroelectric power and coal.

The cases are geographically diverse, focusing on Africa, Asia and Latin America. Their names are as follows: Kribi Power Station (Cameroon), Sankofa Gas Project (Ghana), Kipeto Wind Energy (Kenya), Kariba South Expansion (Zimbabwe), Teesta III Hydroelectric Project in Sikkim (India), Central Java Power Plant (Indonesia), Malampaya Deep Water Gas-to-Power Project (Philippines) and Moyobamba-Iquitos Transmission Line Project (Peru).

Projects were researched by the following organisations: African Forum and Network on Debt and Development (AFRODAD), Centre for Research and Advocacy Manipur, IBON International, Institute for National and Democracy Studies (INDIES) and José Víctor Serra Vega (recommended by the Latin American Network for Economic and Social Justice, LATINDADD).

The figures on energy PPPs in this brief are from the World Bank's Private Participation in Infrastructure Projects Database. These figures should be read as a useful indication of global trends and not as a basis for an extensive quantitative analysis. This is because although the World Bank database is the most comprehensive resource on private participation in infrastructure, it goes well beyond the definition of PPPs indicated in this brief, and it contains different definitions of PPPs, which can result in confusing reporting practices.

## Introduction

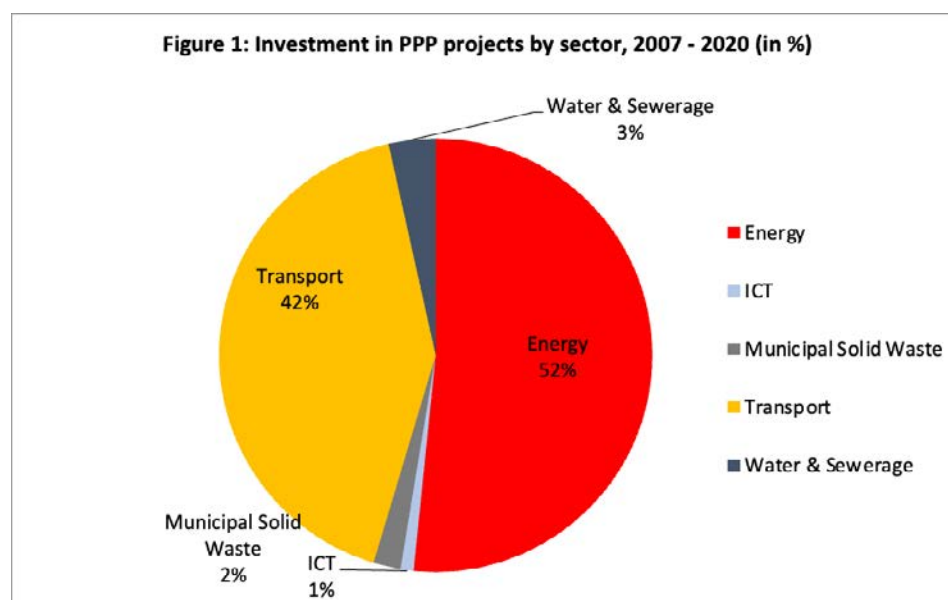
PPPs do not have a universally agreed upon definition and have been used to identify different arrangements in international development. This report focuses on the widely accepted definition of PPPs, described as a *'medium- or long-term contractual arrangement between the state and a private sector company; an arrangement in which the private sector participates in the supply of assets and services traditionally provided by government, such as hospitals, schools, prisons, roads, bridges, tunnels, railways, water and sanitation and energy; an arrangement involving some form of risk sharing between the public and private sector.'*<sup>6</sup>

In recent years, energy PPPs have expanded across the world. Indeed, energy is the second most common PPP project, after transport (see Figure 1). Energy PPPs are usually implemented as large (or mega) infrastructure projects, funded by a consortium of donors and investors. As instruments of global finance they connect

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6 Eurodad (2015), What lies beneath? A critical assessment of PPPs and their impact on sustainable development, [https://www.eurodad.org/what\\_lies\\_beneath](https://www.eurodad.org/what_lies_beneath)

transnational private capital, as well as states. In a domestic context, they are often sites of political contestation between politicians and citizens, and also carry a significant ecological impact.



Source: PPI Database, World Bank, as of August 2022

Considering these dimensions, this paper provides a background to the overall rise of energy PPPs, divided into six sections. The first section outlines the role of energy PPPs as providers of energy access, expressed in the Sustainable Development Goals (SDG-7). The second section analyses the privatisation of the energy sector and the origins of PPPs in the global push for deregulation and privatisation. Section three provides an overview of the global trends in energy PPPs, with particular attention to their continuation in the midst of different crises. Section four analyses the rise of PPPs in renewable energy. Section five provides a brief history of financing trends in energy PPPs and section six summarises the various risks of energy PPPs as illustrated in this brief. Finally, the evidence of the case studies informs the conclusion and recommendations.

## 1. Access to energy – a global overview

The proliferation of energy PPPs is presented as a required response to the adoption of SDG 7. The SDGs established in 2015 refer to areas such as health, education, water supply and resilient infrastructure, which affect the basic human rights of citizens and are key to promoting environmental stability and encouraging inclusive growth. There are 17 goals, and access to clean, modern and sustainable energy is encapsulated in SDG-7. In particular, SDG-7 aims to “ensure access to affordable,

reliable, sustainable and modern energy for all”<sup>7</sup> and includes a number of targets to be achieved by 2030. These include achievement of universal access (Target 7.1), increased share of renewable energy in the global energy mix (Target 7.2), doubling the rate of improvement in energy efficiency (Target 7.3), enhancement of international cooperation, as well as international flows to developing countries in support of clean and renewable energy (Target 7.A), and the expansion and upgrade of infrastructure associated with energy (Target 7.B). The global proliferation of energy PPPs has incorporated SDG-7 as its justification.

A brief overview of the global energy sector shows that progress in achieving SDG-7 is not advancing at the scale required. Lack of universal access to energy remains a problem for many developing countries, especially in Africa. Although global electrification levels have made substantial progress over the years, reaching 89% of the global population in 2017, 840 million people are still without access.<sup>8</sup> Affordability remains a pressing problem for access-deficit countries, with 40% of households in half of access-deficit countries not being able to afford a subsistence level of electricity consumption (30 kilowatt-hours per month)<sup>9</sup>. Disruption in access varies across the world but has severely hit access-deficit countries.

Progress towards Target 7.3, which stipulates that global rates of improvement in energy efficiency have to be doubled by 2030, has also been lagging significantly.<sup>10</sup> In comparison, the share of renewable energy in total energy consumption made several gains, with the share of renewables being highest in global electricity generation, moving from 27% in 2019 to 29% in 2020.<sup>11</sup>

Finally, environmental sustainability encapsulated in energy efficiency targets and the proliferation of renewable energy showed mixed results. Energy efficiency, simply defined as reduction in the amount of energy required to provide products and services, has been gradually improving. According to the World Bank, financing is needed to overcome the multifaceted challenges of high energy needs:

*‘Between 2018 and 2030, annual average investment will need to reach approximately \$55 billion to expand energy access, about \$700 billion to increase renewable energy, and \$600 billion to improve energy efficiency.’<sup>12</sup>*

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7 United Nations (2015), Resolution adopted by the General Assembly, 25 September 2015, Transforming our world: the 2030 Agenda for Sustainable Development (A/RES/70/1).

8 World Bank (2019), Tracking SDG 7: The Energy Progress Report 2019, Main Report, <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/517781558037625254/tracking-sdg-7-the-energy-progress-report-2019>

9 Ibid.

10 Ibid.

11 International Energy Agency (2020), World Energy Outlook 2020, IEA, Paris.

12 World Bank (2019), Tracking SDG 7: The Energy Progress Report 2019: Main Report, <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/517781558037625254/tracking-sdg-7-the-energy-progress-report-2019>



To respond to the financing needs of energy problems, energy PPPs have been the World Bank's preferred model.

## 2. The privatisation of the energy sector

The global rise of PPPs as a preferred financing mechanism for energy projects is part of the trend that moved infrastructure provision from the public to the private sector. This is underpinned by an ideological belief that elevates the role of the market and market practices in the provision of infrastructure and social services. The transformation of public infrastructure, previously supported through funding by the state and taxpayers, into a privatised asset, contingent on user fees, has had a drastic impact on energy sectors, which have previously been largely constituted by natural monopolies, especially those in electricity. Natural monopolies are single firms, which require high initial costs to operate but are characterised by declining long-term average costs and the capacity to satisfy high market demand. Many state-funded natural monopolies in the energy sector were privatised in the 1990s, broken up into different regional firms and fragmented following a deregulation of prices.

The use of public finance to leverage private investment in energy was also supported through multilateral initiatives in international development, including the World Bank's Billions to Trillions agenda (2015) and Maximising Finance for Development (MFD) agenda (2017).

Premised on enticing trillions of 'idle' private sector dollars to invest, and profit from, activities in international development, these multilateral initiatives provide guarantees for private sector solutions to address development challenges. Although PPPs are promoted at all multilateral levels, including by the the EU, UN and G20, as well as global Development Finance Institutions (DFIs), the World Bank's role in shaping the global rise of PPPs has been multifaceted and all-encompassing. The World Bank advocates for PPPs through various means, including promoting policy reforms, advice and finance.

The role of the private sector in such projects is not a panacea for enhanced access, energy efficiency and affordability. Many developing countries, which struggled with the provision of equitable access to energy and affordability, did not resolve these problems with the rise of private investments in energy. On the contrary, a general outcome of privatisation and PPPs in the global energy sector, as the regional reports demonstrate, has been the exacerbation of human rights violations with regard to vulnerable populations and indigenous populations, in particular, escalating energy prices, and an increasing global pattern of household



indebtedness, which have led to widespread protests across developed and developing countries.<sup>13</sup>

An alternative view of energy PPPs can be found in approaches that view energy infrastructure as a site of political contestation between different actors. Different stakeholders, including the private sector, the state and citizens, have different interests in advancing infrastructure projects, and the contradictory nature of their demands means that outcome of investments needs to be analysed through the question of who benefits. Researchers from SOAS University of London, define this approach as follows:

*Infrastructure policy and practices are not just a matter of how much (infrastructure's quantitative dimension as an additional source of demand creating employment and output), but also of what (infrastructure's links to productivity and growth), and, crucially of how (capturing processes of financing and delivering infrastructure) and with what effect (who gets access to what and on what terms).'<sup>14</sup>*

Based on this approach, investment in global energy PPPs on its own cannot be considered as a potential enabler of better access unless also accompanied by a fuller analysis on distribution of cost, contribution towards country debt, impact on environment, land appropriation and human rights abuses.

### 3. Global trends in energy PPPs: continuity in the midst of crises

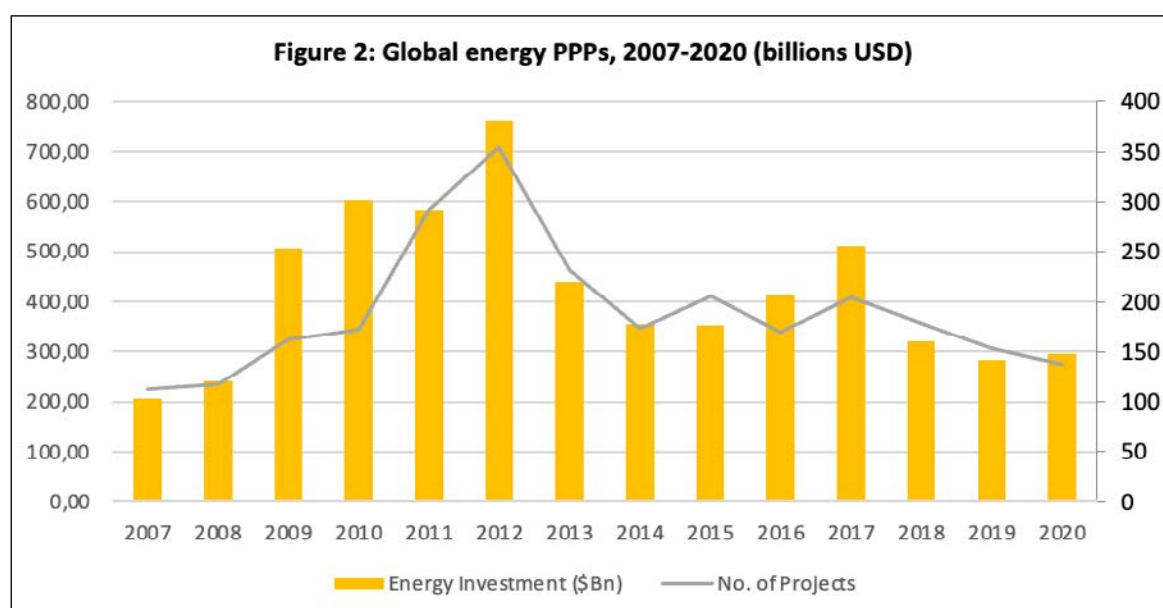
A geographical distribution of energy PPPs across regions shows that investment patterns in countries have been fairly stable in spite of three major global disruptive challenges, namely the 2007-08 Global Financial Crisis (GFC), the 2015 commodity crisis and the 2020-21 Covid-19 pandemic. The aftermath of the 2007-08 GFC resulted in delays, as well as increases in financing costs; however, the sustained push towards market liberalisation and privatisation of the energy sector, specifically in energy, ensured that many new projects continued to move forward, although at a slower pace (see Figure 2 for the consistency of trends after the peak in 2012). A brief overview of trends in the aftermath of the 2007-08 GFC shows the dominance of private finance, increased role of DFIs and high investment in upper-middle-income countries and lower-middle-income countries.

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13 Scrivener, Alex. Electricity privatisation has consistently failed from London to Lagos. So why are we still doing it?. Global Justice UK. 2016. <https://www.globaljustice.org.uk/blog/2016/05/electricity-privatisation-has-consistently-failed-london-lagos-so-why-are-we-still/>

& David Hall, David, Lobina, Emanuele, and de la Motte, Robin. Public resistance to privatisation in water and energy. Development in Practice, Volume 15, Numbers 3 & 4, June 2005. [https://docs.gre.ac.uk/\\_data/assets/pdf\\_file/0023/123665/Public-resistance-to-privatisation-in-water-and-energy.pdf](https://docs.gre.ac.uk/_data/assets/pdf_file/0023/123665/Public-resistance-to-privatisation-in-water-and-energy.pdf)

14 Van Waeyenberge, Elisa, Bayliss, Kate and Bowles, Benjamin (2021:7). Shapeshifting in UK Infrastructure Finance and the Limits of Regulation. London: ESRC/NIESR Rebuilding Macroeconomics Network Working. <https://eprints.soas.ac.uk/35152/>



Source: PPI Database, World Bank, as of February 2022

A transformative shift in PPP funding in the aftermath of the 2007-08 GFC emanated from a reduction in lending for long-term financing, especially to low investment grade countries. This led to a greater role of DFI funding for PPPs to de-risk private investors. Attracting private finance in energy PPPs thus became feasible owing to the enhanced contribution of DFI guarantees. By fulfilling the power sector companies' demand for concessional financing, DFIs continued to make PPPs an attractive investment forum across countries.<sup>15</sup> In spite of fluctuations in investment, regional investment trends were dominant in South Asia (2007-2012), followed by Latin America and East Asia from 2012 onwards (see Figure 3).

Since early 2014, commodity prices across countries fell significantly. In comparison to previous years, investment in the energy sector declined in 2015. However, in spite of diminished investment in electricity projects, electricity generation remained dominant, accounting for 93% of energy projects.<sup>16</sup> Private participation in the energy sector enabled spurs in investment henceforth; however, these were dominated by large projects in select countries.<sup>17</sup> For example, a 12% increase in investment in the energy sector in 2016, due to private participation, was mainly dominated by two countries: Brazil and Indonesia. In 2018, energy recorded its lowest investment share, and the transport sector outpaced the energy sector for the first time in 10 years.<sup>18</sup> Recovery in 2019 was 7% below the previous five-year

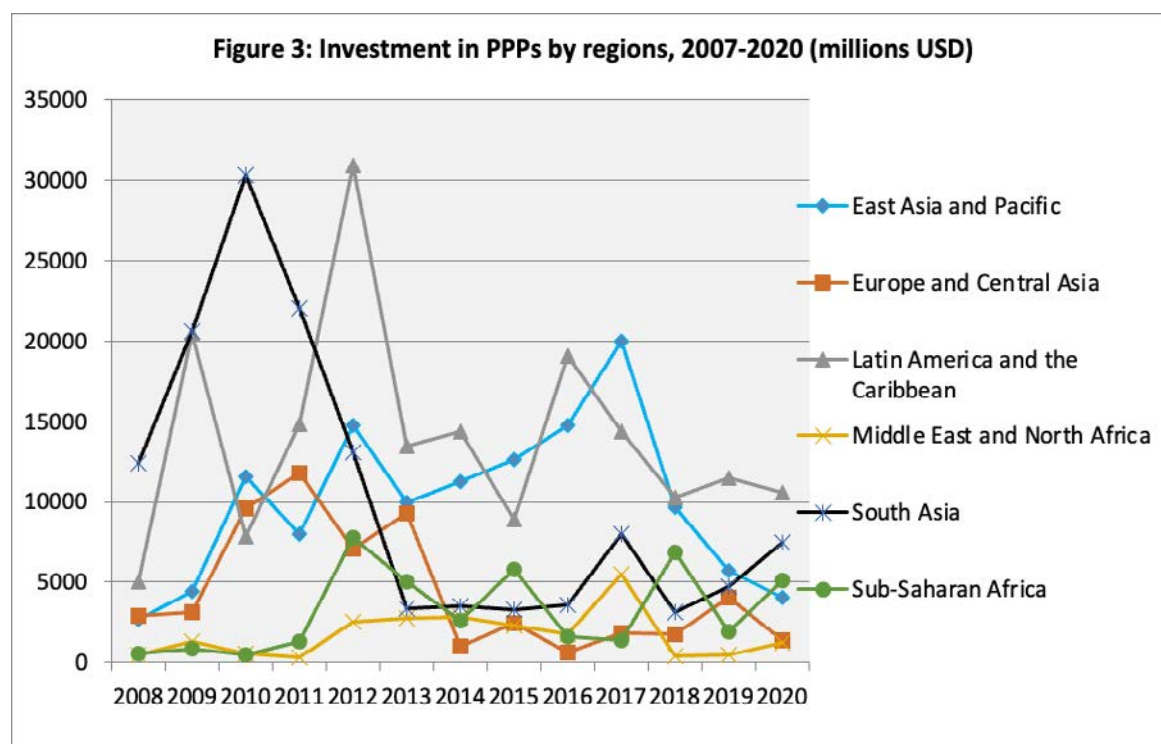
<sup>15</sup> World Bank 2010a. Financial Crisis: Threat or Opportunity for Power Sectors of ECA Countries? Washington, DC: World Bank.

<sup>16</sup> World Bank. 2015 Energy Sector Global PPI1 Update. 2015. <https://ppi.worldbank.org/content/dam/PPI/documents/Energy-Sector-Update-2015.pdf>

<sup>17</sup> Ibid.

<sup>18</sup> World Bank. 2018 Private Participation in Infrastructure (PPI). Annual Report 2018, 4. [https://ppi.worldbank.org/content/dam/PPI/documents/PPI\\_2018\\_AnnualReport.pdf](https://ppi.worldbank.org/content/dam/PPI/documents/PPI_2018_AnnualReport.pdf)

average of USD 103.5 billion.<sup>19</sup> The Petrobras gas network divestiture alone accounted for 40% of energy investment in 2019.<sup>20</sup>



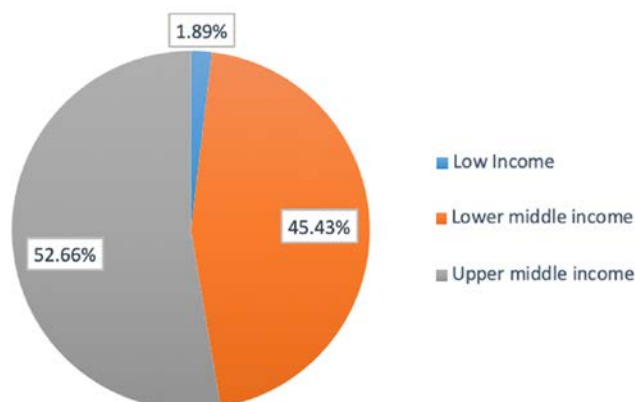
Source: PPI Database, World Bank, as of August 2022

In terms of investment by country income groups, upper-middle-income countries are marginally higher than lower-middle-income countries; however, low-income countries only received 1.89% of the entire PPP investment in 2007-2021 (Figure 4). This is significant because PPPs have a record of being implemented in developed markets to allow for faster recovery costs and mitigate against risks generally faced in underdeveloped markets. Selective bias of PPP investment against low-income countries shows that the primary motivation of such projects is to quickly secure profits as opposed to developmental objectives.

<sup>19</sup> World Bank. 2019 Private Participation in Infrastructure (PPI). Annual Report 2019. <https://ppi.worldbank.org/content/dam/PPI/documents/private-participation-infrastructure-annual-2019-report.pdf>

<sup>20</sup> Ibid.

**Figure 4: Investment in energy PPPs by country income group, 2007–2021**

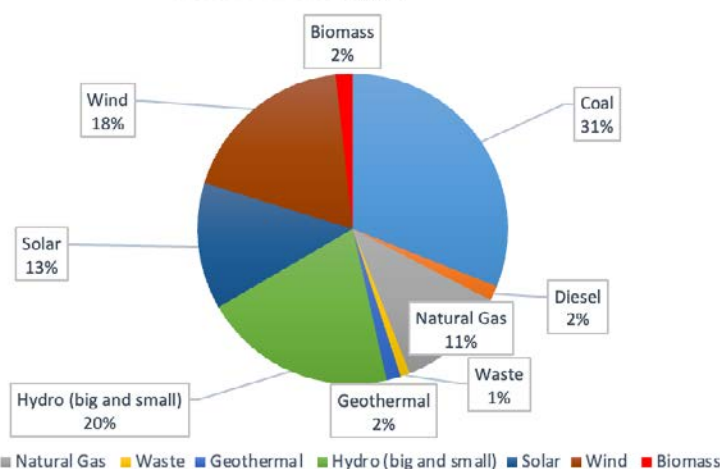


Source: PPI Database, World Bank, as of August 2022

## 4. The rise of PPPs in renewable energy

The most transformative change in the energy sector in the last two decades has been the rise of renewable energy. In the span of less than 20 years, renewable energy has gradually substituted traditional energy channels (See Figure 5). Renewable energy can be generally defined as energy which is collected from renewable resources that are naturally replenished on a human timescale. It includes sources such as sunlight, wind, rain, tides, waves and geothermal heat. Hydro, solar and wind have emerged as the most dominant forms of renewable energy sources, followed by other technologies such as biomass, waste and geothermal energy.

**Figure 5: 2007-2020 share of global investment in renewable and non-renewable energy (%)**



Source: PPI Database, World Bank, as of August 2022

The increase of global PPPs in renewable energy is a combination of multiple drivers, including increasing demand from countries following international climate policies such as the 2015 Paris Agreement, competition for energy resources, increase in oil and gas prices, and government subsidies to encourage renewable investment.

The urgency of climate change, visible through mounting evidence of planetary destruction, has been the major driver for implementing international treaties such as the 2015 Paris Agreement. This treaty sought to bind major carbon emitting countries to control their emissions through a series of initiatives, paving the way for investment in renewable energy. In 2016, the share of renewables in total final energy was almost 17.5% of total final energy consumption.<sup>21</sup> Private participation in renewable energy continued to expand, and by 2018, 94% of all new private power projects supported by the World Bank utilized renewable energy sources to generate electricity, accounting for 63% of new capacity added through PPPs. In terms of investment volume, almost 70% of electricity-generation investments by the World Bank were in renewables. In 2021, all energy projects were in the electricity subsector and 95% of these projects were renewable.<sup>22</sup> With few exceptions, most countries were also reported to have a renewable energy investment rate of 100%.

Competition for energy resources by major economies spurred regional investment across the globe. China and the US awarded state subsidies to local investors to invest in renewable sectors, accelerating global investments. These drivers were spurred on by additions to China's wind capacity, expansion of solar capacity in the US and increases in the share of renewables in final energy consumption.

It is important to note that the mere rise of renewable energy projects cannot necessarily be equated with progress towards a just transition or a step towards de-linking with environmentally harmful energy sources. Renewable energy is introduced to the existing matrix of energy sources in recipient countries and remains contingent on how different countries are able to adapt.

As a researcher from the University of Sussex has shown, countries, like South Africa, which have an electricity supply system dominated by coal cannot be considered to be moving towards a 'low carbon transition' simply through the introduction of renewable energy.<sup>23</sup> According to the case study analysis, although renewable energy contributed to the diversification of South Africa's national electricity grid, it did not alter the electricity-intensive model. The question of affordable energy to low-income households also remained unresolved. Moreover,

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21 World Bank (2016), 2016 Private Participation in Infrastructure (PPI) Annual Update, [https://ppi.worldbank.org/content/dam/PPI/resources/ppi\\_resources/global/2016-PPI-Update.pdf](https://ppi.worldbank.org/content/dam/PPI/resources/ppi_resources/global/2016-PPI-Update.pdf)

22 World Bank (2021) PPI 2021 Annual Report [PPI-2021-Annual-Report.pdf \(worldbank.org\)](https://www.worldbank.org/content/dam/pipr/documents/2021/01/ppi-2021-annual-report.pdf)

23 Lucy Baker (2015), Renewable energy in South Africa's minerals-energy complex: a 'low carbon' transition?, *Review of African Political Economy*, 42:144, 245-261, DOI: 10.1080/03056244.2014.953471; To link to this article: <https://doi.org/10.1080/03056244.2014.953471>

this model was dominated by foreign Independent Power Producers (IPPs), which are privately owned power plants, limiting the space for domestic companies. Whilst these problems can vary across countries, a focus on renewable energy alone is not enough to demonstrate sustainability since the inclusion of the private sector in PPPs is based on high returns, which can lead to a model of green extraction.<sup>24</sup> This often means that Global North countries are able to sell renewables to Global South countries at a high cost, which ultimately adds to their debt portfolios.<sup>25</sup> Additionally, renewable energy in recipient countries is often added to the existent matrix of non-renewable energy, which ends up supporting their high carbon energy model, instead of replacing it. For example, in South Africa, the introduction of renewable energy is actually being used to boost the traditional energy sources, including projects which rely on coal.<sup>26</sup>

## 5. Financing of PPPs

Multilateral and bilateral DFIs have played an instrumental role in financing all infrastructure projects in middle- and low-income countries, but financing for energy and renewable energy projects has been particularly high in recent years. Multilateral support for renewable energy projects increased four-fold from 2016 to 2017, with funding for renewables accounting for 56% of all PPP investments during that period.<sup>27</sup> Bilateral support also increased, from financing 18 renewable projects in 2016 to 45 in 2017.<sup>28</sup> In 2018, 70% of total DFI infrastructure support went to energy projects, increasing to 78% in 2020.<sup>29</sup> Sectoral investments within renewables have continued to be strong in solar, wind, geothermal and hydro.<sup>30</sup>

Accompanying the increase in the amount of funding is the fact that the nature of DFI financing has expanded its focus to the creation of a market enabling environment. DFIs have been increasingly focused on creating market-friendly conditions in recipient countries to ensure private sector returns and facilitate ease of business. These roles include technical support, business advisory support, including guarantees and risk mitigation facilities.

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24 Dunlap A (2017), The 'Solution' is now the 'Problem:' Wind Energy, Colonization and the 'Genocide-Ecocide Nexus' in the Isthmus of Tehuantepec, Oaxaca, *The International Journal of Human Rights*, 1-25, <https://doi.org/10.1080/13642987.2017.1397633>

25 Aji Max (2021). A People's Green New Deal. Pluto Press. <https://library.oapen.org/handle/20.500.12657/48775>

26 Dunlap A (2017), The 'Solution' is now the 'Problem:' Wind Energy, Colonization and the 'Genocide-Ecocide Nexus' in the Isthmus of Tehuantepec, Oaxaca, *The International Journal of Human Rights*, 1-25, <https://doi.org/10.1080/13642987.2017.1397633>

27 World Bank (2017), 2017 Energy Sector Private Participation in Infrastructure (PPI), [PPI\\_2017\\_Energy-Sector\\_fullres.pdf \(worldbank.org\)](https://www.worldbank.org/publications/ppi/2017-energy-sector-fullres.pdf)

28 Ibid.

29 World Bank (2018), 2018 Private Participation in Infrastructure (PPI) Annual Report, 23, [PPI\\_2018\\_AnnualReport.pdf \(worldbank.org\)](https://www.worldbank.org/publications/ppi/2018-annual-report.pdf)  
& World Bank (2020), 2020 Private Participation in Infrastructure (PPI) Annual Report, 20, [PPI\\_2020\\_AnnualReport.pdf \(worldbank.org\)](https://www.worldbank.org/publications/ppi/2020-annual-report.pdf)

30 World Bank (2020), 2020 Private Participation in Infrastructure (PPI) Annual Report, 20, [PPI\\_2020\\_AnnualReport.pdf \(worldbank.org\)](https://www.worldbank.org/publications/ppi/2020-annual-report.pdf)

Renewable investments are a target in many middle- and lower-income countries since low levels of financial sector development are an obstacle for investment. DFI support through debt and guarantees was thus high in 2016 and 2017. In 2020, 34 out of the 43 total energy projects financed went to renewable energy projects; however, DFI guarantees were dominated by Multilateral Investment Guarantee Agency (MIGA) in comparison to other DFIs, signalling a decreased appetite for risk mitigation.<sup>31</sup>

## The Covid-19 pandemic, energy crisis and future outlook

The global Covid-19 pandemic had a widespread impact on investment in all sectors, including infrastructure.<sup>32</sup> Projects were delayed or cancelled owing to a lack of demand, supply-chain disruptions, shipping restrictions and a general lack of liquidity. The rise of global public debt, including debt defaults in some countries, increased risk for private investments and uncertainty about the future posed major challenges for all projects.<sup>33</sup> These drivers led to an overall decline in project investment in 2021. In the energy sector, investments in the first half of 2021 totalled USD 13.4 billion, which is a 7% decrease from 2020 levels.<sup>34</sup> However, in the same period, investments in renewable energy projects remained strong, with 95% of total electricity projects being concentrated in renewables.<sup>35</sup>

As the global economy slowly adjusted to the economic slowdown of the pandemic, the war in Ukraine contributed to an energy crisis, which in turn led to another global shock. The long-term impacts of the multiple crises that the world is facing may be exacerbated by the renegotiation of PPP contracts and rise in debt associated with PPP projects, as well as the materialisation of contingent liabilities.<sup>36</sup>

However, since energy is a basic necessity, demand is not likely to change. Electricity, heating, cooking and transport are essential for day-to-day living, and our reliance on these sources is not an option. Moreover, risks have not deterred the IFI push to ‘catalyse’ the role of private finance in international development, and PPPs remain on top of their agenda.<sup>37</sup> This is also bolstered by the focus on renewable energy. According to the International Energy Agency (IEA), demand for renewables increased by 3% in 2020 and is set to grow in all sectors, including

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31 World Bank (2020), 2020 Private Participation in Infrastructure (PPI) Annual Report, 20, [PPI\\_2020\\_AnnualReport.pdf](https://www.worldbank.org/content/dam/ppi/documents/PPI_2020_AnnualReport.pdf) (worldbank.org).

32 <https://blogs.worldbank.org/ppps/covid-19-and-infrastructure-very-tricky-opportunity>

33 World Bank (2021), *International Debt Statistics 2022*, <https://openknowledge.worldbank.org/handle/10986/36289>.

34 World Bank (2021), 2021 Private Participation in Infrastructure (PPI) Annual Report, [https://ppi.worldbank.org/content/dam/ppi/documents/PPI\\_2021\\_Half-Year-Report.pdf](https://ppi.worldbank.org/content/dam/ppi/documents/PPI_2021_Half-Year-Report.pdf)

35 Ibid.

36 IMF (2021), Mastering the Risky Business of Public-Private Partnerships in Infrastructure, Departmental Paper No 2021/010, <https://www.imf.org/en/Publications/Departmental-Papers-Policy-Papers/Issues/2021/05/10/Mastering-the-Risky-Business-of-Public-Private-Partnerships-in-Infrastructure-50335>

37 IMF (2021), Private finance for development: wishful thinking or thinking out of the box?, <https://www.imf.org/en/Publications/Departmental-Papers-Policy-Papers/Issues/2021/05/14/Private-Finance-for-Development-50157>



power, heating, industry and transport.<sup>38</sup> Given the future of our energy-centric societies, citizens will ultimately bear the burden of escalation in energy and food prices and delay in investments due to the pandemic, as well as the rising demand for renewables.

## 6. Risks of energy PPPs

As the regional reports that accompany this briefing and other academic and civil society research clearly demonstrate, energy PPPs are expensive, risky and have a long record of causing multiple problems in recipient countries.

A resounding similarity in all cases is the exorbitant costs of the projects and risk to the recipient state. Energy PPPs are complex to negotiate and implement. This means that hidden indebtedness, inherent to the PPP model, and the transfer of high cost to consumers often goes unaccounted for. For instance, the Philippines Malampaya project shows high and unanticipated contingent liabilities, which are further compounded in contexts of low tax revenues and high debt levels. In the aftermath of the ongoing pandemic, the Philippines' sky rocketing debt represents a microcosm of the broader situation in developing countries. According to figures released by the IMF in 2022, a total of 22 countries were either in debt distress or at high risk of falling into debt distress.<sup>39</sup> In the absence of debt cancellation, these countries will suffer most.<sup>40</sup> According to the World Bank, in 2022, fiscal risks from current infrastructure PPP projects in South Asia alone are quite high; debt financing in India, Nepal and Pakistan makes up more than 70% of total physical investments. Expansion of projects in the region can increase this risk unless managed properly.<sup>41</sup>

In this context, the inequity of PPP models needs to be considered in the context to the IFI-led reforms, including liberalisation and privatisation in developing countries. The deregulation of energy markets in developing countries enables private operators to liberalise energy tariff rates. Variable service charges mean that consumers are forced to pay high prices for the same service, while private investors accumulate even higher profits. Moreover, the diversion of public resources to fund expensive energy PPPs constrains necessary spending for public infrastructure and social services. As evident from the reports, many countries have enacted PPP laws for the first time, and most of them became operational in the mid-2000s. These laws are still evolving and cannot guarantee the protection

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38 International Energy Agency (2021), World Energy Outlook 2021, IEA, Paris, <https://www.iea.org/reports/world-energy-outlook-2021>

39 IMF (2022) List of LIC DSA for PGRT-Eligible Countries, August 2022, <https://www.imf.org/external/Pubs/ft/dsa/DSAlist.pdf>

40 UN (2020), Intensified debt relief could save economies, prevent defaults, Department of Economic and Social Affairs, <https://www.un.org/tr/desa/intensified-debt-relief-could-save-economies-prevent-default>

41 World Bank (2022), PPP Distress and Fiscal Contingent Liabilities in South Asia, <https://documents1.worldbank.org/curated/en/099526108032233729/pdf/IDU01bffd770d209042f50bd54087dae7e38cbe.pdf>

of domestic interests, including the human rights of citizens, which are protected under international law. The removal of free, prior and informed consent through the flexibilization of environmental assessments are one example of this.

The issue of the high costs of PPPs is additionally exacerbated due to the unequal position of developing countries in the global financial markets. The currencies of developing countries are at the bottom in the global hierarchy of currencies and remain disadvantaged due to fluctuating exchange rates. The case of Zimbabwe's Kariba South Expansion project shows that currency reforms for a developing country can lead to a manifold increase in debt. In Zimbabwe, currency reforms were pursued during the implementation of the Kariba South Expansion project. As a result, payments to investors became extremely costly since the original mode of payment in US dollars was converted into Zimbabwean dollars (ZWL). The inability of recipient states to bargain their way out of structural constraints, which define their hierarchical position in the global financial system, are therefore further deepened as they implement PPPs.

The latter is an important point to consider when confronted with recurrent cases of non-transparency and corrupt practices in PPPs around the world. These are overwhelmingly posited as 'domestic' problems, emanating from a weak public sector and inefficient public bureaucracies. This approach not only fails to account for a similar lack of transparency associated with foreign private companies and investors, but it shifts attention away from the design of PPPs, which holds investors accountable only to their shareholders.

As the case of Cameroon's Kribi Power Station shows, the rise of financial intermediaries, including private equity funds, further complicates the question of accountability, owing to the non-transparency of their models. The consistent trend of impunity that enables private investors to continue their investments, despite credible allegations of human rights violations and other abuses, is notable. As the Teesta III Hydroelectric Project in Sikkim shows, arbitration to hold multinationals and private companies accountable is an expensive, lengthy and complicated process, with significant costs to recipient states. These cases are also lengthy and may not necessarily be in favour of the countries taking legal action.

The quest for profit and a reorientation of domestic laws to cater for favourable outcomes for private investors has meant that human rights abuses and ecological damage are a recurrent consequence of PPPs. While it is of course true that these are not totally absent from state-led and financed projects, the PPP model with its weak mechanisms of accountability exacerbates the dynamics that lead to them. Displacement of indigenous populations, land grabbing and damage to the local environment are common issues. The report of Peru's Moyobamba-Iquitos Transmission Line Project illustrates the degree of damage to the Amazonian environment. As with most cases, deforestation and destruction of biodiversity are irreversible outcomes of mega energy projects that require extensive land. Moreover, as Indonesia's Central Java Power Plant shows, compensation of land

settlements are not always favourable to local communities. Intimidation, threats and outright violence are also widely reported in most cases.

The question of overwhelming foreign ownership in energy PPP projects is another concern. Procurement contracts, expertise, accounting and auditing companies are dominated by foreign companies, with limited involvement for the role of the domestic private sector. The repatriation of profits by these companies to developed countries deprives recipient countries of much needed financing. The fact that these companies benefit from tax breaks in recipient countries deepens this problem.

## CONCLUSION AND POLICY RECOMMENDATIONS

The different regional reports that accompany this briefing illustrate the problematic role of energy PPPs with respect to efficiency, cost-effectiveness and environmental sustainability. As documented in various policy and academic literature, these problems are not sporadic accounts of energy PPP projects, but inherent to PPPs as a financing model. The problems with governance, poor regulative capacity and corruption in the public sector are escalated in the case of PPPs owing to the nature of their implementation, which often involves a host of external and foreign stakeholders, who are not accountable to domestic stakeholders. Against the backdrop of a global energy crisis, a different approach to the financing of energy projects is urgently needed. This requires a fundamental shift in thinking about energy as a public good, which is a human necessity and pivotal to enabling states to meet their legally binding international human rights obligations. The following set of policy recommendations advances this:









- The overwhelming evidence of problems associated with energy PPPs shows that this financing model is expensive, risky and unsustainable in the long run. In conjunction with the need to publicly recognise the financial and other significant risks that PPPs entail, IFIs and multilateral organisations need to reconsider the promotion of energy PPPs.
- Public financing models are a viable substitute and show a proven record of sustainability and affordability, especially in energy infrastructure. This alternative model, if adequately implemented and accompanied by reliable governance structures, is the most efficient solution to avoid the problem of indebtedness, environmental damage and human rights abuses, as well as the lack of transparency and public accountability. To make this possible, debt cancellation of public external debt payments, the establishment of a multilateral framework for debt crisis prevention and resolution, effectively curbing international tax dodging (including corporate tax avoidance and evasion), enhancing domestic spending through prioritising progressive taxation and other long-term internal and external finances (such as concessional and non-concessional finances) can be a concrete way forward.

- The World Bank should ensure that projects including private actors are accountable, democratic and designed in the interest of the citizens of recipient countries. Informed consultation and broad civil society participation and monitoring, including by local communities, trade unions and other stakeholders, should form the main pillars of any infrastructure project. Projects should uphold the right to free, prior and informed consent, and ensure the right to redress for any affected communities. The rights of affected communities should be paramount in deliberations, planning, execution and monitoring of all projects.
- Public participation in energy PPP projects should also be enshrined in domestic PPP policies to ensure that the voices of communities directly impacted by the projects are listened to. Contracts and performance reports of social and economic infrastructure projects should also be proactively disclosed.

The citizens of the world face one of the biggest energy crises in modern memory, which threatens the lives of the most vulnerable. Governments and international institutions must prioritise solutions that actually address the needs of the citizens. Public-private partnerships are a highly questionable model that ultimately profit the private sector, with the public sector taking all the risk. Now is not the time to take these gambles. ■

## OVERVIEW OF REGIONAL REPORTS

For access to the regional reports please scan the QR codes.

1	Cameroon	<a href="#">Experiences from Cameroon: The Kribi Power Station</a>	
2	Ghana	<a href="#">Experiences from Ghana: The Sankofa Gas Project</a>	
3	India	<a href="#">Experiences from India: The 1200 MW Teesta III Hydroelectric Project in Sikkim</a>	
4	Indonesia	<a href="#">Experiences from Indonesia: The Central Java Power Plant</a>	
5	Kenya	<a href="#">Experiences from Kenya: The Kipeto Wind Power Project</a>	
6	Peru	<a href="#">Experiences from Peru: The Moyobamba-Iquitos Transmission Line Project and Associated Substations in the Peruvian Amazon</a>	
7	The Philippines	<a href="#">Experiences from The Philippines: The Malampaya Deep Water Gas-to-Power Project</a>	
8	Zimbabwe	<a href="#">Experiences from Zimbabwe: The Kariba South Expansion Project</a>	

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