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Caribbean Infrastructure PPP Roadmap



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ESCO	Energy Service Company
EU	European Union
ICT	Information and communications technology
IDB	Inter-American Development Bank
IFC	International Finance Corporation
IMF	International Monetary Fund
IPP	Independent power producer
LNG	Liquid Natural Gas
MIF	Multilateral Investment Facility
NRW	Non-Revenue Water
OECS	Organization of Eastern Caribbean States
PPA	Power purchase agreement
PPIAF	Public-Private Infrastructure Advisory Facility
PPP	Public-private partnership
WB	World Bank
WBG	World Bank Group



Executive Summary

There is growing interest in the Caribbean in using public-private partnerships (PPPs) to provide infrastructure. Infrastructure investment needs are significant across the region, to boost economic growth and resilience. Many Caribbean governments are increasingly turning to PPPs to meet those needs, driven by a combination of tight fiscal constraints, and growing appreciation of the role of the private sector in delivering public services. This inclination reflects global trends and experience. Many countries have found that PPPs—when selected, structured, and managed well—can help make the best use of the financial and technical resources of the public and private sectors to provide improved infrastructure assets and services.

Experience with PPPs to date in the Caribbean has been mixed. PPPs are not new in the region, having been used to deliver new or improved roads, ports, airports, bulk water treatment facilities, and electricity generation plants. Many PPP projects have operated successfully for years, delivering high-quality infrastructure facilities. Others have faced challenges. In many cases, the complexity of the PPP development and implementation process has meant long delays in delivering projects; others resulted in questionable value or unexpected costs to governments or consumers. All PPP projects to date were implemented without overarching PPP policy frameworks, as described in more detail below.

This raises a question: How can Caribbean governments navigate the challenges to make the best use of PPPs to deliver improved infrastructure assets and services? This “Caribbean Infrastructure PPP Roadmap” seeks to answer this question. It reviews the outlook for PPPs in the region, by: identifying PPP project opportunities in eleven Caribbean countries¹; constraints or barriers to successful development of those project opportunities, based on previous experience; and possible actions to overcome these constraints. The Roadmap was developed by the World Bank Group, with inputs from Caribbean governments, private investors, and other development partners, and support from the Public-Private Infrastructure Advisory Facility (PPIAF).

PPP OPPORTUNITIES

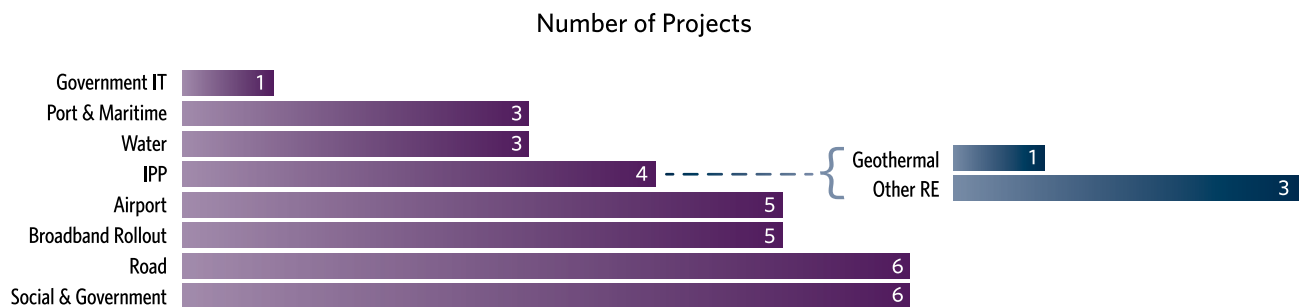
This Roadmap identified a potential PPP “pipeline” of 33 projects that are being actively developed as PPPs across 11 Caribbean countries, with a total estimated investment value of USD 2 to 3 billion. These are projects that are actively under development, albeit in some cases at an early stage, and that appear potentially viable as PPPs from a prima facie assessment—from technical, economic, commercial, legal and regulatory, and political perspectives—although detailed appraisal is needed in most cases. As such, this pipeline provides a reasonable estimate of the potential for PPP in the Caribbean in the next two to five years.

This pipeline represents a significant planned increase in the use of PPPs in several countries: notably Jamaica and Trinidad and Tobago (which together contribute half the pipeline projects); Suriname; and some Organization of Eastern Caribbean States (OECS) members such as Saint Lucia and Grenada. On the other hand, some countries with more PPP experience are moving away from PPP going forward. Particularly in the Dominican Republic, challenges with early PPPs in some sectors have led to political and public skepticism.

¹The Roadmap covers the following 11 countries: Antigua and Barbuda, Dominica, the Dominican Republic, Grenada, Haiti, Jamaica, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, and Trinidad and Tobago. These were selected as World Bank Group (WBG) client countries for which an initial desk review provided prima facie evidence of interest in PPP. In practice, several non-WBG client countries in the region have expressed an intention to make greater use of PPP. As such, the Roadmap does not present a comprehensive outlook for PPP across the Caribbean region, but could be considered to provide a representative picture. Regional actions presented in the Roadmap could in practice apply to a wider group of countries.

Transport and power opportunities remain significant—although new PPP sectors are also emerging. Figure 0.1 below shows the sector distribution of the 33 pipeline projects. Transport projects include roads (both toll roads and long-term rehabilitation and maintenance contracts); a major port concession for Jamaica’s Kingston Container Terminals; passenger ferry and cruise ship facilities; and five proposed airport concessions. In the energy sector, the focus is on diversifying energy sources, with several PPPs in development for renewable energy generation. While telecommunications services are mostly private in the Caribbean, potential PPPs in the ICT sector comprise rollout of higher-speed broadband networks, as well as government IT systems. Views on PPP in the water sector remain circumspect, outside bulk water and wastewater treatment projects being considered in Jamaica. Finally, several countries are considering PPP projects for social and government infrastructure such as health and education facilities—although the affordability of such projects remains a question in the face of tight fiscal constraints.

Figure 0.1: Caribbean PPP Pipeline by Sector



Source: Authors, based on Castalia and World Bank research, and inputs from relevant governments

Most of these projects are at a very early stage. Substantial further work is needed to assess whether the projects are viable and represent attractive PPP opportunities; and for those that do, to take these projects through to financial close and deliver improved infrastructure on the ground. Of the 33 projects identified, 16 remain at the concept stage; 13 are undergoing more detailed feasibility analysis or due diligence; and transactions are underway for only four projects. Many have been receiving support from development partners, including the World Bank Group, the Inter-American Development Bank (IDB) and its Multilateral Investment Fund (MIF), the European Union (EU), and the Bill, Hillary & Chelsea Clinton Foundation, among others.

PPP CONSTRAINTS

Experience in the Caribbean suggests that governments may face some constraints in turning this potential PPP pipeline into successful projects on the ground. Caribbean countries have implemented PPPs, and several are successfully providing improved infrastructure services. However, others have experienced problems in implementation. These problems have included unexpected fiscal costs; questionable value for money; and long delays in closing deals. Many additional projects have simply failed to launch, as evidenced by the large number of pipeline projects that have been under discussion for some time. In particular, regional project ideas have struggled to get off the ground in the face of limited mechanisms for regional cooperation.

Many of these past problems can be traced back to the lack of “PPP architecture” across most of the Caribbean. In other words, these are the types of problems that countries with successful PPP programs have typically solved by introducing PPP-specific policy and institutional frameworks—defining clear processes for managing PPPs that ensure thorough project due diligence and preparation; defining responsibilities for carrying out those processes; and building capacity to do so (both internal, and through the use of well-qualified advisors). While a few Caribbean countries have made significant recent progress towards establishing PPP policies and institutions—particularly Jamaica and Trinidad and Tobago, as shown in Figure 0.2 below—significant gaps remain across the region.

Figure 0.2: Limited PPP Policy and Institutional Architecture in the Caribbean

	Policy	Law	Detailed Guidelines	Defined Roles	Dedicated Units(s)	Staff with PPP Experience	Dedicated Project Prep Funding
Jamaica	✓ (2012)	✗	Underway	✓	✓ (DBJ & MOF)		✗
Trinidad & Tobago	✓ (2012)	✗	Underway	✓	✓ (MOF)		✗
Dominican Republic	✗	✗	✗	✗	✗		✗
Haiti	✗	✗	✗	✗	✓ (MOF)		✗
Suriname	✗	✗	✗	✗	✗		✗
OEC States	✗	✗	✗	✗	✗		✗

✓ In place (date) ✗ Absent Low Moderate High; Development Bank of Jamaica (DBJ); Ministry of Finance (MOF)

Source: Authors, based on Castalia and World Bank research

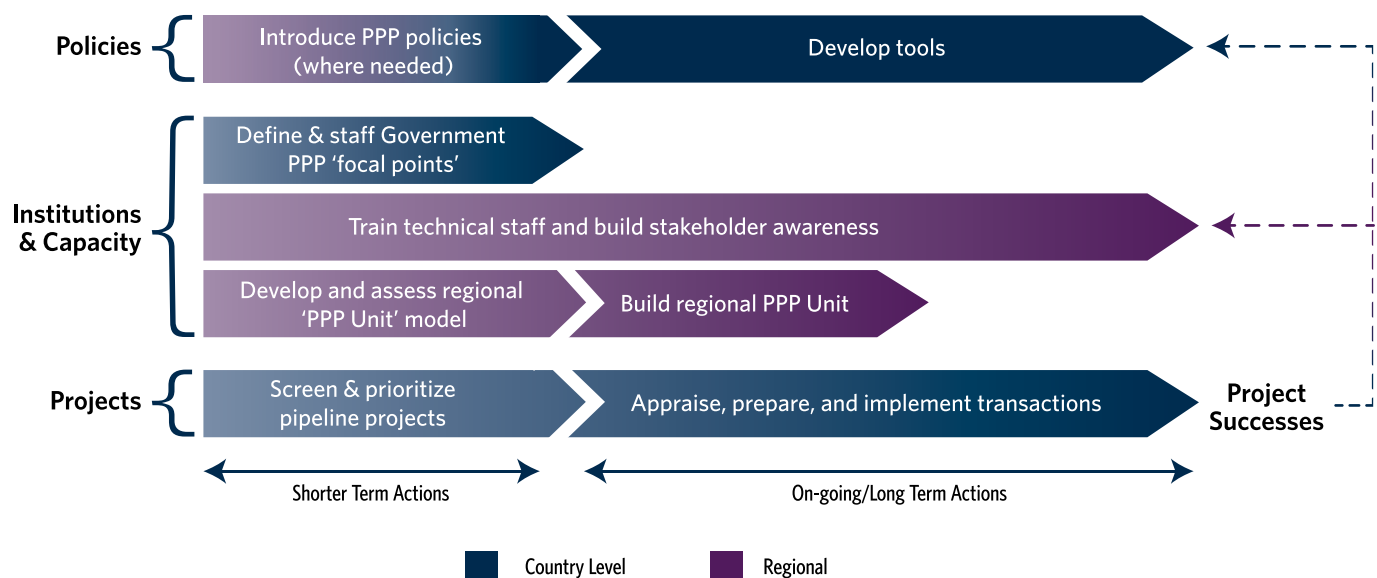
In addition to these constraints on implementing pipeline projects that appear viable, there are additional barriers to greater use of PPP in the Caribbean—that is, to further expansion of the pipeline. In a few cases, particularly in the energy sector, completion of on-going sector reform processes is needed to “unlock” opportunities for PPP. In several others, apparently viable PPP opportunities appear unlikely to be pursued in the near term due to a lack of political interest in PPP in certain countries and sectors—a barrier that is likely to be more intransigent, although it may erode over time in the face of local PPP “success stories.”

Ultimately, the small scale of infrastructure needs at the country level—particularly for smaller islands—may limit the extent of “marketable” PPP projects. Flexible approaches will be needed for countries to mitigate this inherent barrier. On the one hand, this could include greater regional cooperation—whether on regional projects in sectors such as energy and transport; or a regional approach to developing and marketing PPP pipelines that could help elicit greater interest from international investors. Caribbean governments could also consider targeting a wider range of PPP investors—including educating and encouraging local entrepreneurs to get into the business, and finding regional players that may be interested in smaller-scale projects.

THE WAY FORWARD: PPP ACTIONS

Capitalizing on the PPP potential in the Caribbean will therefore require building more robust PPP architecture, as well as moving forward with PPP projects, as summarized in Figure 0.3. Pursuing these actions in parallel will help ensure institutions and processes are founded on experience and practical realities, and build political and market momentum behind PPP programs by moving forward with deals. This could include a combination of country-level and regional actions. Since many Caribbean countries face similar needs, collective action at the regional level to support PPP makes sense: to achieve economies of scale and avoid reinventing the wheel; help foster a regional PPP market that is better able to attract investor interest; and enable pursuit of regional projects.

Figure 0.3: PPP Actions



Caribbean countries that intend to make significant use of PPPs going forward would benefit from introducing guiding policy frameworks.

As described above, of the countries covered by this Roadmap, only Jamaica and Trinidad and Tobago have recently introduced PPP policies, although several additional governments have expressed interest in doing so. While each country will need to develop and build consensus around its own policy or law, regional cooperation on PPP policy frameworks could involve developing a “model” policy, process manual, and tools from which countries could draw for national PPP policies.

Building the institutional capacity needed to effectively implement PPP policies and projects could involve actions at both the national and regional level. These actions could include:

- **Designating “PPP focal points” at the national level** by identifying teams or individuals to play a coordinating role for the PPP policy and projects, and to be a repository of experience and knowledge on PPP. Jamaica and Trinidad and Tobago have both established PPP Units to this end, in the Development Bank and Ministry of Finance respectively.
- **Reviewing the case for a regional “PPP Unit,”** given the limited scale of PPP programs, particularly on smaller islands, which may make it inefficient for each government to build a dedicated PPP team.
- **Training and capacity building** for government staff at all levels will be needed—another area ripe for regional cooperation. A regional PPP capacity-building initiative aimed at government officials involved in PPPs could address immediate needs; over time, this could expand to working with regional educational institutions to equip young graduates for future roles in PPPs, whether on the public or private side.

At the same time, Caribbean governments can move forward with developing priority PPP projects and pipelines. In the absence of well-established processes and internal capacity, caution will be needed to ensure early PPP projects establish successful precedents. The support of experienced advisors will be crucial, and governments need to be prepared to invest substantial resources in developing PPPs well. Governments may also want to take a more systematic approach to developing PPP pipelines by screening priority public investment projects for PPP potential. This can help identify the most promising projects for early PPP successes, as well as the likely scope of a PPP program in the medium term. While project and pipeline development in the near term is likely to focus at the national level, introducing such pipelines to the market in a coordinated way—for example, through a regional PPP Forum—could help create a regional “PPP market” and generate greater investor interest.

Experience suggests that undertaking these actions is likely to require external support, while governments in the region build the internal capacity and consensus needed to move PPP programs forward, and to overcome challenges of regional coordination. The World Bank and IFC are already supporting the development of PPP projects and programs in several Caribbean countries and sectors, as are other development partners such as the IDB and its MIF—going forward these efforts could increasingly be combined and coordinated. “Quick wins” could include work to harmonize national PPP policies, build common tools, and develop a regional capacity-building program.

Going forward, a lasting regional PPP support mechanism could be considered. This could take the form of a regional “PPP Facility,” comprising a regional “PPP unit” that provides both upstream and downstream transaction implementation support to Caribbean governments for national and regional PPP projects—working with development partners, and experienced external technical advisors as needed—and a revolving “PPP preparation fund” to support the activities of this regional team. The success of such a facility would depend heavily on the level of demand and commitment from governments in the region. A first step would therefore be to develop a business model for the facility, as the basis for consultation and agreement among participating governments and potential multilateral and bilateral partners.

A public-private partnership (PPP) is a long-term contract between a private party and a government agency for providing a public asset or service, in which the private party bears significant risk and management responsibility.² This differs from other forms of private-sector participation in infrastructure, such as privatization, where the ownership of an asset is transferred to private hands (often under regulation), or a joint venture, where the relationship between the public and private parties is defined in a shareholders' agreement.

There is growing interest in the Caribbean in using PPPs to provide infrastructure. Infrastructure investment needs are significant across the region, to boost economic growth and resilience. Many Caribbean governments are increasingly turning to PPPs to meet those needs, driven by a combination of tight fiscal constraints and growing appreciation of the role of the private sector in delivering public services. This inclination reflects global trends and experience. Many countries have found that PPPs—when selected, structured, and managed well—can help make the best use of the financial and technical resources of the public and private sectors to provide improved infrastructure assets and services.

Experience with PPPs to date in the Caribbean has been mixed. PPPs are not new in the region, having been used to deliver new or improved roads, ports, airports, bulk water treatment facilities, and electricity generation plants. Many PPP projects have operated successfully for years, delivering high-quality infrastructure facilities. Others have faced challenges. In many cases, the complexity of the PPP development and implementation process has meant long delays in delivering projects; others resulted in questionable value or unexpected costs to governments or consumers.

This raises a question: How can Caribbean governments successfully navigate the challenges to make the best use of PPPs to deliver improved infrastructure assets and services? This “Caribbean Infrastructure PPP Roadmap” seeks to answer this question. It reviews the outlook for PPPs in the region, by: identifying PPP project opportunities in 11 Caribbean countries³; constraints or barriers to successful development of those projects, based on previous experience; and possible actions to overcome these constraints. The Roadmap was developed by the World Bank Group, with inputs from Caribbean governments, private investors, and other development partners, and with support from the Public-Private Infrastructure Advisory Facility (PPIAF).

This report presents the “Caribbean Infrastructure PPP Roadmap,” as follows:

- Section 2 explains the rationale for PPPs in the Caribbean—it describes why and how PPPs can add value by delivering needed infrastructure effectively and efficiently;
- Section 3 presents experience with private-sector participation in infrastructure and PPP in the 11 countries covered by the Roadmap;
- Section 4 reviews emerging PPP opportunities: a potential PPP pipeline of 33 projects that are being actively developed as PPPs across these 11 countries;
- Section 5 draws on experience with PPP in the region to identify possible constraints on successful development of these projects, and barriers to greater use of PPP; and
- Finally, Section 6 sets out concrete actions that Caribbean governments can take—individually, and collectively—to build successful PPP projects and programs.

² There is no single, internationally accepted definition of PPP, and the term is often used to describe a range of contract types. This report adopts a broad definition, as used in the World Bank Institute’s “PPP Reference Guide,” available online at: <http://wbi.worldbank.org/wbi/news/2012/04/10/now-available-public-private-partnerships-reference-guide-version-10>.

³ The Roadmap covers the following 11 countries: Antigua and Barbuda, Dominica, the Dominican Republic, Grenada, Haiti, Jamaica, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, and Trinidad and Tobago. These were selected as World Bank Group (WBG) client countries for which an initial desk review provided prima facie evidence of interest in PPP. In practice, several non-WBG client countries in the region have expressed an intention to make greater use of PPP. As such, the Roadmap does not present a comprehensive outlook for PPP across the Caribbean region, but could be considered to provide a representative picture. Regional actions presented in the Roadmap could in practice apply to a wider group of countries.

Rationale for PPPs in the Caribbean

Many Caribbean governments face common challenges in delivering the quality, efficient, accessible infrastructure needed to support sustainable and inclusive growth. Energy costs in many Caribbean countries are among the highest in the world, and vulnerable to oil price shocks. Transport services, crucial for competitiveness of small island nations, are typically expensive—often reflecting diseconomies of scale, but also under-investment and inadequate maintenance (exacerbated by exposure to natural disasters), and operating inefficiencies. While telecommunications markets are competitive, gaps in services such as high-speed broadband constrain development of new industries. Most governments are aiming to overcome these challenges in the face of tight resource constraints.

Caribbean governments are increasingly turning towards partnerships with the private sector to meet these infrastructure challenges. There are two main motivations for this. First, cash-strapped Caribbean governments see PPPs as a means to create more “fiscal space” for much-needed infrastructure investment. Second, this exigency is accompanied in some cases by a shift in perception of the role of government—from historically state-led development models towards greater emphasis on private-sector-led growth. In this context, governments are interested in greater private-sector involvement in providing infrastructure through PPPs with a view to achieving improved performance and efficiency, particularly in the context of limited managerial resources in the public sector. Both these motivations for PPP in the Caribbean are borne out to some extent by international experience.

In some cases, PPPs can mobilize additional resources for infrastructure—although certainly not always, as described further in Box 2.1 on page 9. Care is needed to ensure PPPs do not simply mask the future cost of infrastructure investments. PPPs typically replace upfront capital expenditures with long-term commitments or contingent liabilities, or a combination of the two. The cost of these fiscal commitments needs to be carefully assessed and managed, particularly in the context of tight fiscal constraints. While international norms for capturing PPPs in government accounts are still evolving, there is a general trend towards recognizing some or all PPP projects as constituting public assets and liabilities—such that the impact on debt measures, for example, can be the same under both a PPP and a debt-financed traditional public procurement.

PPPs can help governments get more value out of resources spent on infrastructure. PPPs can bring private-sector experience and innovation to bear in delivering infrastructure, and provide the right incentives to improve performance. Potential advantages of PPP can include:

- **On-time, on-budget completion of investment projects.** Many public infrastructure projects in the Caribbean go over budget and are delivered late. Some countries have found PPPs can reduce these problems, because the private company is only paid once the asset is operational—creating a strong incentive to deliver on time.⁴
- **Accountability for improved service delivery.** Well-structured PPPs typically set clear standards for service performance, and financial penalties for failure to deliver to these standards. This creates clear accountability and incentives for performance that can be hard to replicate in the public sector, particularly where managerial resources are constrained.
- **Reducing whole-of-life costs.** PPPs typically integrate up-front design and construction with on-going operations and maintenance under the responsibility of one private company (rather than a series of contracts), creating an incentive to do both in a way that minimizes total project cost. In the Caribbean there are significant opportunities to minimize whole-of-life costs—such as by designing more energy-efficient schools, government offices and water utilities, and by reducing road maintenance costs through higher-quality initial construction.

⁴ In the United Kingdom, for example, the National Audit Office found in 2003 that whereas 73 percent of traditional projects ran over budget, the proportion was just 22 percent for PPP projects. Seventy percent of traditional projects were late, whereas only 23 percent of PPPs were late. (See Finlay, Browne, Chambers, and Ratcliffe, under the direction of Richard Eales, National Audit Office, 2003, “PDI: Construction Performance Report by the Comptroller and Auditor General.”) Similar results have been found in Australia—see for example, Infrastructure Partnerships Australia, 2007, “Performance of PPPs and Traditional Procurement in Australia.”

- **Sustained maintenance and service delivery.** Public infrastructure across the Caribbean is plagued by inadequate maintenance, creating a build-neglect-rebuild cycle that greatly increases the total cost of infrastructure service provision. PPPs can help curtail this cycle. Because the private partner only gets paid if the service continues to be provided at the contractually specified level, operators seek to ensure the contract provides sufficient funds for maintenance over the project life, and that this maintenance is carried out in practice.
- **Increased resilience.** Infrastructure projects in the Caribbean are particularly exposed to the high winds and heavy rainfall of tropical storms—risks that will likely intensify in coming years due to the effects of climate change. As a result, assets often deteriorate rapidly. PPPs can bring innovation, incentives and experience needed to build resilient infrastructure projects. Because their capital will typically only be recovered if the asset is operating, private investors will carefully assess climate-related risks, and identify innovative and proven approaches to manage risks. For instance, highways are more likely to be built with proper drainage, and renewable energy installations will be resistant to hurricanes.

To achieve these performance and efficiency benefits in practice, PPPs must be carefully chosen and developed. Most benefits of PPP rely on providing the right incentives for the private party to bring to bear experience and innovation in delivering infrastructure better or at lower cost. These incentives depend on a well-structured contract, with clearly-identified performance requirements and risk allocation. PPPs therefore work less well where the outputs required are difficult to specify contractually and monitor—for example, in sectors where needs can change rapidly. The potential advantages of on-time delivery and increased resilience only apply if the private sector bears the risks associated with cost overruns and climate-related events, respectively.

Moreover, PPPs can create their own risks. Their relative complexity raises the risk of problems in the contracting process—such as failure to attract qualified bidders if a project is not well-structured, or legal challenges to the process. Governments can also be tempted to eschew competitive processes and negotiate directly with potential investors—making it difficult to be sure a project is providing good value. Furthermore, as described above, the fiscal costs of PPPs are typically less clear than those of traditionally procured projects (being long term, and often contingent). Governments can underestimate these costs—leading to unexpected fiscal costs, or at worst, over-specified projects that do not provide good value for money. Section 5 below on “PPP constraints” describes examples of some of these challenges experienced in the Caribbean.

Developing and managing PPP contracts successfully is therefore demanding and resource-intensive. Achieving the benefits and avoiding the risks of PPPs come at the cost of more complex contract preparation, procurement, and management—both for the government and for bidders. These costs are somewhat fixed irrespective of project size—meaning they may simply not be justified for small-scale projects, a constraint that may bite for many potential Caribbean PPPs. Governments will also need to think carefully about whether and how they can ensure capacity to design, procure, and manage a PPP is in place before embarking on a project, as described further in the sections that follow.

Box 2.1: PPPs and “Fiscal Space”

For some projects and under some circumstances, PPPs can expand the resources available for infrastructure investment. Specifically, PPPs can help mobilize:

- **Additional revenues.** Some PPPs—such as toll roads—introduce fees that reflect the value of services provided; others can help reduce leakage in collection of existing charges. In principle, government entities could charge fees and collect revenues efficiently—in practice, incentives to do so tend to be weaker in the public sector. Private operators can also be creative in finding additional ways to use a facility to generate revenue. For example, in 2003 the Vancouver Airport Services Consortium took over operations of Sangster International Airport in Montego Bay, Jamaica, under a 30-year concession. The concessionaire doubled airport capacity and created 43 new retail spaces at no cost to the public purse. Retail revenues partially offset the cost of expansion—increasing the revenues to the government from concession fees
- **Additional capital.** Sometimes governments want to fund projects, but do not have the cash or borrowing capacity to finance the capital expenditure, even when the revenue generated from the investment would exceed the cost of debt service. In these circumstances, a PPP can unlock the inherent capital-raising ability of the asset in question by taking it out of the constrained sphere of government finance. As an example, in the early 90s, the Government of Grenada was not able to invest in expanding and improving electricity assets because of fiscal constraints. It sold a controlling stake in GRENLEC—the power utility in Grenada—to a private company, which put capital into the company, allowing it to make needed investments in improving the system.

However, while “mobilizing resources” is commonly given as a key advantage of PPPs, the reality is highly case-specific. For example, social infrastructure projects involving availability payments from the government (often called “government-pays” projects) do not create any additional **funding** to pay for infrastructure. Such projects may take up less “fiscal space” in the short term by turning an upfront capital expenditure into a long-term payment commitment, but ultimately the cost of the investment is being met from the public purse either way.

Moreover, such projects may not really mobilize more **capital** than the government could simply by borrowing—in both cases, financiers are looking to the fiscal capacity of the government, to service debt, or make availability payments over time. Such PPPs may make sense, if they reduce costs or increase asset utilization compared to conventional procurement; careful assessment is needed of affordability and the rationale for PPP.

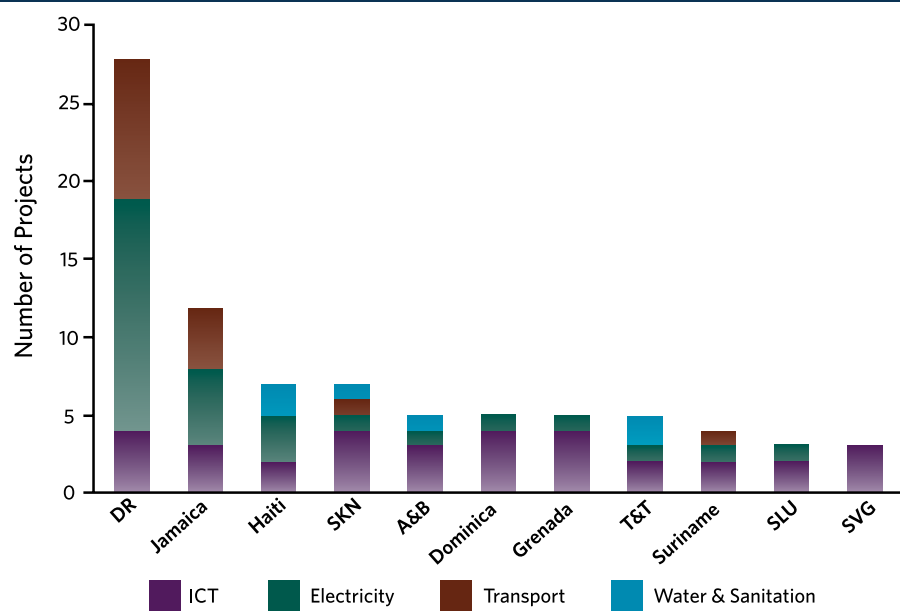
Where a PPP has its own revenue stream (“user-pays” projects), there is a greater likelihood that a PPP approach may truly mobilize additional capital beyond what the public sector would be able to provide, particularly in the borrowing-constrained context of the Caribbean. Nonetheless, such projects often create contingent liabilities, in the form of guarantees or contractual clauses under which the government bears some risk. Particularly in the context of high indebtedness, the possible costs and sustainability of accepting these liabilities needs to be assessed and monitored.

While international norms for capturing PPPs in public accounts and national statistics are still evolving, there is a general trend towards recognizing PPP projects as creating public assets and liabilities—particularly for “government-pays,” but also in some cases for “user-pays” PPPs. This means the impact on national debt, for example, may be the same under a PPP and a debt-financed traditional procurement. For Caribbean countries under International Monetary Fund (IMF) programs, the treatment of PPP liabilities under program targets—to date defined on a country-by-country basis, but increasingly requiring recognition of some or all PPP project-related liabilities—will be important in delineating the fiscal space available for investment through PPPs.

Caribbean Experience with PPP

Private investment in infrastructure is not new in the Caribbean. In the last 20 years, private infrastructure companies and lenders have invested more than USD 8.5 billion in infrastructure assets in the 11 countries included in this study, with the Dominican Republic and Jamaica the leading destinations for investment. This comprises an annual average of about 0.7 percent of GDP for these 11 countries over the past 20 years, compared to an annual average of 1.2 percent of GDP for the Latin America and Caribbean region as a whole over the same period. As shown in Figure 3.1, this investment has been concentrated in the telecommunications and electricity sectors; at the other end of the spectrum, there has been relatively limited interest in attracting private investment in the water sector.

Figure 3.1: Private Infrastructure Investment Experience in the Caribbean



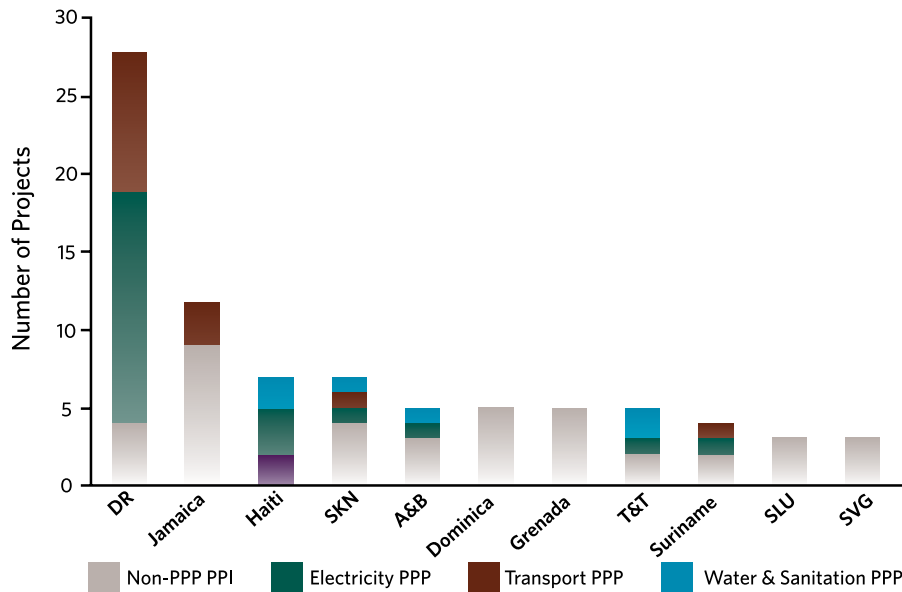
Source: Authors, drawing from Castalia research and World Bank PPI Database

All the countries included in the Roadmap have attracted private infrastructure investment, although most commonly through structures other than PPPs. These have included privatizations of public utilities, regulated green-field private investments—particularly in the telecommunications sector, which has been liberalized in most Caribbean countries—and a few joint ventures. This suggests that for the right projects, the Caribbean is an attractive investment destination. However, PPP experience is relatively limited—of the 95 infrastructure investment projects recorded in these 11 countries, fewer than half were through some form of PPP.

The use of PPPs has been more concentrated by both country and sector, as shown in Figure 3.2 below. More than half of current PPP projects in the countries and sectors covered by this Roadmap are in the Dominican Republic, and only seven of the 11 countries have made use of the PPP modality for core infrastructure.⁵ Electricity and transport sector projects dominate, primarily comprising investments in electricity generation by independent power producers (IPPs), and PPPs for rehabilitation, upgrade, or a few new investments in roads, ports, and airports. A handful of water contracts include experiments with technical assistance and lease contracts in Haiti, as well as four bulk water treatment plants elsewhere. None of the private investment in information and communications technology (ICT) has to date been under a PPP structure. Appendix A provides a list of these previous PPPs; Caribbean PPP experience by sector is also described further in Section 4.

⁵ A few additional examples in other sectors include government buildings in Saint Lucia and Trinidad and Tobago.

Figure 3.2: PPP Project Experience in the Caribbean



Source: Authors, drawing from Castalia research and World Bank PPI Database

The results of previous PPP experience in the Caribbean have been mixed. While defining success for a PPP is not straightforward—see Box 3.1 below—there are several PPP projects in the Caribbean that could reasonably be considered successful. These PPP projects have operated for years, providing quality, reliable infrastructure assets and services at a reasonable cost, and often without attracting much attention. These include, for example, Suralco, the Caribbean’s oldest PPP—a 185MW hydro plant built by Alcoa Aluminum in 1958, which continues to supply up to 60 percent of Suriname’s electricity under a 75-year power purchase agreement (PPA). At a much smaller scale, WindWatt Nevis, a micro-generator with an installed capacity of 2.2MW (equivalent to 20 percent of Nevis’ demand for electricity), commenced operations in 2010 under a 25-year PPA and has operated reliably since.

Box 3.1: Defining PPP Success

What does it mean to say that a PPP is successful? In practice, this may depend on the nature of the project, and what was the rationale or expected benefits from delivering the project as a PPP. In general, a successful PPP could be defined as one in which the asset and/or service provided by the private party meets its objectives over the project lifetime, and does so in a way that provides better value for money to the government and service users than the alternatives.

Assessing the success of a PPP in meeting its objectives is relatively straightforward—albeit only ultimately possible once the contract is concluded. For example, this could include considering whether: construction or rehabilitation was completed on time; the PPP asset or assets are continuously available at the required standards; anticipated service performance levels or improvements (for concessions of existing assets) materialize and are sustained; and the asset or service continues to contribute to meeting government objectives in the sector in question over the contract lifetime.

Assessing the success of a PPP in providing value for money is harder, because direct comparators are rarely available. Nonetheless it is possible to assess some indicators of success. For example, a PPP that ends up costing the government more than expected (that is, where contingent liabilities realize) may be considered unsuccessful in delivering value for money. It is also possible to assess whether conditions conducive to achieving value for money were in place—for example, whether the transaction process was transparent and competitive.

Not all Caribbean PPPs have achieved sustained success. Problems have included unexpected fiscal costs, questionable value for money, and significant implementation delays—while many additional potential PPP projects have simply failed to launch. These challenges are described in more detail in Section 5 below, which looks at the constraints on the successful use of PPP in the region.

None of the existing Caribbean PPPs was implemented under an overarching PPP policy or legal framework. As shown in Figure 3.3, a few governments have since begun to develop specific policy and institutional “architecture” to guide the use of PPPs. Jamaica and Trinidad and Tobago both introduced PPP policies in 2012, establishing guiding principles, criteria, processes, and roles for managing their PPP programs. Both have also created dedicated PPP teams—in Jamaica these comprise a PPP Unit in the Development Bank of Jamaica (DBJ) and a PPP Node in the Ministry of Finance and Planning; in Trinidad and Tobago, a PPP Unit in the Ministry of Finance. A PPP Unit was also established in Haiti’s Finance Ministry in 2012, although without a guiding policy, the role and mandate of this unit remains somewhat unclear.

Caribbean countries still lack institutional capacity to develop and implement PPPs. Given the limited PPP project experience outside the Dominican Republic, relatively few governments have staff with experience implementing PPPs. Moreover, where such experience does exist, it is for the most part distributed among responsible government entities. In Jamaica, Trinidad and Tobago, and Haiti, efforts are underway to consolidate and build expertise in dedicated PPP teams—in the case of Jamaica, with the benefit of building on an existing privatization team at DBJ. Despite the lack of internal PPP capacity, governments have also proved reluctant to consistently allocate sufficient funding to cover the costs (which can be significant) of experienced external advisory support needed to prepare high-quality PPP projects.

Figure 3.3: PPP Policy and Institutional Architecture in the Caribbean

	Policy	Law	Detailed Guidelines	Defined Roles	Dedicated Units(s)	Staff with PPP Experience	Dedicated Project Prep Funding
Jamaica	✓ (2012)	✗	Underway	✓	✓ (DBJ & MOF)		✗
Trinidad & Tobago	✓ (2012)	✗	Underway	✓	✓ (MOF)		✗
Dominican Republic	✗	✗	✗	✗	✗		✗
Haiti	✗	✗	✗	✗	✓ (MOF)		✗
Suriname	✗	✗	✗	✗	✗		✗
OECS States	✗	✗	✗	✗	✗		✗

✓ In place (date) ✗ Absent Low Moderate High; Development Bank of Jamaica (DBJ); Ministry of Finance (MOF)

Source: Authors, based on Castalia and World Bank research

Emerging PPP Opportunities

A ramp-up of PPP activity in infrastructure is planned across much of the Caribbean. As described in section 2, the drivers of interest in PPPs vary. In some cases this trend reflects a shift in the perceived role of government, and the potential efficiency and performance benefits of engaging the private sector in infrastructure delivery. However, a primary driving concern in almost all cases is the pressing need for investment in the context of tight fiscal constraints. Since the ability of PPPs to genuinely increase the resources available for infrastructure varies by project—as described in Box 2.1 above—this fiscal imperative is reflected in the types of PPPs that are likely to be successful across much of the Caribbean in the short to medium term.

The PPP Roadmap identified a potential PPP pipeline of 33 projects being considered or developed as PPPs across 11 Caribbean countries, with a total investment value of more than USD 2 billion. The process and criteria for identifying this pipeline are described in Box 4.1. Broadly speaking, these are projects that are actively under development—albeit in many cases at an early stage—and, from initial assessment based on experience and available information, appear viable and implementable as PPPs in the near term. As such, this pipeline provides a reasonable estimate of the potential for PPP in the Caribbean in the next two to five years.

Box 4.1: How the PPP Pipeline Projects were Identified

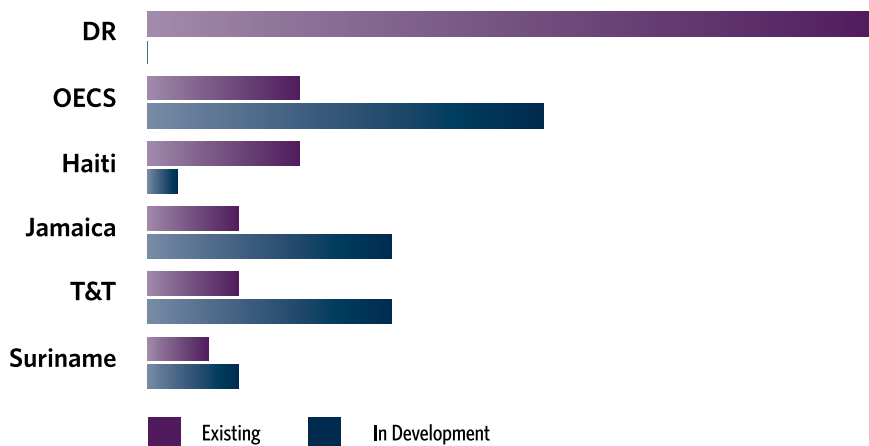
Few governments in the Caribbean have what could be called a “PPP pipeline.” Both Jamaica and Trinidad and Tobago are establishing a programmatic approach to PPP, which has involved systematically screening potential PPP projects. In these cases, the pipeline presented in this report is based on consultation with the responsible officials, and captures the pipeline projects that are in active preparation. In the remaining nine countries, the pipeline presented here was developed for this roadmap. A wider set of potential PPPs was identified through a combination of desk research, meetings with government officials, private investors and development partners; and review of any available project documentation. These were screened against the following criteria, based on experience and (limited) available data:

- **Prima facie assessment of technical and economic viability of the project**—the project would use proven technology to address a clearly-identified service need that is in line with development and public investment priorities.
- **Prima facie assessment of viability as a PPP**—the PPP would follow established contractual models, and is likely to generate a revenue stream that would make the project financially viable and attractive to investors. Where the PPP would involve government payments, these appear affordable given fiscal constraints.
- **Political support** for implementing the project as a PPP.
- **Project readiness** and feasibility of implementation within a reasonable time frame. For example, project studies are already underway or completed; and no major sector or other reforms are needed as pre-requisites for pursuing a PPP.

The resultant pipeline is far from exhaustive, since it has not arisen from a systematic review of government investment priorities to identify projects that could offer more value as PPP. On the other hand, given the early stage of development of many of the projects, there is likely to be attrition from this pipeline where further analysis reveals that some projects or PPPs are not viable in practice.

This pipeline represents a significant planned increase in the use of PPP in several countries, as shown in Figure 4.1: notably, Jamaica, Trinidad and Tobago, Suriname, and some Organization of Eastern Caribbean States (OECS) member countries such as Saint Lucia and Grenada. Jamaica and Trinidad and Tobago together comprise almost half of the PPP pipeline by number of projects. The approximate total investment value represented by this pipeline, of more than USD 2 billion, would comprise around two percent of GDP in these 11 countries; or four percent of GDP excluding the Dominican Republic, where no sufficiently firm pipeline projects were found.

Figure 4.1: Number of Current and Planned PPP Projects in the Caribbean by Country



Source: Authors, based on Castalia and World Bank research and inputs from relevant governments

On the other hand, some countries with more PPP experience are moving away from PPP going forward. Particularly in the Dominican Republic, challenges with early PPPs in some sectors has led to political and public skepticism, as described further in Section 5 on PPP constraints. In Haiti the outlook is more mixed: with general interest among many government parties in exploring the use of PPP going forward, but few specific potential projects identified to date in the face of mixed opinions across government, and limited capacity to identify and move projects forward.

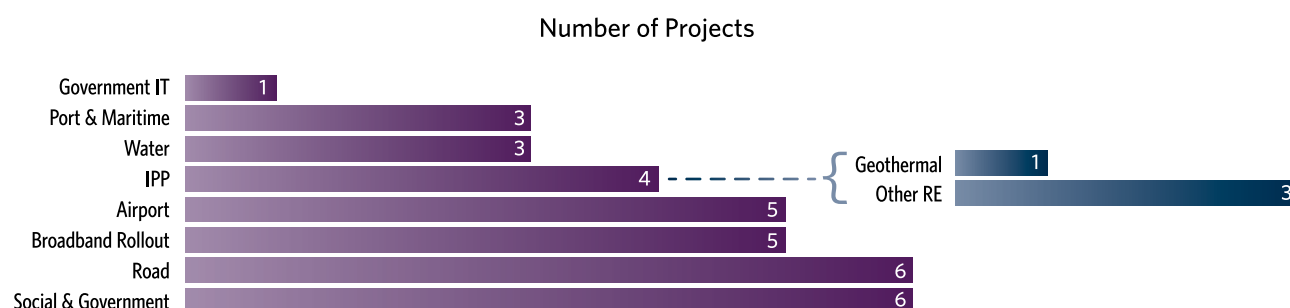
Most of these PPP pipeline projects are at a very early stage. Substantial further work is needed to assess whether the projects are viable and represent attractive PPP opportunities; and for those that do, to take these projects through to financial close and deliver improved infrastructure on the ground. Of the 33 projects identified:

- **16 remain at the concept stage**—that is, have not yet been subject to detailed analysis. Pre-feasibility analysis may have been done, or in some cases, unsolicited proposals received from investors have been favorably received but are yet to be carefully assessed. Concept-stage projects included in the pipeline are those that the relevant government is actively pursuing—that is, projects expected to proceed to the next stage in the near future. Many more project ideas exist that are not yet being actively developed or that currently face binding constraints, as described further in the sector sections that follow.
- **13 projects are undergoing more detailed feasibility analysis or due diligence.** In some cases, this work is focused primarily on the technical and economic viability of the project, with procurement and implementation options yet to be analyzed; in others, this work already includes assessment of PPP options. A few such projects are relatively well-advanced along the PPP structuring process—such as a proposed concession for the Norman Manley International Airport in Jamaica.
- **Only four projects are at the transaction stage**—that is, a competitive tender process is underway, or the government is in negotiation with one or more potential investors based on proposals received. These projects are a concession for the Kingston Container Terminals in Jamaica, for which a Request for Proposals has recently been issued; a geothermal IPP in Dominica; and a wind power IPP and cruise-ship pier in Saint Kitts.

Many of these projects are currently receiving support from development partners, including the World Bank (WB), International Finance Corporation (IFC), Inter-American Development Bank (IDB) and its Multilateral Investment Fund (MIF), European Union (EU), the Bill, Hillary & Chelsea Clinton Foundation, and others. In a few cases, this support is defined to span the full project development process; however, in most cases, further support is likely to be needed to bring the project to fruition, as described further in Section 6.

Transport and power remain significant, reflecting infrastructure investment needs—although new PPP sectors are also emerging. Figure 4.2 below shows the distribution of the 33 pipeline projects across sectors and sub-sectors. The outlook for PPP in the Caribbean in the transport, power, water, ICT, and social and government infrastructure is described in Sections 4.1 to 4.5.⁶

Figure 4.2: Current and Planned PPP Projects in the Caribbean by Sector



Source: Authors, based on Castalia and World Bank research, and inputs from relevant governments

4.1 TRANSPORT SECTOR

Of the 33 potential PPP projects identified, 13 are in the transport sector—including airports; ports and other maritime transport sub-sectors; and roads, described in turn below. This sizeable potential pipeline reflects the perceived need for investment in improved transport services—both of goods and people—to underpin economic growth in the region, including in the crucial tourism sector.

The economic case for some of these projects is likely to be inter-dependent. As noted above, the potential PPPs described in this section arise from the current investment priorities of the respective Caribbean governments. There is a risk, however, that country-level infrastructure improvements pursued in parallel—particularly in the port or airport sectors, for example—could lead to over-capacity at the regional level.⁷ In this context, regional analysis and policy coordination could be mutually beneficial to avoid over-dimensioned projects; or conversely, to identify opportunities that make sense once regional linkages are taken into consideration. In turn, port and airport investments may drive road investment priorities at the national level.

⁶ Where potential PPP projects are already in the public domain, these examples are described in the relevant section. However, it is not the intention or remit of this report to announce PPP project opportunities being considered that are not yet public knowledge. In these cases project types are mentioned without reference to specific projects.

⁷ For example, “Air Transport in the OECS: Flying Solo?” World Bank Caribbean Knowledge Series, June 2013, describes how weak inter-island air connectivity currently provides impetus for each island to develop airport facilities that collectively are over-dimensioned.

4.1.1 AIRPORTS

Virtually all governments in the region want to develop first-class airport facilities—to improve connectivity and support economic growth, in particular promoting tourism, as well as for reasons of national prestige. Airport rehabilitation or expansion projects can be good candidates for PPPs—as stand-alone assets with service obligations that can be clearly defined; with revenue streams that are typically sufficient to cover operating and capital costs; the opportunity to create value through better consumer services, such as increased retail facilities; and with a well-established PPP market, particularly in Europe and Latin America.

The Caribbean has already seen several successful airport PPPs, reflecting international experiences. Jamaica set a precedent for private participation in the airport sector in the Caribbean, with a successful PPP for its largest airport, Sangster International at Montego Bay. Under this concession since 2003, airport capacity has doubled, and 43 new retail spaces have been added, among other system improvements. The Dominican Republic has a concession agreement with a private operator in places for six airports—a largely successful PPP in a country where PPP experience overall has been mixed. Puerto Rico also recently introduced a concession for its main airport at San Juan.

Building on this experience, there is strong interest in additional airport PPPs in the region going forward, with five such projects included in the pipeline of 33 potential PPPs. The Government of Jamaica is currently preparing a concession for its second international airport, the Norman Manley International Airport in Kingston. Four additional airport concessions are under consideration in the countries covered by this Roadmap. All appear to hold the potential to be viable as PPPs, although all are at a relatively early stage, with further assessment needed of economic and financial viability. As noted above, analysis of needs at the regional level could help avoid creating excess capacity that could undermine the success of individual projects.

Scale limitations may limit the potential for substantial further PPP development in the sector beyond these near-term opportunities.

The small size of many airports in the region means they suffer from diseconomies of scale—such that expansions or upgrades may not be financially viable, even if economically beneficial—and may be too small to attract interest from experienced investors without providing substantial incentives (which may not result in value for money for the government). This challenge can in some cases be overcome by bundling—for example, the six airports in the Dominican Republic are under private operation under one master concession contract—but such opportunities within Caribbean countries are limited.

Moreover, in some countries, political and public opposition to private operation of airports persists. Airports are sometimes seen as strategic assets that governments prefer to retain under public control, particularly in small countries with only one significant airport facility. Projects that could make attractive PPPs—such as a concession for the Port au Prince airport in Haiti, where investment needs are combined with significant passenger flows—are unlikely to progress in the face of limited political interest. This dynamic may change over time as the region builds experience with airport PPPs.

4.1.2 PORTS

The Caribbean port sector consists of facilities of vastly differing sizes and traffic levels, from 1.9 million TEUs (standard containers) per year in Jamaica to just 19,000 TEUs per year in Dominica. These ports face concomitantly differing challenges. Larger ports with significant global trans-shipment business are preparing for the forthcoming expansion of the Panama Canal—which in most cases will require investment to enable ports to handle larger ships. For mid-size and smaller ports serving primarily intra-regional and domestic traffic, the primary challenge is low efficiency, which results in high port charges and import/export costs. While diseconomies of scale are inevitable in many cases, these are typically exacerbated by a history of under-investment and operating inefficiencies—particularly, of high staffing levels.

Most Caribbean ports remain publicly owned and controlled—in contrast with global trends. Globally, many governments have turned to the private sector to undertake port investment and improve operational performance. A majority of ports worldwide are now under private ownership or control—whether as fully private entities, or under some type of PPP. In contrast, only a few Caribbean countries have adopted port PPP structures that involve significant investment or risk for a private operator—although most have some level of private provision of port services (such as cargo handling or stevedoring) within ports that are publicly owned and run. In the Dominican Republic, several ports are operated under concession contracts, while one such concession is in place in Suriname for the Port of Nieuwe Haven.

Going forward, a handful of the Caribbean governments included in this Roadmap are considering port PPPs. Principal among these is the Government of Jamaica, which is currently seeking a private port operator under a concession arrangement for the Kingston Container Terminals (the largest port in the region); several fully private port investments are also under consideration as part of the government's "Logistics Hub" initiative. The pipeline of 33 potential PPPs includes only one other potential port project that is under active consideration by the relevant government.

Elsewhere the port sector remains largely in public hands for a combination of reasons, which appear unlikely to change in the immediate future. Primarily, there appears to be limited political will in some cases to cede port operations to private interests, given widespread political and public perception that ports are strategic assets. These views may change over time as more PPP ports in the region are introduced and are successful. Port reform can be especially politically challenging in cases where over-staffing is a major cause of inefficiency that a private operator would likely seek to resolve, particularly given a strong union presence in several countries. Finally, as for the airport sector as described above, some of the smaller ports in the region are simply of a very small scale, making attracting private operators difficult.

4.1.3 OTHER MARITIME TRANSPORT

The outlook for the cruise ship industry in the Caribbean appears bright. According to the Cruise Lines International Association, moderate growth in global cruise passenger numbers is expected in 2014, while the Caribbean is expected to extend its lead as the dominant cruise destination, with a 12 percent increase in cruise ship deployments to the region.⁸ However, the trend in the industry is towards larger cruise ships, with the new generation of ships capable of accommodating upwards of 5,000 passengers. Many Caribbean destinations, although popular with cruise lines, do not have adequate berthing and ancillary facilities for the expected increases in passenger arrivals.

Several Caribbean countries have turned to PPPs to develop new cruise ship pier facilities—with successful projects in Jamaica, Grenada, and Haiti. Cruise ship piers can make attractive PPPs—as stand-alone assets, with reliable revenue streams with plenty of room to add value by improving customer services. In some cases investors are cruise ship lines seeking to capitalize on synergies between cruise and pier operations—such as the Haiti Labadie Pier, and Jamaica's new Falmouth cruise ship pier, both operated by Royal Caribbean Cruises.

Several more countries are considering private investment in cruise ship piers under PPPs or similar structures. One such pipeline project is well advanced: a second cruise ship pier in Saint Kitts and Nevis, expected to accommodate up to 200,000 passengers in its first year. In September 2013, the government signed a 30-year concession agreement with marine construction company Jay Cashman, following a Memorandum of Understanding signed in May. Under the agreement, a local subsidiary will be established to design, finance, build, and maintain the pier. The pier will then be leased back to the Air and Seaports Authority (SCASPA), which will be responsible for operations. The project is now pursuing financial close, with the first cruise ship expected to dock in October 2014. Based on the roadmap discussions, several more countries are considering entering into PPP or similar arrangements for cruise ship piers, but are at too early a stage for these to be considered as pipeline projects.

⁸ Cruise Lines International Association "State of the Cruise Industry in 2014," www.cruising.org.

Another possible area of interest for PPP is in the ferry sector. Ferry transport is common between islands in the Caribbean, and is typically fully privately operated, under regulation by maritime authorities (that is, not under PPP structures). However, PPPs can be relevant where ferry projects involve a significant investment in land-side infrastructure—potentially requiring government support, or requiring a long-term investment for which specification of rights and obligations of public and private parties is beneficial. This would be the case for the one potential ferry PPP project included in the pipeline, albeit at an early stage of development—a proposed foot and vehicle passenger ferry in Haiti, for which wharf and terminal facilities would also be needed.

Given the high cost of intra-regional travel—with air travel the only option on many routes—further development of the ferry sector appears attractive, whether through PPPs or fully-private regulated structures. For several years, there have been discussions and plans to launch a regional fast ferry, as described in Box 4.2. However, these plans have not come to fruition. This is an example of the challenges in achieving the regional cooperation required to move forward with projects that could be mutually beneficial, but lack an obvious project champion.

Box 4.2: The Challenges of Regional Projects: OECS Regional Fast Ferry

Fast ferry services are common in many archipelagos of similar size to the OECS, such as regions in the Mediterranean and northern Europe. A regional fast ferry service could potentially provide cheaper travel than air service. While such a project could be largely privately implemented, regional governments would be required to grant licenses, regulate safety, and possibly regulate the tariffs of the private operator(s).

A privately-operated regional ferry service has been discussed among regional governments for many years, but has yet to come to fruition. The most recent initiative foundered in 2008-09, when one of the several governments involved declined to certify the proposed vessels as seaworthy. This illustrates the inherent difficulties of negotiating projects among multiple governments, which may have conflicting interests and fiscal objectives. None of the nine governments interviewed for this study mentioned the fast ferry as a potential PPP project.

4.1.4 ROADS

The vast majority of roads in the Caribbean are publicly run, and free to users. The only countries with privately-run toll roads, operated under concession contracts, are Jamaica and the Dominican Republic. These PPPs have been among the most difficult, in terms of risk allocation and unforeseen fiscal costs. For example, the Dominican Republic has four existing road PPPs, all of which have created unexpected fiscal costs to the government—in the face of this experience, the government does not currently intend to pursue further toll-road PPPs. Nonetheless, two governments are actively considering introducing toll-road PPP projects, and two such projects are therefore included in the pipeline. These projects will need to be carefully assessed and developed to avoid the same pitfalls. Given the low level of traffic in most Caribbean countries, and limited political interest in charging road tolls, there are likely to be very limited opportunities for “self-financing” toll-road PPPs—that is, toll roads that are financially viable based on toll revenue, without government subsidies.

Road sector PPPs do not have to be fully “self-financing” toll roads. Other options include contracts based on “shadow tolls” or availability payments, under which private contractors build or rehabilitate a road, and maintain it to a specified quality over the contract lifetime. Such contracts can help get the most value out of public investment in the road sector—for example, overcoming problems with under-maintenance that are common the Caribbean, by pre-committing to adequate maintenance over the contract lifetime. These PPPs can also incentivize and provide room for innovation in construction that improves resilience, including to climate-related risks (provided the contract is structured such that the cost of such risks is borne by the concessionaire)—such as road drainage systems that reduce the impact of storm rainfall.

A few Caribbean governments have started to transition towards performance-based PPP road contracts. For example, the Governments of Suriname and Saint Lucia have both used a form of this arrangement in which the road is guaranteed over a three-year period. Going forward, a few governments are now looking at longer-term performance-based road PPP contracts, wherein the private operator would take on a greater degree of risk—four such projects are included in the 33 pipeline projects; all at an early stage. As publicly-funded projects, the scope for significant additional PPPs in this area naturally depends on the priority afforded to road investment by governments operating under significant fiscal constraints.

4.2 ELECTRICITY SECTOR

Electricity prices in many Caribbean countries are among the highest in the world, and a significant constraint on competitiveness and growth⁹. While many of the countries covered by this Roadmap have high levels of energy access and relatively reliable supply, as shown in Table 4.1 below, lowering the cost of power by diversifying generation sources away from expensive diesel power is a priority. Haiti and the Dominican Republic are exceptions, in that expanding access (in the former) and achieving sufficient generation capacity to ensure reliable supply remain challenges.

Table 4.1: Electricity Sector—Structure and Performance

Country	Private Utility	IPPs	Independent Regulator	Access (%)	Peak Demand/Capacity (%)	% from Diesel	Average Retail Tariff (US\$/kWh)
A&B		✓		88%	60%	100%	N/a
Dominica	✓			91%	63%	75%	0.43
DR		✓	✓	98%	N/a	53%	0.20
Grenada	✓			88%	59%	100%	0.40
Jamaica	✓	✓	✓	92%	76%	95%	0.36
Haiti		✓		34%	N/a	80%	0.38
Nevis		✓		88%	60%	85%	N/a
Saint Kitts				88%	56%	85%	N/a
Saint Lucia	Mixed			88%	67%	100%	0.38
SVG				73%	49%	89%	0.36
Suriname				100%	74%	49%	N/a
T&T		✓	✓	99%	48%	1%	N/a

Source: Authors, drawing on Castalia research using Annual Reports of each Utility; access estimates for 2010 from World Bank Sustainable Energy for All database

⁹ For example, the World Bank Group's Enterprise Surveys identify electricity as one of the most serious constraints to business success in several Caribbean countries; for more details see www.enterprisesurveys.org.

The Caribbean electricity sector has seen significant PPP activity, as well as other forms of private investment—reflecting a broader political acceptance of private-sector participation in energy, compared to other infrastructure sectors such as transport or water. Of 12 electricity utilities in the countries covered by this report, four are privately owned, as shown in Table 4.1. In the smaller islands, most electricity utilities are vertically integrated, with just a couple of IPPs operating in Antigua and Saint Kitts. In the larger markets of Jamaica, Trinidad and Tobago, the Dominican Republic, and Haiti, governments have liberalized generation, introducing IPPs, and (except in Haiti) established independent regulators—although the effectiveness of these regulators varies. A regional regulator is in the process of being established in the OECS, with two prospective member countries so far.¹⁰

In this context, there is significant interest going forward in making greater use of IPPs, which in many cases can be considered as PPP arrangements.¹¹ The focus is primarily on new-generation technologies—particularly from geothermal sources—that incumbent utilities, whether government-owned or private, may not have the technical or financial capacity to pursue. Table 4.2 below describes the four such projects that are being actively developed (albeit at various stages) and hence are included in the PPP pipeline.

Table 4.2: Potential Electricity PPP Projects

Country	Project	Description	Status	Next Steps
Dominica	Geothermal generation plant	Up to 120MW potential to be developed in two phases: 10-15MW for domestic use; the remainder for export	Exploration phase complete; drilling contract signed in 2012 for first phase (domestic supply) with donor financing. A geothermal bill is being finalized to refine sector legal and regulatory framework	Prepare and procure a PPP contract for the first phase electricity generation plant
Saint Kitts and Nevis	Geothermal generation plant in Nevis	Exploration MoU signed in 2007 with West Indies Power Holdings (WIPH); potential estimated at 300MW from initial drilling	Stalled since initial exploration in face of legal challenges	Resolve outstanding legal dispute; confirm potential and technology; and assess economic and financial case for project (would involve inter-connections and export)
Saint Kitts and Nevis	North Star wind energy project in Saint Kitts	5.4MW wind farm with investment cost of USD 16.5m	Negotiations underway with developer (which has OPIC financing)—currently stalled	Government to complete evaluation of terms and conclude negotiations accordingly
Saint Vincent and the Grenadines	Geothermal generation plant	Geothermal generation—scale of potential unknown	Exploration contract signed with Reykjavik and Emera Energy in June 2013—developers granted right to exploit any resources proven within 6 months	If exploration successful, negotiate exploitation and power purchase agreements; introduce enabling legal framework for project

¹⁰ The Eastern Caribbean Energy Regulatory Authority (ECERA) is being supported by the World Bank and the OECS Secretariat. For more information, see the ECERA project information available on the World Bank website: <http://www.worldbank.org/projects/P101414/eastern-caribbean-energy-regulatory-authority-ecera?lang=en&tab=overview>.

¹¹ For the purposes of this report, IPPs operating under Power Purchase Agreements (PPAs) are considered PPPs in cases where the off-taker is a public utility, and/or where a concession agreement with government is required. The latter is typically the case where the IPP is making use of resources that are otherwise under government control—such as geothermal energy, or waste-to-energy plants. IPPs contracting with privately-owned utilities are not considered PPPs.

While these projects are being actively developed and so are included in the pipeline, they remain for the most part at a relatively early stage, and in the case of geothermal, face significant uncertainty and complexity. Of the proposed geothermal projects, Dominica's is most advanced, and has been receiving substantial support from development partners, including the European Union and the World Bank. Likewise, the Government of Saint Vincent and the Grenadines is working closely with the Clinton Initiative to develop its geothermal exploration (with potential as yet unproven). The complexities and capacity challenges facing these projects are highlighted by the experience of Saint Kitts and Nevis, where both potential energy projects are currently stalled (and in the case of the geothermal project, have been stalled for some time), given process challenges.

Several other governments expressed interest in greater use of PPPs in the energy sector, in addition to the projects listed above. Additional projects being considered are also largely in renewable energy generation, where unlike some other sectors, private investment appears politically palatable throughout most of the region. However, these projects have not yet been included as pipeline projects because of the barriers that would need to be overcome for them to move forward. These consist of:

- **Sector-wide barriers**—some governments are still in the process of developing sector-wide strategies or major reform processes that would need to precede any private investment. For example, the Governments of Suriname and Grenada both expressed strong interest in IPPs for electricity generation, but would first need to complete on-going or proposed sector reform processes. The Government of Haiti is also considering sector reform options that could involve the private sector more widely across the electricity sub-sectors, as a way to improve performance and enable investment, but this process is at an early stage.
- **Technology barriers**—some renewable energy technologies that are attracting interest are new to the region. In particular, four countries expressed interest in waste-to-energy projects, but acknowledge that this technology is as yet unproven at scales that would pertain in the Caribbean.

Furthermore, energy generation and supply is a sector in which there may be significant value from regional solutions, which have yet to be fully explored. All of the geothermal projects described above, if developed to their full potential, would have regional implications, as they would involve cross-border power supply (although the viability of cable inter-connections has yet to be established). Other regional solutions have been mooted, in particular a regional approach to supply of Liquid Natural Gas (LNG) and conversion of generation facilities to run on LNG. This idea is at an early stage, and has yet to gain traction in the absence of a clear champion or effective regional coordination mechanism. The IDB is supporting a feasibility study for a regional approach to LNG supply, compared to alternatives such as greater investment in renewable energy generation, with a view to building consensus and a coalition around such a project.

There may also be opportunities for PPP in performance-based energy efficiency contracts, although no such projects are currently being pursued. Such opportunities typically involve governments working with a private operator to improve the energy efficiency of public buildings and installations, particularly where these are currently energy inefficient or intensive—an attractive option in light of high electricity costs. For example, under such a model, a private operator or energy service company (ESCO), could invest in retrofitting a government building with energy-efficient lighting and cooling systems and receive payments based on the reductions in energy consumption over a multi-year period.

4.3 WATER SECTOR

Caribbean water utilities, all publicly owned companies, have generally performed well in terms of access—but are characterized by inefficiencies.¹² Except in Haiti, more than 80 percent of the population in the countries covered by this study has access to improved water and sanitation, although supply may be unreliable. Key efficiency issues include overstaffing—a typical Caribbean water utility has about eight staff per 1,000 connections, compared to the industry best practice of fewer than four. Large losses are a major challenge. “Non-revenue water” of about 40 to 60 percent is normal in Caribbean water utilities—high in comparison to about 20 to 30 percent achieved by many emerging-market water utilities, and best practice levels of under 20 percent in some countries. Caribbean water utilities also suffer from the high cost of electricity in most countries in the region.

Notwithstanding the apparent potential for performance improvements, there is limited interest in private investment or PPP in water and sanitation. This is mainly due to political and public opposition to private involvement in the sector, which is seen as inherently “non-commercial.” The few examples of PPP or other forms of private investment in delivery of water and sanitation services have had limited success. For example:

- In **Haiti**, an affermage contract is in place for the city of Saint Marc, and a management assistance contract was signed in 2011 for Port Au Prince. However, experience with these contracts is not encouraging. In Saint Marc, the operator has not been able to charge cost recovery tariffs and is operating at a loss. In Port au Prince, the contractor (Suez) has improved quality of service and financial performance, but has not transformed the utility into a self-sustaining entity.
- In **Saint Lucia**, the government attempted to introduce private participation in the water sector, but failed. In 2008, the government corporatized WASCO and established a framework for partial privatization of the utility. However, the transaction was aborted at the finish line when a losing bidder threatened legal action against the government, with lack of public support an exacerbating factor.

There may be greater scope for other types of PPP in the water sector that are not customer-facing. There are four examples of PPPs for bulk water treatment plants—one each in Antigua and Nevis, and two in Trinidad (the latter three being desalination plants)—in each case selling water under a bulk water supply agreement to a publicly run utility. Similar arrangements are currently being considered in Jamaica for both bulk water supply and wastewater treatment plants. These comprise the three water projects included in the pipeline of 33 potential PPPs.

Other more limited PPP arrangements could include performance-based contracts for reduction in non-revenue water (NRW), or energy efficiency of water utilities. NRW reduction projects can be structured in which the private operator shares the costs of replacement of leaking water pipes, in return for long-term payments based on reductions in NRW. Under performance-based energy efficiency contracts with ESCOs, as described in section 4.2 above, private contractors would audit the energy consumption of water utilities (which in the Caribbean tend to be high), and receive payment on reductions in energy costs. However, we found no Caribbean government to be actively considering these types of engagements in the water sector yet.

4.4 TELECOMMUNICATIONS SECTOR

Ownership and operation of telecommunications services in most Caribbean countries is already in private hands. Of the 11 countries in this study, government-owned telecommunications utilities remain only in Antigua and Barbuda, Suriname, and Trinidad and Tobago (in all cases alongside private companies operating under licenses). As in most of the world, the sector has seen significant growth in the last two

¹²Source: Castalia benchmarking of Caribbean water utilities.

decades, particularly in the mobile sector. Penetration of mobile services is about or more than 100 percent in almost all the countries covered in this study, with Haiti (60 percent) and the Dominican Republic (87 percent) as notable exceptions.¹³

However, infrastructure gaps remain, which PPP arrangements could help address. In particular, broadband penetration remains low, at between five and 30 percent in the countries covered by this study. The motivation for PPP in telecommunications is primarily in sub-sectors where incentives or anchor purchase commitments from the government may be needed to prompt further private investment. This could include domestic backbone networks for higher-speed broadband, submarine cable infrastructure within and across borders, and national and regional internet exchange points (IXPs). Several governments in the region are actively pursuing PPP projects in the ICT sector, and four such projects are included in the PPP pipeline.

The World Bank is supporting the development of ICT infrastructure under PPPs through its Caribbean Regional Communications Infrastructure Program (CARCIP) project.¹⁴ CARCIP is working with governments in the region to assess and develop ICT infrastructure projects addressing the gaps described above—both at the national level, and those with regional implications. The project also includes development of policy and regulatory frameworks needed to support these investments, and support to innovative IT industries that would thereby be enabled. The CARCIP project is currently working actively with the Governments of Saint Lucia, Saint Vincent and the Grenadines, and Grenada, comprising three of the four pipeline projects in the ICT sector. The lack of government capacity and processes for procuring PPPs—both at the national and regional level—have been identified by the CARCIP team as potential bottlenecks for these projects.

4.5 SOCIAL AND GOVERNMENT INFRASTRUCTURE SECTORS

While the focus of the Roadmap is on core infrastructure—transport, power, water and telecommunications—interest in PPP in the region goes beyond those sectors. Globally, some governments have used PPPs to deliver investment projects in social sectors (such as schools, healthcare facilities, or prisons), as well as government infrastructure such as office buildings. Several Caribbean governments are looking into these types of PPP projects.

Most of these projects do not generate revenues from users, and are remunerated by government payments over the contract lifetime.

The rationale for PPP in these cases is based on more effective or efficient provision of these assets and services, drawing on private-sector expertise and incentives. These PPPs do typically also change how projects are reflected in budgets and national accounts in a way that can appear to create fiscal space—converting an upfront capital expenditure for traditional procurement (often debt-financed) into a recurrent expenditure over the project lifetime. However, since in both cases the government pays for the asset in full, there is no substantive difference between these two arrangements. Governments must be careful to assess the long-term costs of these types of PPPs.¹⁵

Six of the 33 pipeline PPP projects are in the social and government infrastructure sectors. These comprise two healthcare projects, two education projects, one government office complex, and one set of court buildings, all of which are still at the concept stage. For example, the Government of Trinidad and Tobago, with support from the IDB's MIF, is in the process of engaging advisors to assess the feasibility and business case for 10 early childhood education centers and primary schools, and three imaging and laboratory diagnostic centers, both under PPP contracts.

¹³ Source: <http://www.itu.int/en/ITU-D/Statistics/Pages/stat/default.aspx>, accessed January 2014.

¹⁴ For more information on CARCIP, see <http://www.ctu.int/carcip/143>.

¹⁵ While international norms for capturing PPPs in public accounts are still evolving, there is a general trend towards recognizing such projects as constituting public assets and liabilities. In this case the impact on national debt, for example, is the same under both a PPP and a debt-financed traditional procurement.

Learning From Experience: PPP Constraints

Experience suggests Caribbean governments may face constraints in developing successful PPP projects and programs, notwithstanding the high level of interest and promising initial PPP pipeline described in Section 4. These constraints are of two broad types. The first are implementation challenges that Caribbean governments may face in turning the potential PPP pipeline into successful projects on the ground. The second are barriers constraining further expansion of that pipeline—that is, limiting the number of viable PPP projects in the region. This section explores these constraints, with a view to identifying whether and how they could be overcome by governments to enable successful use of PPP in the Caribbean.

5.1 IMPLEMENTATION CHALLENGES

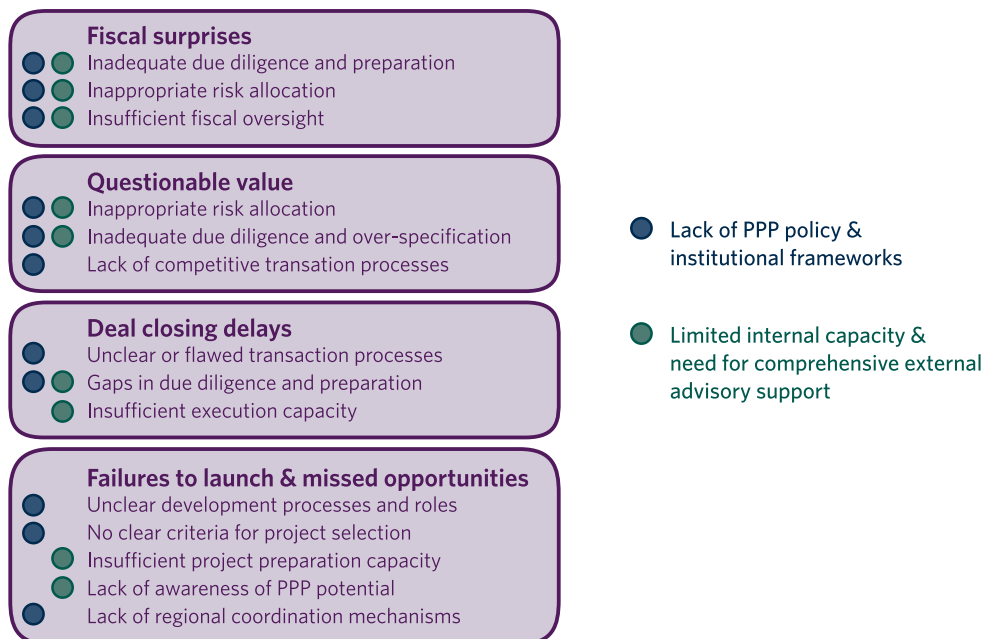
Experience in the Caribbean suggests that governments may face implementation challenges in turning the potential PPP pipeline into successful projects on the ground. Caribbean countries have implemented PPPs, as described in Section 3, and several are successfully providing improved infrastructure services. However, others have experienced problems in implementation. It is worth learning from this experience, to understand what constraints may be faced in developing the potential PPP pipeline projects presented in Section 4 above. Previous implementation problems for PPPs in the Caribbean have included:

- **Fiscal surprises.** There are several examples of PPP projects giving rise to fiscal surprises, or unexpected fiscal costs—including for example the well-documented cases of toll roads in the Dominican Republic, and the first phase of the Highway 2000 in Jamaica. These surprises can arise for several reasons. Firstly, insufficiently rigorous project due diligence and planning can mean a project is simply poorly specified. Second, governments may have accepted risks that they may not be best-placed to manage and that could have been transferred to the private sector. Finally, even where risks accepted by governments are reasonable, insufficient fiscal oversight can mean these risks (and in some cases, even direct project liabilities) are accepted without careful assessment of their costs and potential fiscal impacts.
- **Questionable value for public money.** Where fiscal surprises arose from poor project specification and risk allocation described above, this implies not just that the cost was unplanned (creating fiscal challenges), but also that it may not have been the best use of government resources. A second problem with value for money may arise in the project development process: many PPP projects in the Caribbean—including five of those in the current pipeline—originate from unsolicited proposals. These are often received at a high political level, then directly negotiated with the originating investor. In such circumstances, without competitive pressure, it is very hard to know whether the project provides value for money.
- **Deal closing delays.** Many projects end up taking significantly longer than originally expected to reach financial close. Challenges always arise in the course of developing PPPs—the question is whether these could have been anticipated and dealt with more efficiently if the process were better defined, and due diligence and project preparation more comprehensive. In some cases, lack of experience in PPP development may give rise to misunderstandings, resulting in challenges or delays to processes, such as those experienced in both IPP projects currently being developed by the Governments of Saint Kitts and Nevis.

In addition to these implementation problems, there are many more potential PPP projects that have simply failed to launch—evidenced by the number of PPP concepts that remain in the pipeline despite having been in discussion for some time. Many governments are interested in PPPs and have ideas for projects (some originating from the private sector through unsolicited proposals), but have not succeeded in moving these projects forward. This can be simply due to a lack of clarity on how best to do so, in the absence of defined project selection criteria, processes, and responsibilities, particularly given limited PPP experience among government staff at all levels. Lack of regional coordination mechanisms, in particular, has resulted in very little progress on potentially beneficial regional PPP projects that lack an obvious champion.

Many of these PPP implementation problems can be traced back to the lack of “PPP architecture” across most of the Caribbean, as illustrated in Figure 5.1 below. In other words, these are the types of problems that countries with successful PPP programs have typically solved by introducing PPP-specific policy and institutional frameworks—by defining clear processes for managing PPPs that ensure thorough project due diligence and preparation; defining responsibilities for carrying out those processes; and building capacity to do so (both internal, and through the use of well-qualified advisors). Section 6 below describes actions that the Caribbean governments could take—individually and collectively—to overcome these constraints and move forward successfully with the pipeline projects described above.

Figure 5.1: Constraints Arising from Limited PPP Policy and Institutional Architecture



5.2 BARRIERS TO PPP

PPP constraints in the Caribbean go beyond implementation challenges, to barriers that may limit the extent of viable PPP projects—that is, constrain further expansion of the pipeline. These include the need for major sector reform as a pre-requisite to implementing PPPs; lack of political support for private investment in infrastructure, whether in particular sectors or in a country as a whole; and limited marketability of smaller-scale PPP projects. These barriers, and their implications for the outlook for PPPs as a whole, are described in turn below.

Need for major sector reform

Successful PPPs need conducive and stable legal, regulatory, and policy environments in the relevant sectors. In some cases, this means the use of PPPs in a sector is dependent on a broader sector reform process. This applies to the electricity sector in a few Caribbean countries, as noted in Section 4.2 above. For example, where a publicly-owned utility is loss-making due to tariffs falling below cost-recovery levels, tariff review and reform may be needed to enable that utility to be a credible public partner for IPP investors in new-generation assets. PPP opportunities also depend on the sector structure. In some of the smaller Caribbean states, the electricity utility was privatized as a vertically-integrated monopoly—creating a legal barrier to the use of PPPs in the sector that interested governments would need to work with incumbent operators to overcome. In Haiti, as noted above, clarity on broader sector reform is needed before specific PPP opportunities (whether in distribution or generation or both, for example), could be identified.

The need for legal and regulatory reform need not always be a barrier to pursuing a PPP. In some cases—typically for one-off PPP projects such as concessions for existing assets or networks—the process of developing a particular PPP project can include making changes to a sector law or regulatory framework. This can cause delays if not carefully planned—for the Sangster International Airport concession in Jamaica, for example, the need to amend sector legislation emerged during project preparation and took several years to resolve—but in the context of a clear sector strategy, and provided there is political support for such changes, it does not necessarily constitute a barrier to pursuing the PPP.

Lack of political support

A further barrier to the greater use of PPPs in the Caribbean is the level of political interest in private-sector involvement in infrastructure. Whereas the 33 projects in the PPP pipeline presented in this Roadmap all appear to have support from their respective governments, there are many more project ideas or potential areas where PPPs could make sense but where they lack political support, or indeed face political opposition. This dearth of political will has many roots, including skepticism of individual projects and foreign investors in general. However, there are two broader reasons why potentially beneficial PPP projects may not attract political support:

- **Experience with PPPs that did not work as hoped.** For example, the reluctance of the current administration in the Dominican Republic to do more PPP projects can be traced largely to bad experiences with previous projects—unexpected fiscal costs from toll roads, as described above, and perceived high costs of electricity from IPPs. In this case, a more detailed review of PPP experiences could help—to identify what went wrong, and whether and how these problems could be overcome to enable a successful return to using PPPs in the future.
- **Policy preference for state-directed development and public ownership.** There is a long tradition of state ownership of utilities and other infrastructure in the Caribbean, and in some countries and sectors, there is still a political consensus in favor of the state-ownership model. For example, political and public preference for public ownership and delivery of water services remains widespread in the region.

This barrier, although currently a binding constraint in some countries and sectors, may erode over time as experience with PPPs in the Caribbean grows. Attempts to “push” PPPs absent broad political and public support are rarely successful. Nonetheless, international experience suggests that project successes in some sectors and countries can create “demonstration effects” elsewhere—gradually changing political and public perceptions, and perhaps opening the door to the use of PPPs where these could help meet infrastructure goals.

Limited marketability of smaller-scale PPP projects

Caribbean countries have managed to attract private-sector investment in infrastructure, notwithstanding their small size. Section 2 listed examples of private infrastructure projects across the 11 countries included in this study, most of which have been successful. Larger countries such as the Dominican Republic, Haiti, and Jamaica have attracted large international investors and operators to PPPs in the electricity, water, and roads sectors. Smaller countries have also seen infrastructure investment by international operators—particularly in mobile telecommunications, where similar opportunities existed across multiple countries in the region.

However, as the “big” deals are picked off, reduced interest from investors in smaller-scale PPP investments could become a barrier to further expansion of the pipeline. For example, according to “rules of thumb,” many Caribbean ports and airports are below the scale usually considered viable for PPP. While Caribbean countries cannot overcome the challenges for infrastructure provision inherent in their small size, they may be able to mitigate to some extent the resultant limitations on the greater use of PPPs in the region.

Regional approaches to PPP could help overcome this barrier. In some sectors such as energy and transport, there could be significant value from regional projects, as described in the relevant sections above, which have yet to be fully explored. Moreover, even for projects at the national level, a regional approach to developing and marketing PPP pipelines could help engage greater interest from international investors.

However, both cases would require a level of regional cooperation that has proved challenging to date. Section 6 below describes actions at the regional level that could help improve coordination and enable regional PPP solutions.

Caribbean governments could also consider targeting a wider range of investors—including educating and encouraging local entrepreneurs to get into the business, and seeking regional players to elicit their interest. For example, when the Government of Turks and Caicos wanted to privatize its electricity utility (which was losing money and was under-maintained), it approached WRB, the Florida-based company that supplied and maintained the utility’s generators. The government asked WRB if the company would like to transition from maintaining the generators to operating the whole utility. WRB agreed—and later developed into a regional operator, investing in and managing the utilities in Dominica and Grenada as well.

Summary: Implications of barriers for PPP outlook

These barriers are of varying severity, and apply to different extents across sectors and countries. For example, country-level electricity-sector reforms are on-going that could unlock more PPP opportunities in the short term, while support is already in place for regional analysis in the electricity and telecommunications sectors (as described in more detail in Section 4 above). On the other hand, negative political and public perceptions will likely take longer to overcome. Figure 5.2 summarizes the implications of the barriers described above for the PPP outlook beyond the current pipeline in the core infrastructure sectors in the Caribbean.

Figure 5.2: Summary of Barriers and Implications for PPP Outlook

	Binding constraint(s)	Significant constraint(s)	Implications for Sector PPP Outlook
Transport	<ul style="list-style-type: none"> Lack of political support for transport PPPs in some countries and sub-sectors Limited marketability of smaller-scale projects 	<ul style="list-style-type: none"> Need for regional coordination on sector policy, particularly in sea and air transport 	<p>More opportunities could emerge if regional coordination is strengthened; demonstration effects may help address mixed political perspectives</p>
Energy	<ul style="list-style-type: none"> Need for sector reform in some countries Need for regional coordination to enable possible regional projects 		<p>More opportunities could emerge if regional coordination is strengthened; demonstration effects may help address mixed political perspectives</p>
Water	<ul style="list-style-type: none"> Lack of political support for water PPPs in many countries 	<ul style="list-style-type: none"> Sector reforms may be needed to enable PPPs in future if political interest changes 	<p>More opportunities could emerge if regional coordination is strengthened; demonstration effects may help address mixed political perspectives</p>
ICT	<ul style="list-style-type: none"> Need for policy clarity at the national level, and regional coordination in some cases 		<p>More opportunities could emerge if regional coordination is strengthened; demonstration effects may help address mixed political perspectives</p>

The Way Forward: PPP Actions

There is clearly growing interest in using PPPs to deliver infrastructure in the Caribbean, and a significant potential pipeline of PPP projects that appear implementable in the short to medium term. Going forward, this pipeline can be expected to expand, particularly if barriers such as the need for sector reform can be overcome (although other constraints such as lack of political support for PPPs may be more intransigent). However, Caribbean countries have in the past experienced challenges in turning PPP pipeline ideas into successful PPP projects. As described in Section 5, these problems can largely be traced to missing “PPP architecture”—that is, the policies, institutions, and capacity needed to manage PPPs well.

Capitalizing on the region’s PPP potential will require actions on two fronts: building “PPP architecture,” and moving PPP projects forward. For many countries, it will make sense to advance on both fronts at once. This parallel approach helps ensure that institutions and processes are founded on experience, needs, and practical realities. It also helps build political and market momentum behind PPP programs by moving forward with deals. While this strategy involves some compromises, risks can be mitigated by bringing in trusted advisors with experience in selecting and developing PPPs. Advisors’ experience can serve as a substitute for fully developed processes and institutions, and allow the country to learn by doing.

Regional approaches to support PPPs are worth considering, given that interest in PPPs, potential constraints, and likely solutions are common across many Caribbean countries. Acting at the regional level to support PPPs in the Caribbean could make sense for several reasons:

- **Achieving economies of scale and efficiency.** Given that the lack of “PPP architecture” is common to most Caribbean countries, many governments will face similar needs in developing PPP policies and tools, and in building the capacity needed to implement PPPs well. Addressing some of these needs collectively could make sense, to: overcome diseconomies of scale at the national level when it comes to investing in building PPP capacity; avoid re-inventing the wheel’ and enable governments to learn from each other’s experiences in developing PPP projects.
- **Creating a regional PPP market.** As described in Section 5 above, the small scale of Caribbean PPP programs and projects make it harder to attract qualified investors. Coordinated efforts on PPP can help foster a regional PPP market, with a more substantial pipeline, creating a more attractive prospect for international companies, as well as for development partners seeking to support PPP initiatives in the region.
- **Enabling regional projects.** Some of the Caribbean’s infrastructure constraints could be more effectively addressed by projects at the regional level, as described in Section 4 above, to overcome diseconomies of scale in infrastructure provision at the national level. However, to date there has not been an effective coordination mechanism for bringing such mutually beneficial projects to bear. A regional approach to PPP could provide such a mechanism.

Sections 6.1 to 6.3 below describe the actions that Caribbean governments can take—individually and collectively—to develop “PPP architecture” (comprising policy frameworks and institutional capacity) and move forward successfully with PPP projects. Finally, Section 6.4 describes the sequencing of these actions and possible implementation challenges, and how development partners could work together in a regional approach to support PPP in the Caribbean.

6.1 PPP ARCHITECTURE: POLICY FRAMEWORKS

Summary of Actions to establish and strengthen PPP policy frameworks:

- Develop a “model” PPP policy for the region, based on existing examples, supported by a set of common guidance material and tools; and
- Draw on this model to implement national-level PPP policies or laws that reflect country-specific institutional structures and PPP program needs.

Most countries with a successful PPP program have built that program on a sound PPP policy framework. PPP policies guide government agencies and market participants on how PPPs will be done. As described in Section 3 above, of the countries covered by this study, only Jamaica and Trinidad and Tobago currently have a PPP policy in place. Any other Caribbean country that wishes to make significant use of PPPs going forward would benefit from introducing a guiding policy framework; several governments have already expressed interest in doing so.

PPP policy frameworks are typically established in an overarching policy document or law that sets out at a high level the key parameters of the PPP program. These can include the scope and priorities for PPP projects; the guiding principles by which PPPs will be developed; the criteria and processes by which PPP projects will be identified, developed, and implemented; and the responsibilities for doing so. Experience varies as to whether this guiding document is a policy or a law, or a combination of the two, as described in Box 6.1.

Box 6.1: PPP Policies and Laws

Different countries have different approaches to establishing PPP policy frameworks—the guiding principles, processes, and institutional responsibilities for implementing PPPs. Many countries introduce a “PPP Law” or other overarching legislation; others rely on a PPP Policy, implemented through a cabinet-level decision.

The approach depends to some extent on the legal system in the country. Countries with civil-law systems typically use laws to prescribe government behavior. Most Latin American countries’ PPP programs are based on PPP or Concession Laws; Haiti and the Dominican Republic, for example, would likely require a similar approach. In common-law countries with Westminster-style systems of government, which include most of the English-speaking Caribbean, PPP frameworks may be established through policies rather than laws. This is the approach taken to date in Jamaica and in Trinidad and Tobago, and it builds on practices developed in the United Kingdom, Australia and New Zealand.

There are also practical advantages and disadvantages to each approach. A PPP Law can be considered more binding than a policy and more likely to endure changes in government—providing greater comfort to investors. At the same time, a law is harder to change in response to experience or the evolving needs of a PPP program. For the latter reason, well-designed PPP laws typically focus on enduring principles rather than details, and a policy may work better in the early days of a PPP program.

PPP policies or laws are often supplemented with guidance material, or regulations, setting out PPP processes in more detail. Such processes may cover how to select a project for development as a PPP, how to select the private partner for the project, and how to monitor the private partner’s performance. Both Jamaica and Trinidad and Tobago are currently in the process of developing PPP “manuals” and associated templates and tools to support their PPP policies.

Policies are clearly country-level decisions. Nevertheless, there are opportunities to benefit from regional cooperation in developing policy frameworks. Harmonized policies with similar PPP development processes would help foster a PPP “market,” with the advantages described above. Moreover, process manuals and tools would likely be similar for many countries, meaning that governments could save time and money by developing and using common materials. For example, regional cooperation on PPP policy frameworks could involve developing a “model” policy, process manual, and tools—based on existing examples, such as those in Jamaica and Trinidad and Tobago—from which countries could draw when introducing national PPP policies.

6.2 PPP ARCHITECTURE: INSTITUTIONAL CAPACITY

Summary of Actions to build the institutional capacity needed for successful PPPs:

- At the national level, designate PPP “focal points” to coordinate the PPP program;
- Consider establishing a regional “PPP unit”—to support governments in implementing PPP transactions (including by hiring and managing experienced technical advisors), and to be a regional repository of PPP experience and knowledge; and
- Coordinate regional PPP training initiatives: both immediate training programs for current government officials likely to be involved in a PPP; and education in relevant skills for future generations of public- and private-sector employees.

Developing and implementing PPP projects is a demanding process for governments. It requires expertise in structuring PPP contracts (and managing external advisory support in doing so), to match the experience brought to the table by potential private partners. It also requires coordinated inputs, reviews, and approvals from many entities across government—as is typical for public investment projects—to ensure the project aligns with priorities and fiscal constraints.

To help meet these demands, many governments designate a specific team to support and coordinate the development of PPP projects, and to act as a repository of experience and knowledge on the subject of PPP for the government. Common roles of such “PPP Units,” as well as the other entities typically involved in the PPP project lifecycle, are highlighted in Figure 6.1 below.

Figure 6.1: Typical PPP Program Functions and Responsibilities

PPP Program Functions	Typical Responsibilities
Approving PPP projects	Cabinet or Parliament (parallels with public-sector investment planning)
Coordinating PPP policy	PPP Unit
Managing fiscal implications	Ministry of Finance (MOF)
Identifying PPP projects	Ministries, Departments, and Agencies (MDAs)—with PPP Unit and/or MOF support & input (parallels with public-sector investment planning)
Guiding PPP development	Project ‘steering committee’ under MDA
Undertaking due diligence (with advisors)	MDA-led project team with PPP Unit support
Implementing transactions (with advisors)	MDA-led project team with PPP Unit support
Managing PPP contracts	Varies: PPP Unit/MDAs

Three such PPP Units currently exist in the Caribbean. In Jamaica and Trinidad and Tobago, the roles and responsibilities of these units were established in their respective PPP Policies, as described in Section 3 above. In Jamaica, the main implementing team for the PPP program is a PPP Unit in the Development Bank of Jamaica (DBJ), which works in tandem with a PPP Node in the Ministry of Finance and Planning. In Trinidad and Tobago, a PPP Unit was established in the Ministry of Finance. A PPP Unit was also established in Haiti's Finance Ministry in 2012, although without a guiding policy, the role and mandate of this unit remains somewhat unclear.

Other Caribbean countries that intend to make greater use of PPPs will likely also benefit from establishing a clear “focal point” for their PPP programs. The location of this function in each country will depend on existing institutional capacities and mandates. For example, in Jamaica the PPP Unit was located in the Development Bank of Jamaica, to capitalize on the experience of an existing privatization team. Many countries, such as Trinidad and Tobago, choose to locate a PPP Unit within the Ministry of Finance—taking advantage of this ministry's existing role in coordinating economic policy and expenditure decisions, and the financial literacy of its staff.

However, given the limited scale of PPP programs, particularly on smaller islands, it may be inefficient for each government to build a dedicated PPP team. Where pipelines comprise just a handful of PPP projects, it may not make sense for governments to designate dedicated teams with the full range of expertise—legal, economic, and financial—typically found in full-fledged PPP Units. In these cases, it may make more sense to assign responsibility for PPPs to an existing team or individual to act as a “focal point,” and to rely more heavily on outsourcing to experienced PPP advisors for specific projects. This also raises the question of whether building capacity at the regional level could be an efficient approach for the Caribbean—to this end, Box 6.2 below explores the idea of a regional “PPP Unit.”

Box 6.2: How Could a Regional PPP Unit Work?

Caribbean governments face common challenges in implementing PPPs—central among these is the challenge of building and sustaining sufficient capacity to implement PPP projects well, given necessarily limited PPP pipelines. Moreover, governments can find it difficult or be reluctant to invest in engaging experienced external technical advisory support to prepare PPP projects.

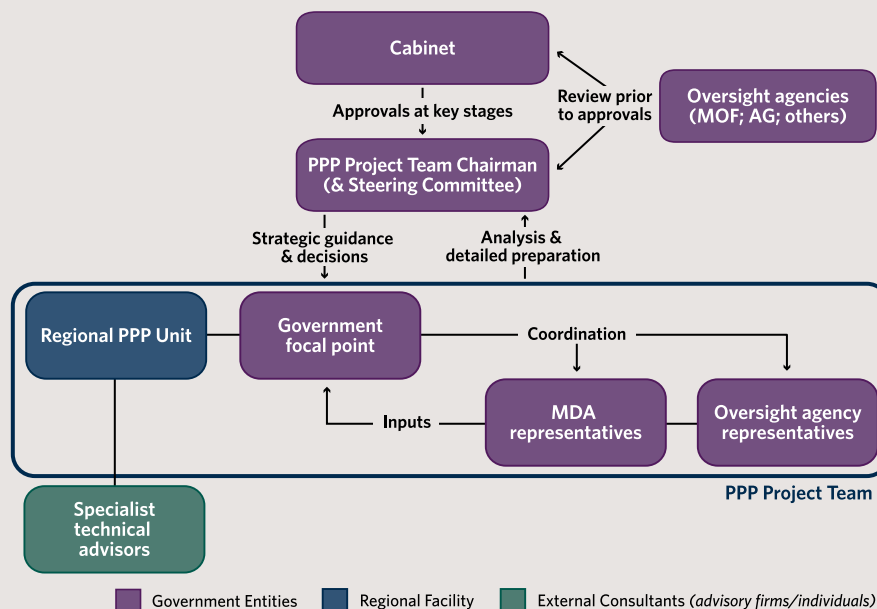
In this context, it makes sense to consider building this capacity at the regional level. This could take the form of a “regional PPP unit,” which could provide support to national governments in implementing PPP transactions, including by engaging and managing specialist technical advisors to support that process. A revolving fund housed within such a unit could also provide a sustainable source of funding for funding transactions and contracting advisors, by charging success fees to winning bidders.

Such a unit would partly mimic the role of PPP implementation units that are often established at the national level by countries looking to implement significant PPP pipelines. That said, a regional PPP unit could not replace the need for oversight of PPP project implementation at the national level—for example, the relevant government would need to determine the consistency of the project with national and sector-level strategies, fiscal priorities and constraints, and approve (or not) a project on that basis. The role of a regional unit could be to manage the day-to-day, detailed transaction preparation and implementation, bringing to bear the specific skills and experience needed to do so successfully.

(continued on page 32)

Box 6.2: How Could a Regional PPP Unit Work? (continued from page 31)

The figure below illustrates a possible structure for managing a typical national PPP project with the support of a regional PPP unit.



Such a regional unit's activities could also extend "upstream": for example, supporting governments to implement PPP policies, build capacity, and identify and screen potential PPP pipeline projects from among national investment priorities. However, such activities would not be revenue-generating, so would require additional funding.

Finally, a regional PPP unit could act as a channel for development partners seeking to support the development of PPPs in the region—both for funding and technical assistance. The Caribbean Development Bank (CDB) appears a natural home for such a unit, given its mandate and the skill set of existing staff—although investment would be needed in building PPP-specific skills.¹⁶

The approach to staffing PPP "focal points" will likely vary by country, and could involve both building and hiring in skills and expertise. The number of full-time-equivalent staff needed will depend on the expected scale of the PPP pipeline. Where existing staff have relevant skills and can be made available to focus on the PPP program, this could primarily involve training on PPP-specific topics to enable those staff to fulfil their new roles. Where staffing constraints are tight, this could involve hiring in international experts, whether as coordinating staff or as resident advisors.

In either case, given limited experience to date with PPPs in the Caribbean, governments will need to invest in building capacity to implement PPPs. This should include tailored training for staff across the range of entities involved in PPPs, to enable them to fulfil their roles as shown in Figure 6.1 above. Officials directly involved in preparing and implementing PPP projects, such as PPP "focal point" and line ministry staff, may need training on technical matters such as financial analysis, risk allocation, and contract drafting. Officials making decisions on PPP projects and policies could benefit from higher-level training on topics such as project selection, the benefits and pitfalls of PPPs, means for ensuring appropriate governance, and stakeholder consultation.

¹⁶ At a "Caribbean PPP Forum" convened in Barbados in November 2013, the CDB expressed interest in building such a PPP support function, and government representatives in using its services. However, further work is needed to establish demand and flesh out the business model.

PPP training is another area where governments could benefit from regional cooperation. The need for capacity-building is common throughout the Caribbean—including in countries that have already established institutional structures for PPPs. Some training on specific skills, such as project finance and financial modeling, is available externally from academic or commercial providers. However, addressing the full range of capacity-building needs will likely require commissioning specific programs that are delivered locally. Governments in the region could benefit from doing so jointly—to benefit from economies of scale; complement the common processes and tools described above; and build networks and learn from each other's PPP experiences. Going forward, this could include working with regional educational institutions to introduce PPP concepts and skills to future employees of both the public and private sectors.

6.3 PPP PROJECTS AND PIPELINES

Summary of Actions to develop and implement PPP projects and pipelines:

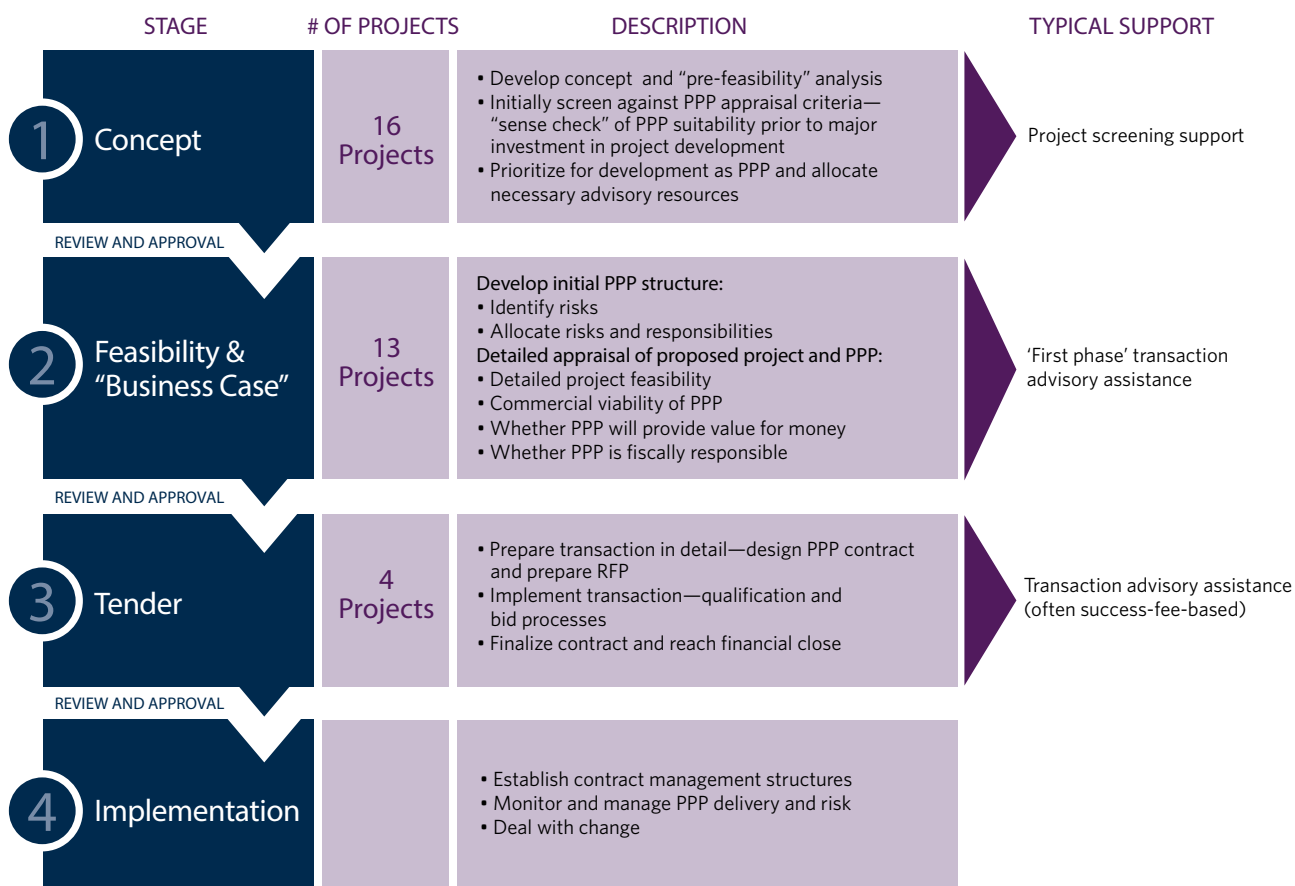
- Invest in comprehensive support from experienced advisors for early-mover PPP projects;
- Consider a more systematic approach to developing PPP pipelines; and
- Cooperate to present projects and pipelines in a coordinated way to attract greater investor interest.

At the same time as developing PPP architecture, Caribbean governments can move forward with developing priority PPP projects. Doing so in parallel with developing PPP policies and institutional capacity makes sense, as described above, because it ensures those policies and institutions are focused on practical ends, and build on hands-on experience. However, in the absence of well-established processes and internal capacity, governments will need to proceed with caution to ensure that early PPP projects avoid the pitfalls discussed in Section 5, and establish successful precedents on which PPP programs can build.

The support of experienced advisors will be crucial. Figure 6.2 below shows the typical stages involved in developing a PPP project, including the type of advisory assistance usually sought at each stage. A low-cost initial screen of potential projects can help “sense-check” PPP suitability before investing significant resources in detailed feasibility studies and due diligence, transaction preparation, and implementation. The latter typically requires inputs from a range of specialist advisors—technical, legal, and financial consultants, among others. Full-service transaction advisors typically provide this range of inputs, as well as strategic advice to governments throughout the process.

Governments need to be prepared to invest substantial resources in developing PPPs well. The total cost of transaction advice typically runs to several million dollars, or a few percent of the final transaction value. A portion of this cost can be covered by success fees charged to winning bidders. However, governments should be wary of creating incentives to push through deals without thorough preparation and due diligence, and ensure appropriate “break points” for reviews and approvals that are informed by this appraisal work. Inadequate resourcing at these stages can be a serious false economy—creating delays during the process, or worse, fiscal surprises or questionable value for money from the project itself.

Figure 6.2: Typical PPP Project Development Process



Governments may also want to take a more systematic approach to developing PPP pipelines. The PPP project ideas that comprise the potential pipeline presented in Section 4 have arisen on a somewhat ad-hoc basis. Going forward, interested Caribbean governments could initiate a more systematic screening of priority public investment projects to assess whether they could provide better value as PPPs, against criteria similar to those used for this study (see Box 4.1 above). This can help identify the most promising projects for early PPP successes, and also the likely scope of the PPP program in the medium term—and therefore the likely resources needed, both human and financial. This approach has been used with some success in Jamaica and Trinidad and Tobago.

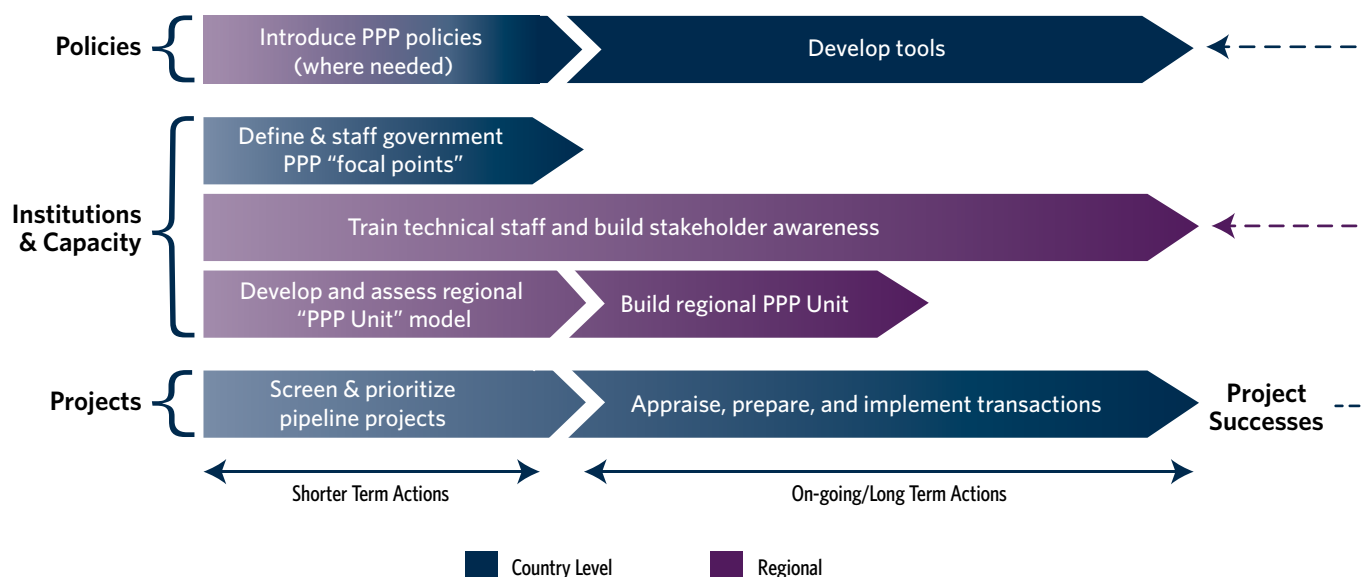
Caribbean governments may also benefit from presenting PPP pipelines to the market in a coordinated way—with a view to generating greater investor interest (and hence competition and value) than each country pipeline would do individually. For example, this could include instituting a regular public-private “PPP forum,” at which investors can interact with officials and potential partners to network, and learn from each other’s experiences and about potential opportunities. The annual Caribbean Renewable Energy Forum (CREF) provides a possible model. Since CREF started, it has made a major contribution to knitting the Caribbean together into a single marketplace for renewable energy developments—something that was previously far from the case.

6.4 SEQUENCING OF ACTIONS AND IMPLEMENTATION CHALLENGES

This section set out several actions that Caribbean governments could take to further the successful use of PPPs to deliver infrastructure in the region—to develop sound PPP policy and institutional frameworks, and to move forward with priority PPP projects. These actions are

summarized in Figure 6.3 below. Some of these actions—such as introducing PPP policies, and initially screening potential PPP pipelines—can be undertaken in the short term by interested governments, and indeed are already underway in a few countries in the region. Others, such as building capacity, will take longer, and build on project experience and successes.

Figure 6.3: Summary and Sequencing of Actions



Several of these actions would benefit from cooperation at the regional level. "Quick wins" at the regional level could include coordinated work to harmonize national PPP policies based on a common model, and developing common basic guidance material and tools (which may be refined over time). A regional PPP capacity-building program for government officials involved in PPPs could efficiently address immediate needs, although building capacity will be an on-going process—for example, this could expand to working with regional educational institutions to equip young graduates for future roles in PPPs, whether on the public or private side.

Going forward, a lasting regional PPP support mechanism could be considered. This could take the form of a regional "PPP Facility," comprising a regional PPP support team that provides both upstream and downstream transaction implementation support to Caribbean governments for national and regional PPP projects—working with development partners, and experienced external technical advisors as needed—and a revolving "PPP preparation fund" to support the activities of this regional team. The success of such a facility would depend heavily on the level of demand and commitment from governments in the region. A first step would therefore be to develop a business model for the facility, as the basis for consultation and agreement among participating governments and potential multilateral and bilateral partners.

Experience suggests that undertaking these actions is likely to require external support while governments build the internal capacity and consensus needed to move PPP programs forward, and to overcome challenges of regional coordination. Several development partners are already actively supporting the PPP agenda in the Caribbean—working with early-mover governments to develop policy frameworks, and providing technical assistance to support the appraisal and development of PPP opportunities at the project or sector level. Going forward, there is an opportunity to combine these efforts, in a coordinated regional approach to PPP support in the Caribbean that could be more than the sum of its parts.

Caribbean PPP Experience—Existing PPPs in the Caribbean

Country	Sector	Subsector	Name	Description	Year	Type
Antigua and Barbuda	Electricity	Generation	Antigua Power Company Limited (APCL) (Independent Power Producer)	Build-own-operate-transfer (BOOT) contract for construction and operation of initially a 27MW diesel generation plant, with a 50.9MW expansion, under a power-purchase agreement between APCL and Antigua Public Utilities Authority (APUA). APUA has consistently failed to pay APCL, resulting in a long standing litigation battle, which was finally settled by the Privy Council in favor of APCL in July 2013.	1996	PPP
	Water	Production	Sembcorp desalination plant	Water supply contract between Sembcorp and APUA to design, build, finance and operate a desalination plant. The plant supplies 65 percent of Antigua's piped water. As of February 2013, APUA owed Sembcorp USD 7.6 million for water already supplied.	1991	PPP
	Social infrastructure	Health	Mount St. John Medical Center	Five-year contract between American Hospital Management Company and the government-owned Mount St. John Medical Center to provide non-medical support services at the new hospital facility	2010	PPP
Dominican Republic	Transport	Roads	Autopista del Nordeste	Concession contract for the design, construction, and operation of a 106-kilometer toll road connecting Santo Domingo with the Samaná peninsula. Developed by the Colombian concessionaire Grodco and Odinsa. Investment value USD 162 million.	2001	PPP
	Transport	Roads	San Pedro Macori-La Romana and Las Americas	Concession contract awarded in 1999, renegotiated in 2002 and transformed into a 30-year concession contract for expansion, operation and maintenance of the San Pedro Macori-La Romana highway, and operation and management of the Las Americas toll road built by the Dominican Government. Concessionaire is CODACSA; Investment value USD 62 million.	2002	PPP
	Transport	Roads	Boulevard Turístico del Atlántico	Concession contract to design, build, finance, and operate a 123-kilometer toll road for 30 years in the Samaná Peninsula. Concessionaire is Colombian Grodco and Odinsa, and Dominican Consortia Remix. Investment is USD 150 million.	Ongoing	PPP
	Transport	Roads	Viadom	Concession contract to design, finance, rehabilitate, construct, operate, and maintain 500 kilometers of highways. Concessionaire is Colombian Odinsa, Italian Ghella, Argentinean IECSA and Dominican Consortia Remix. Investment is USD 471 million.	2012	PPP
	Transport	Ports	Port of Rio Haina	Concession contract for one of the two port terminals that handle 70 percent of the country's trade. HIT's investments (Terminal Haina Oriental) included reconstruction of the patio, docks, dredging, and installation of cranes. Haina International Terminal is the concessionaire. Total investment for the four port concessions listed in this table is USD 469 million.	2001	PPP
	Transport / Tourism	Ports	Port of Santo Domingo	Concession contract for rehabilitation and operation of the state-owned tourist port. Concessionaire company is San Couci Tourism Investment (ITSS). Total investment for the four port concessions listed in this table is USD 469 million.	2001	PPP
	Transport	Ports	Port of Cabo Rojo	Concession contract for operation and maintenance of this industrial port specialized in the export of limestone and bauxite as well as in the import of clinker (an input in cement production). Concessionaire is Dominican Ideal Dominicana and Colombian Cementos Andinos. Total investment for the four port concessions listed in this table is USD 469 million.	2001	PPP

Caribbean PPP Experience—Existing PPPs in the Caribbean (continued)

Country	Sector	Subsector	Name	Description	Year	Type
Dominican Republic	Transport	Ports	Port of Manzanillo	Concession contract for operation and maintenance of this port, focusing on the export of refrigerated containers cargo and the import of general cargo (contract was revoked in 2012). Concessionaire company was Corporacion Portuaria del Atlántico. Total investment for the four port concessions listed in this table is USD 469 million.	2001	PPP
	Transport	Airport	Six state owned airports in the country	Concession contract for management, operation, maintenance, renovation, and expansion of the six government-owned airports: Aeropuerto Internacional Las Américas, Santo Domingo Aeropuerto Internacional Gregorio Luperón, Puerto Plata Aeropuerto Internacional Presidente Juan Bosch Aeropuerto Internacional La Isabela, Santo Domingo Norte Aeropuerto Internacional Maria Montez, Barahona Aeropuerto Arroyo Barril, Samaná. Total investment USD 350 million.	1999	PPP
	Electricity	Generation	Various thermal power plants across the country (14 projects in total)	Since 1999, 14 PPPs have been awarded in the electricity sector, totaling USD 2.5 billion in private investment. Around 2,800 MW of the electricity generation capacity in the DR is privately owned. IPPs sell electricity under long-term PPAs. Investors are various, including Haina, Itabo, Union Fenosa, AES, Monte Rio, Metaldo, and Laesa.	Since 1999	PPP
	Electricity	Distribution	EdeNorte, EdeSur, and EdeEste	Performance-based management contracts for three public electricity distribution companies. The contracts have expired and the public sector has regained control of the power distribution companies.	Unknown	Management contract
Haiti	Electricity	Generation	E-Power	An IPP of 30MW heavy fuel oil-powered plant in Port-au-Prince, sells power to EdH under a 15-year PPA. Investors are Haitian, East West Power, IFC, and the Dutch Development Bank (FMO). Investment value USD 56 million.	2011	PPP
	Electricity	Generation	La Société Générale d'Énergie S.A. (SOGENER)	An IPP that operates three mobile diesel generation units throughout Haiti (Varreux I, II et III) and sells to EdH under PPA contracts. Investor is Vorbe Group. Investment value USD 50-60 million.	2002	PPP
	Electricity	Generation	Haytrac (Haitian Tractor)	An IPP that operates mobile diesel units throughout Haiti (Petit-Goâve and Les Cayes, total installed capacity of 12 MW) and sells to EdH under PPA contracts. Investors are Haitian. Investment is USD 20-30 million.	2009	PPP
	Transport/Tourism	Port	Pier Operating Company	Concession Contract to build, finance, manage, and operate the Labadie pier, a private resort in the north of the country (close to Cap Haïtien). Resort leased to concessionaire until 2050, in exchange for a USD 6 payment per tourist. Concessionaire is Royal Caribbean Cruise (RCI); investment is USD 50 million.	2009	PPP
	Water	Production, distribution	National Directorate for Drinking Water and Sanitation	Under a technical and operational assistance contract, the consortium provides assistance to the Port-au-Prince metropolitan region water utility. The consortium is comprised of Suez Lyonnaise des Eaux, Agbar, and United Water. Investment is more than USD 10 million.	2011	Technical assistance contract
	Water	Distribution	La Société des Eaux de Saint-Marc (SESAM)	Under an affermage contract, management of water service was delegated in Haiti. Awarded in 2009 to SESAM after an international tendering process. A 15-year contract for the operation, restructuring and long-term consolidation program of the water sector. Investor is LYSA and investment is over USD 5 million.	2009	PPP

Caribbean PPP Experience—Existing PPPs in the Caribbean

Country	Sector	Subsector	Name	Description	Year	Type
Jamaica	Transport	Airport	Sangster International Airport in Montego Bay	Vancouver Airport Services Consortium took over operations of Sangster International Airport in Montego Bay under a 30-year concession. Airport capacity was doubled, and 43 new retail spaces created, such that revenues from valuable retail space partially offset the cost of expansion. Investment value USD 180 million.	2003	PPP
	Transport	Roads	Highway 2000 concession (toll road) Phase 1A	A 45-kilometer tolled expressway linking Kingston/Portmore to Sandy Bay. Developed under a design, build, operate and transfer PPP between GoJ (represented by NROCC) and Transjamaican Highway (TJH), a special company established by Bouygues Travaux Publics, a French construction company, which was granted a 35-year operating concession. Investment value \$324 million. This contract gave TJH the right of first refusal to further planned phases of Highway 2000.	2001	PPP
	Transport	Roads	North-South Link extension of Highway 2000	A 68-kilometer four-lane extension of Highway 2000 under an implementation and concession agreement with Jamaica North South Highway Company Ltd. (JNSHC), a special company established by China Harbour Engineering and Construction Company (CHEC). Estimated investment value USD 600 million.	2012	PPP
Saint Kitts and Nevis	Electricity	Generation	Wind Watt Nevis Limited	A power supply PPP, under a 25-year PPA to supply up to 2.2MW to NEVLEC. Investor is Wind Watt Canada Power Incorporated.	2010	PPP
	Water	Production	BEAD Limited	A bulk-water PPP, under a 10-year contract to supply one million gallons of bulk water per day. Investor is Bedrock Exploration and Development Ltd.	2007	PPP
	Transport	Airport	Private Jet Port	Build, operate, and transfer concession for a USD 15 million private jet port at the Robert L. Bradshaw Airport in Saint Kitts. Investor is Veiling of Mauritius.	2013	PPP
Suriname	Electricity	Generation	Suralco (Suriname Aluminum Company)	Alcoa built a 185 MW hydroelectric plant in 1958, and sells surplus electricity to the national grid under a 75-year PPA. Investor is Alcoa USA.	1958	PPP
	Transport	Port	Integra Port Services (IPS)	Dubai World acquired 60 percent of Suriname's leading terminal operator, Integra Port Services (IPS). IPS has a concession for container and break-bulk cargo operations in Nieuwe Haven Port. Investment is USD 31 million.	2011	PPP
Trinidad and Tobago	Electricity	Generation	Powergen (Independent Power Producer)	Trinidad's state-owned utility (T&TEC) divested its generation assets in 1994 to PowerGen, which supplies the T&TEC under a PPA. T&TEC remains the majority shareholder, alongside Maru Energy of Georgia (39%), and Amoco of Texas (10%). PowerGen's three gas-fired power stations now have total installed capacity of 1386 MW.	1994	PPP
	Water	Desalination	Desalination Company of Trinidad and Tobago (Desalcott)	A design, build, finance, and operate PPP for a USD 200 million desalination plant, Desalcott sells desalinated water to Trinidad's Water and Sewage Authority (WASA). Originally a joint venture between Trinidadian company HKESL (60%) and General Electric (40%), in 2012 HKESL purchased GE's share, making Desalcott 100% locally owned and operated. After expansion, it is providing 50 million gallons of water per day.	1999	PPP
	Water	Desalination	Seven Seas	A build, own, operate, transfer PPP with US-based Seven Seas for a new desalination plant to provide 4.6 million gallons of water per day to Trinidad's Water and Sewage Authority (WASA).	2013	PPP







ENABLING INFRASTRUCTURE INVESTMENT

PPIAF is a multi-donor trust fund that provides technical assistance to governments in developing countries to develop enabling environments and to facilitate private investment in infrastructure. Our aim is to build transformational partnerships to enable us to create a greater impact in achieving our goal.