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working world

A blurred photograph of a hospital hallway with medical staff in white coats and green scrubs walking. The image is out of focus, creating a sense of motion and activity.

## **Public-private partnerships and the global infrastructure challenge**

How PPPs can help governments  
close the “gap” amid financial  
limitations

# Public-private partnerships and the global infrastructure challenge

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Wherever you go in the world, infrastructure is the bedrock of economic and social well-being. It supports the efficient transport of people and goods. It delivers essential utilities such as water, waste and power services. It provides accommodation for education, health and judicial functions. It enables entertainment and leisure.

When it works, no one talks about it. When it fails, it makes headlines.

In a country with sustained underinvestment in infrastructure, economic competitiveness can suffer. The global “infrastructure gap” is so wide that closing it by 2030 will require an estimated US\$40 trillion to US\$50 trillion.

This “gap” looks even more daunting when you consider the fiscal and political obstacles to delivering essential infrastructure. Government revenues are constrained, and public sector spending is constantly in the spotlight, especially on “mega” projects involving significant taxpayer funds.

In such conditions, it is more important than ever to get infrastructure procurement right – which is where project finance and public-private partnerships (PPPs) come in.

## Project finance models continue to evolve

The PPP model is no stranger to debate, especially since the global financial crisis transformed the economic status quo, triggering an unprecedented focus on financial management and the cost efficiency of government procurement.

Globally, the PPP model is at a pivotal junction. Countries with established and mature PPP markets have seen them shaken by the shift in financial climate. In some places, the model and its core principles have encountered profound challenges.

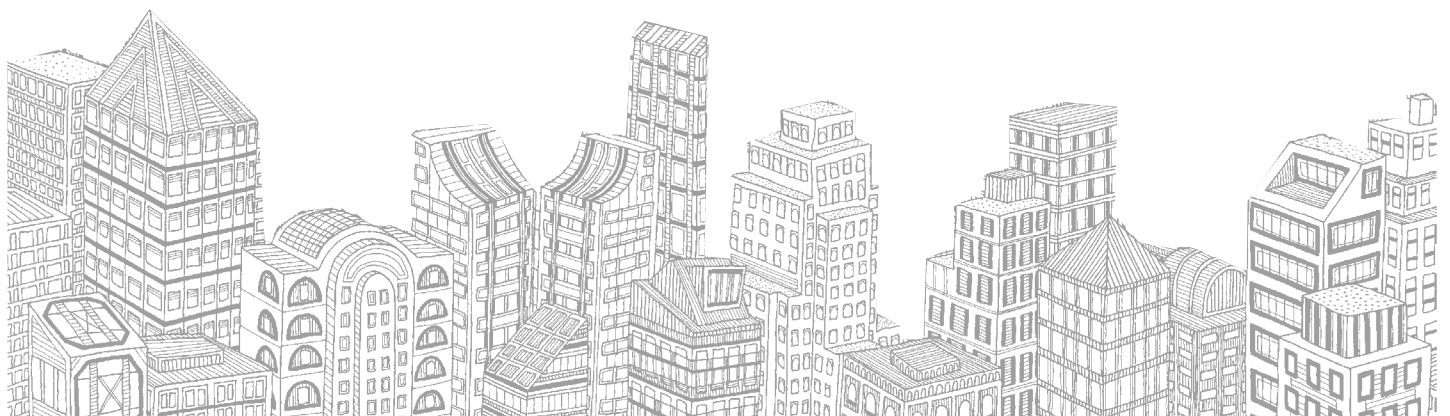
In other countries, where PPPs have traditionally played no or only a small role in meeting the infrastructure task, governments are exploring the potential of the model and have taken definitive steps to establish policies, pipelines, resources and partnerships with private sector providers. These areas offer interesting lessons to the more established markets. The decisions made by governments that are starting from scratch can be fed back into improving PPPs in established markets, enabling continuous improvement.

EY has PPP advisory teams in established and emerging markets. This paper brings together the collective views of our teams around the world and answers the question: “Where do PPPs go now?”

## Lessons from established and developing markets

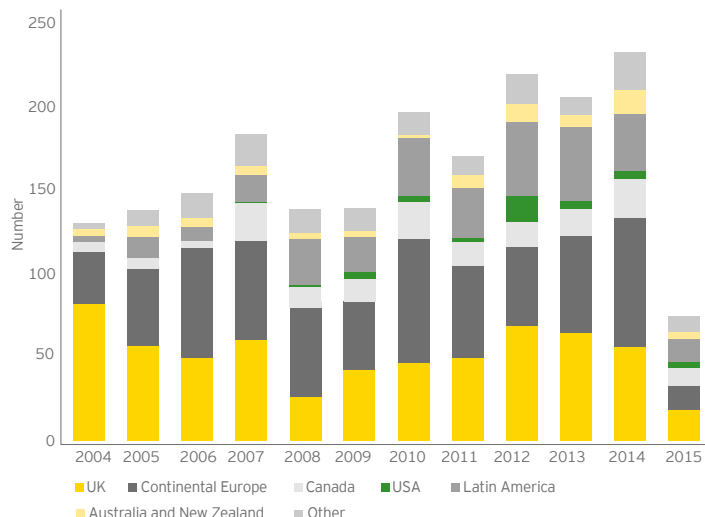
EY has infrastructure capability on all continents. This puts us in a position to assess the latest trends and reforms in global PPP markets and to help inform the next stage of policy development. Drawing on lessons from two sources, we aim to assist governments to continue to innovate using project finance and PPPs.

**First**, lessons come from regions with well-established PPP programs that have long been points of reference for other jurisdictions – countries such as the UK, Canada and Australia. In these markets, governments have continued to nurture and stimulate the PPP model, responding to changing market conditions through reflection, reform and innovation.



- ▶ **Canada** continues to be a model for steady deal flow, with an active financial market and a track record of on-budget and on-time delivery. Key to Canada's success has been unapologetic government support at all levels, including providing dedicated funding and financial mechanisms, pioneering standardization and undertaking efficient collaborative procurement.
- ▶ The **UK**, the elder statesman of PPPs, has subjected the PFI model to deep and forensic review in recent years, resulting in the improved "PF2." Although the market is still adjusting to the new approach, it is telling that PPPs weathered the storm and continue to be actively supported by Government. Developments in Scotland provide interesting lessons in structuring projects to address public concerns about profiteering and transparency.
- ▶ In **continental Europe**, the most noteworthy development has been recent initiatives targeting stronger investment-grade ratings to diversify the pool of investors beyond banks and to attract institutional investors. These initiatives include government-sponsored credit enhancements that have instigated a noticeable trend toward longer-term debt solutions.
- ▶ **Australia** was one of the world's pioneers in using and developing the PPP model. Although Australia's economy weathered the global financial crisis better than most, its PPP market today faces highly challenging financing conditions. This is largely a result of its small and constrained market. In contrast with other markets, long-term debt solutions have not returned. This lack of competition to commercial banks – combined with a lumpy pipeline – means that the full potential of institutional investment has not been realized.
- ▶ **New Zealand** is a small market but one where PPPs are playing a growing role. The government learned from its first two closed projects and developed a comprehensive institutional framework and suite of standardized contracts for use in future investments.
- ▶ **Latin America** is accumulating valuable PPP experience, and some countries have had a PPP program for more than two decades. However, many programs have been troubled by poor contract management and a large number of renegotiations during the term. In response, governments have continued to develop PPP legislation and procurement practices.

**Figure 1: number of PPP projects by region – global**



Source: InfraDeals

**Second**, lessons come from countries and regions whose PPP programs are in their infancy, particularly those that have only recently established pipelines and frameworks. Governments in these emerging markets have the benefit of being a blank slate. They can base their principles and processes on the latest global best practices, equipping them to tackle the challenges of today's contracting and financial environment.

- ▶ The **US** has much potential, but its market is impeded by variable uptake, continued resistance to using PPP for social infrastructure projects, and the slow development of institutional frameworks and standard processes. When PPPs do emerge, mainly in the transportation sector, they benefit from a deep financing market supported by tax concessions and government programs that, although not replicable in many other markets, provide valuable lessons.
- ▶ **Asia** is expected to be one of the largest markets for infrastructure development over the next decade as nations turn to PPPs to help keep pace with rapid growth. But start-up has been slow, and many countries in the region look to multilateral agencies such as the Asian Development Bank to support their PPPs.
- ▶ In **Africa**, South Africa was an early adopter of PPPs. Elsewhere, despite recent progress, PPP development faces significant constraints, including limited financial markets, inadequate legal and regulatory frameworks, an absence of technical skills within government agencies, and political and national risks. Nevertheless, the demand for infrastructure across Africa is significant, and many countries see PPPs as part of the solution. That view, combined with support for the PPP model from multilaterals such as the World Bank, is driving projects, particularly in the transportation sector, where significant economic value can be generated.

# Five key trends all governments should consider

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## 1. Incentives for deploying the PPP model

The world's most vibrant PPP markets are those where the government sustains and advances projects through incentives. They can range from access to skilled resources and government oversight to budgetary stimulus through dedicated PPP funds, "alternative" funding sources or other financial assistance, such as guarantees.

This approach is not without hazard. Some governments have withdrawn budgetary incentives for PPPs on the grounds that they can be seen as jeopardizing the objectivity of procurement decisions.

As long as the assessment of which delivery model to use is rigorous and evidence-based, providing incentives for PPPs can bolster the pipeline, especially for "new entrants" such as local councils. Incentives can also inject greater rigor into procurement practices and provide important signals to the market that the government is committed to doing business.

## 2. Standardization of principles, processes and documents

As PPP programs mature and governments grow more confident in their preferred risk exposure and procurement practices, the need to reinvent the wheel for each transaction lessens. Standardization generates more efficient procurement (including making better use of advisors) and a stronger pipeline of projects.

Countries entering the PPP market for the first time are equipped with a suite of precedent prototype documents; governments that have historically been active PPP users are increasingly moving that way, too. Standardization is particularly evident in the adoption of template risk allocation matrices, standard form contracts, and supporting documentation, including pro forma technical specifications and performance rules.

Markets adopting consistent positions and documents:

- ▶ Develop greater private sector engagement and stronger pipelines
- ▶ Reduce both the effort required to develop documentation and the number of departures included within bids. This makes contract negotiations easier and leads to shorter procurement time frames and lower bid costs for both the public and private sector partners. Evidence shows a clear correlation between the degree of standardization and the intensity of the debate in the market around reducing bid costs.

## 3. Proactive intervention in capital markets

The global financial crisis harmed project finance markets. Particularly detrimental were the withdrawal of institutional investors and the dominance of commercial banks offering short-term debt solutions.

However, in many of the world's markets, the tide is turning. Some countries are seeing PPPs regain the prized participation of pension funds and insurers. Crucially, where participation has broadened, it has not been a purely market-instigated phenomenon – but driven by different types of government intervention. These have ranged from subsidized interest payments and credit enhancements for project bonds to project bundling and government guarantees.

A common thread is that institutional investors are attracted by products or instruments that match their risk appetite. It follows that this is likely to be a fruitful avenue for governments to investigate further.

## 4. Assessing value-for-money

The ex ante appraisal of the PPP model's value-for-money (VFM) relative to "traditional" procurement approaches remains a matter of much debate. In particular, the usefulness of quantitative VFM assessment has come under vociferous attack. We see a growing consensus that developing a robust approach to quantitative assessment is highly problematic.

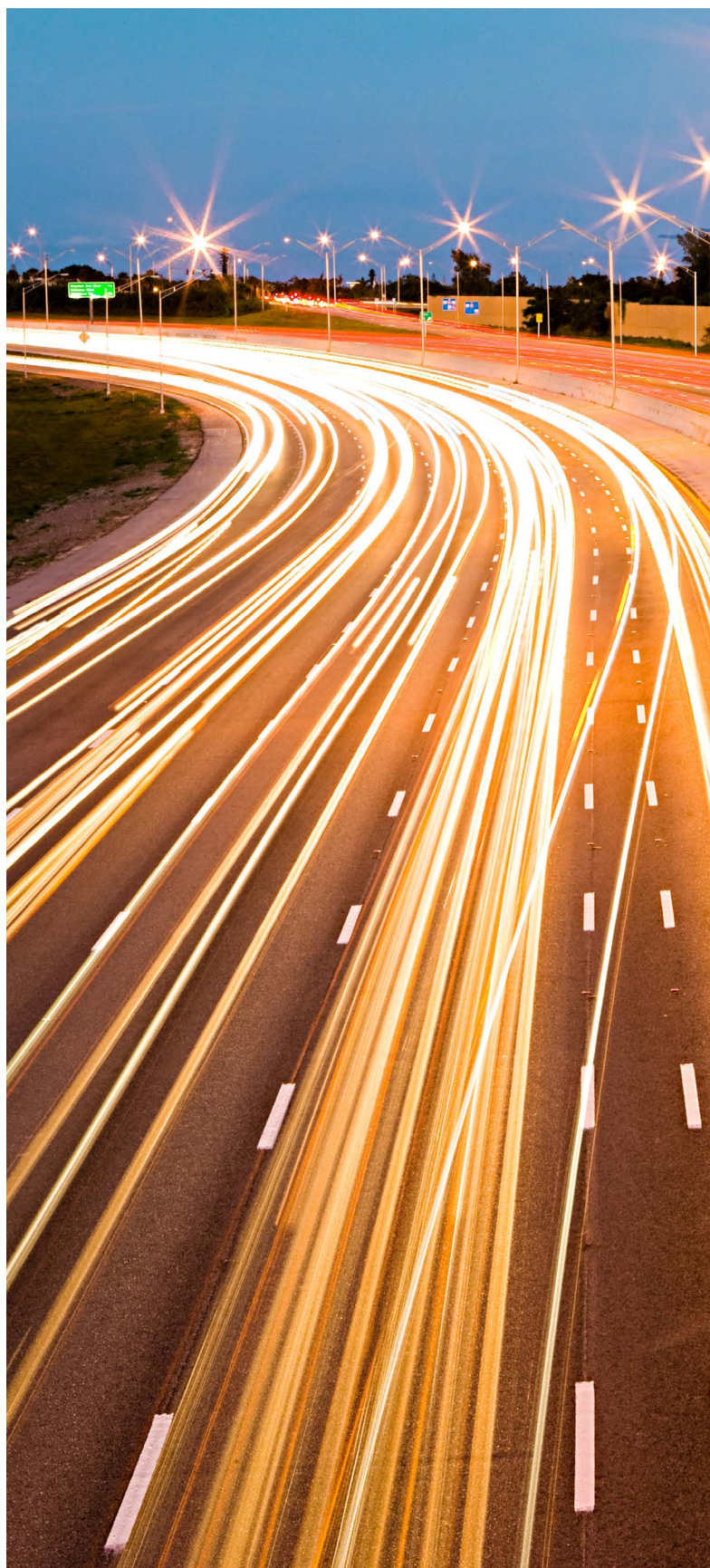
In this and other areas of procurement, the "opportunity cost" for government and the broader impact on the economy are too often overlooked. If quantitative assessment is to be genuinely "like-for-like," then the true costs of government funding must be considered. Not only do government contributions to projects affect net debt, but every dollar put into projects is a dollar no longer available to meet other demands on the public purse.

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## 5. Retrospective evaluation of PPP projects and procurement

Midterm or retrospective scrutiny of projects is an important means of monitoring continued performance and VFM and of ensuring transparency. Project-specific evaluations can include metrics related to financial and operational performance, contractual requirements and timely reporting.

However, evidence from global PPP markets indicates that no robust and accepted methodology has been developed for measuring the success of PPP programs against their stated objectives. Such an exercise is challenging because of the shortage of comparative data. Governments have an important opportunity to take the lead in developing comprehensive evaluation frameworks.



## PPPs today, tomorrow and beyond

### Lessons from around the world

Recognizing that the global project finance market is at a crossroads, EY completed a comprehensive, evidence-based review of key innovations and trends.

### The PPP model

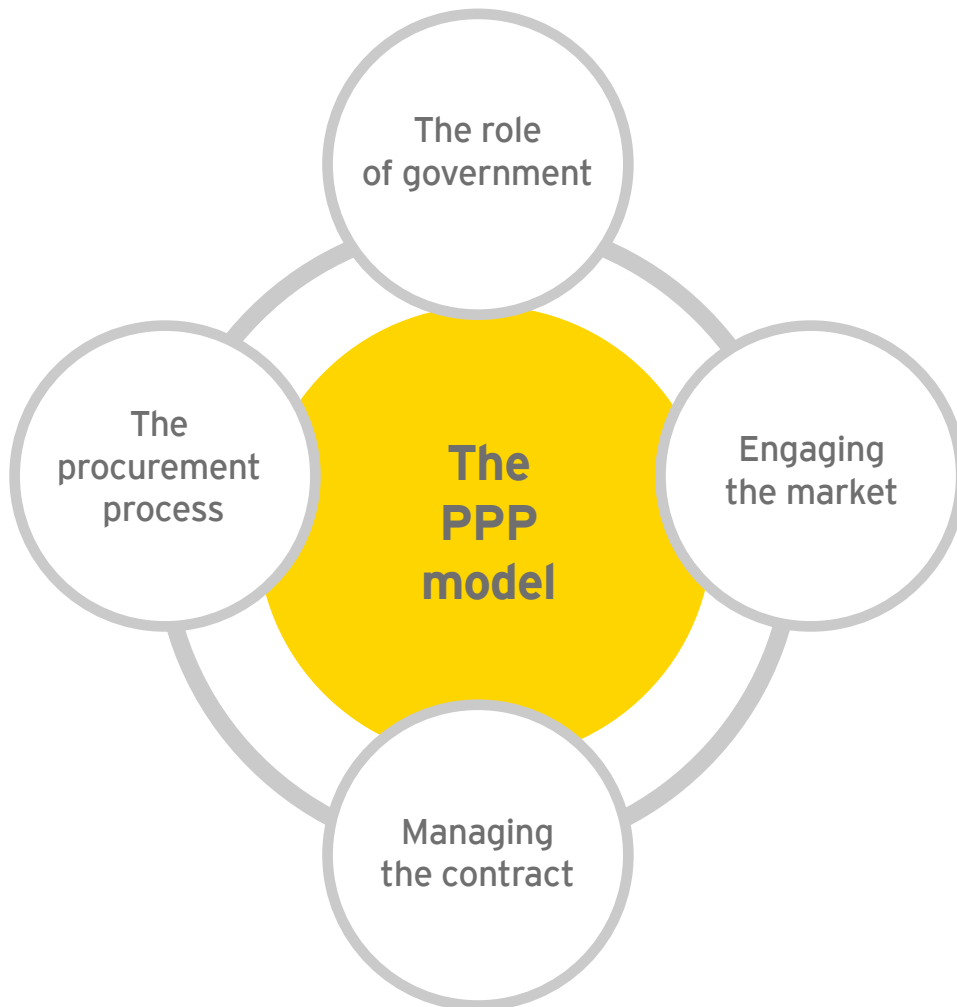
The case for PPP continues to be compelling, demonstrated by the ongoing support for it in established markets, as well as the emergence of new markets where governments are recognizing the potential benefits for the first time.

### PPP in the UK – rebranded and refreshed

At the beginning of the decade, the UK's PFI model was subject to a fundamental and forensic probe, undertaken at the highest levels of government and in a very public manner.

After a comprehensive period of reflection, consultation and debate, PFI was revamped. Despite rebranding it "PF2" and implementing a number of changes, the UK Government renewed its commitment to procuring major projects through privately financed solutions. It launched PF2 with the words "the Government believes that private sector investment, innovation and skills should continue to play a significant role in the delivery of public infrastructure and services."<sup>1</sup>

Although the PFI review unsettled the market and deal flow has been slow to recover, the government's reaffirmed commitment signaled that PPPs will have an important role in delivering infrastructure in the future.



<sup>1</sup> HM Treasury, "A new approach to public private partnerships," 2012.

The fundamental rationale for pursuing PPPs – as articulated in the principles, benefits and objectives for PPPs enshrined in laws, guidelines and policy documents – varies little from place to place. The core tenets of risk allocation, long-term whole-of-life outcomes, output basis and alignment of incentives appear to be as relevant today as ever.

**Table 1: comparison of PPP principles in Australia, Canada, Brazil and Bangladesh**

Australia	Canada	Brazil	Bangladesh
<ul style="list-style-type: none"> <li>▶ Sufficient scale and long-term nature</li> <li>▶ Risk profile and opportunity for risk transfer</li> <li>▶ Whole-of-life costing</li> <li>▶ Innovation</li> <li>▶ Measurable outputs</li> <li>▶ Asset utilization</li> <li>▶ Better integration of design, construction and operational requirements</li> <li>▶ Competitive process</li> </ul>	<ul style="list-style-type: none"> <li>▶ Integration of project design, building, financing and maintenance</li> <li>▶ Allocation of risks to the party most able to deal with them</li> <li>▶ Specification of outputs/outcomes rather than inputs</li> <li>▶ A payment system that aligns incentives and controls behavior</li> <li>▶ Competitive contracting for the whole-life cost of a project</li> <li>▶ Financing mechanism that encourages rigorous due diligence</li> <li>▶ Putting private capital at risk for the whole lifetime of the project</li> </ul>	<ul style="list-style-type: none"> <li>▶ Efficiency</li> <li>▶ Respect for the interests of users and the private actors involved</li> <li>▶ Non-transferability of regulatory, jurisdictional and law enforcement responsibilities</li> <li>▶ Transparency</li> <li>▶ Objective risk allocation</li> <li>▶ Financial sustainability</li> </ul>	<ul style="list-style-type: none"> <li>▶ Better value for money by optimized risk sharing</li> <li>▶ Budgetary certainty through whole-of-life costing</li> <li>▶ Enhanced government asset utilization and access to additional investment</li> <li>▶ Access to private sector expertise and innovation</li> </ul>

Source: "National Public Private Partnership Policy Framework," Infrastructure Australia, 2008; "PPP in Canada: A Model for Public Infrastructure Procurement," PPP Canada, 2015; "Public-Private Partnerships Reference Guide, Version 1.0," The World Bank; "Your Guide to Public Private Partnership in Bangladesh," Public Partnership Office, 2012.

When projects are not successful, the reason is rarely a flaw in the rationale and principles of PPPs, but more often mistakes and miscalculations in the way they are put into practice.

The "standard" allocation of risk between public and private partners has changed, often driven by external factors. For example, some projects have allocated certain risks away from government to facilitate favorable accounting treatment. We are also seeing a growing willingness to retain certain risks to encourage competitive pricing and market participation, or to activate the secondary market.



### **Demand risk innovation: Chile and Greece**

Chile has taken a novel approach to sharing demand risk with the private sector through the least present value of revenue (LPVR) model.

Under this approach, the length of the concession is adjusted to actual demand levels. Concessions are in effect auctioned, and the winning bidder is the one that proposes the least discounted revenues over the term – which ends once the specified revenues have been collected or the specified volumes have been reached. The use of adjustable concession periods effectively limits the exposure to demand risk for the private sector partner and mitigates the risk of overoptimistic patronage or usage predictions.

This system has been adopted for the Santiago-Valparaíso Highway and for the Iquique and Puerto Montt airports.

A variant model has also been used in the recent restructuring of a PPP involving a bundle of Greek motorways. Here, the project company can exercise an option to extend the concession if it has not reached its return requirements during the term.

### **The role of government**

The development of efficient infrastructure markets continues to be impeded by political uncertainty and cyclical patterns of investment. The most successful PPP programs are in countries where the government has prevailed over these challenges by providing demonstrable commitment to the PPP model.

Consistent and transparent legislative and institutional frameworks lower the risk of adverse changes that can reduce market confidence and deter investor participation.

### **Legislative enablers for PPPs**

In many countries, PPP-specific laws are not strictly required to make PPPs legal, but have been introduced to encourage them as a model for delivering public infrastructure.

In South Korea, for example, the PPP Act and the Enforcement Decree regulate the procurement of PPP projects, including a “Basic Plan for PPP,” which provides a detailed implementation process and defines the roles of associated parties.

In Europe, France and Greece have laws that accelerate the implementation of PPPs; in the developing world, there are PPP facilitation laws in Angola, Benin, Mauritius, Fiji and Honduras.





Although there is no “one size fits all” approach to establishing a framework for PPP delivery, the role of the dedicated PPP unit is evolving. It now includes greater sector specialization and a more formal role in the procurement decision.

### The growing move toward dedicated PPP units

Australia’s Productivity Commission recently found that more than 50% of countries in the Organisation for Economic Co-operation and Development report the existence of a PPP unit. Such units also exist in countries as diverse as Ghana, Malawi, Kuwait, Sri Lanka, Bangladesh, Kosovo and Uruguay – remarkable evidence of the growing move toward PPPs in markets with little history of privately financed infrastructure.

One noticeable trend is the growing number of sector-specific PPP units<sup>2</sup> being established, especially in continental Europe. In Germany, for example, Verkehrsinfrastrukturfinanzierungsgesellschaft is a specialist agency of the Ministry of Transport with a focus that includes developing PPPs in the roads sector. Spain has a similar organization, the Sociedad Estatal de Infraestructuras del Transporte Terrestre. In France, a number of line ministries (justice, health, higher education, defense and railways) have taken steps to internalize and formalize the PPP procurement function.

Providing funding and financing through targeted PPP systems brings a variety of risks. However, a number of governments have overcome these challenges and implemented mechanisms for investing in PPPs, improving their ability to offer the community value for money. Such incentives for PPP projects facilitate the development of more sustainable PPP programs and more efficient procurement processes.

### Targeted PPP grants: the P3 Canada Fund

The P3 Canada Fund was established in 2009 and is administered by PPP Canada, a Federal Crown Corporation. PPP Canada has an independent Board of Directors reporting to Parliament through the Minister of Finance.

The fund’s purpose is to encourage and improve project delivery by providing funding support to public infrastructure projects in 15 eligible categories proposed by public authorities, including provincial, territorial, municipal and regional governments.

To meet the application criteria, projects must:

- ▶ Be well-structured and deliver value for money
- ▶ Demonstrate substantial risk transfer to the private sector
- ▶ Establish public benefits
- ▶ Promote jobs and economic growth

The amount of funding support, in combination with other direct federal assistance, is capped at 25% of the project’s direct construction costs, which include planning, bid costs and finance costs during the construction phase.

The level, form and conditions of any funding support vary depending on the needs of a project. Generally, it comes in the form of non-repayable contributions to help the procuring authority afford payments to a concessionaire during or immediately after construction of the asset.

The P3 Canada Fund is administered through annual public calls for projects, each with a different focus. Round seven, which opened on 13 April 2015, focuses on:

- ▶ Inexperienced jurisdictions
- ▶ Three sectors: water/wastewater treatment, transportation and solid waste disposal

As of December 2013, the fund had committed more than \$700 million to at least 15 PPP projects in Canada.

<sup>2</sup> “Public Infrastructure – Inquiry report,” Productivity Commission, 2014.

## Government financing support

The Banco Nacional de Desenvolvimento Econômico e Social in Brazil has been a major lender to private infrastructure projects.

In the UK, the Government established the Green Investment Bank (GIB) in 2012, capitalized to the tune of £3 billion, to address market failures affecting green infrastructure projects and to stimulate private investment. Recently, the GIB announced long-term loan financing for a waste treatment plant – a PPP project undertaken by the North Yorkshire County Council and the City of York Council with lending from both private corporations and the European Investment Bank (EIB).

In the US, the Transportation Infrastructure Finance and Innovation Act (TIFIA) provides federal credit assistance, in the form of direct loans, loan guarantees and standby lines of credit, to finance transportation projects of national and regional significance. TIFIA loans must be repayable, in whole or in part, from tolls, user charges or other dedicated revenue sources, such as special assessments and tax increment revenues from land sold and developed.

In Europe, the EIB has a portfolio of more than 130 projects in which it has invested around €30 billion. Annual lending to PPPs has exceeded €2 billion since 2000 and reached €3.4 billion in 2010, including €2.4 billion in the transportation sector alone. In Scotland, the bank has provided more than a third of all lending to PPPs in the country, illustrating the importance of EIB finance to PPPs.

## The procurement process

Governments' use of incentives for PPP selection during the project development process has resulted in active, stable and successful PPP programs characterized by strong pipelines and constructive engagement with private sector contractors and financial markets.

Despite an appealing and logical rationale, the usefulness of the Public Sector Comparator (PSC) has been questioned, particularly in countries where it has been used the most. Reliance on the PSC inevitably highlights the financial cost to government of procurement, which often fails to account for the differences in expected benefits and the opportunity cost of government investment.

### Reassessing VFM: case studies

- ▶ **UK:** the recent PFI reforms (and the introduction of PF2) included the temporary suspension of quantitative VFM assessment, and an updated methodology remains under development.
- ▶ **Canada:** Infrastructure Ontario is refreshing its VFM methodology to reflect lessons from projects delivered and keep up to date with market trends.
- ▶ **Australia:** the Victorian Government recently revised its VFM framework, including adjusting the role of the PSC.

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Procurement practices and documents are becoming increasingly codified and standardized, improving consistency and presenting the market with uniform positions that encourage private sector engagement. Standardization reduces both the effort required to develop each project's documentation from scratch and the length and intensity of contract negotiations, leading to shorter and cheaper procurement phases.

### **Standard PPP contract: case study – New Zealand**

New Zealand has introduced standard templates for the suite of PPP contractual documents.

#### **The Base Agreement, which includes all expected provisions:**

- ▶ Definitions and interpretation
- ▶ Project documents
- ▶ Participants and nature of parties' obligations
- ▶ Commencement and duration
- ▶ Ownership and tenure
- ▶ Access to Crown site and site issues
- ▶ Works provisioning
- ▶ Completion
- ▶ Operational services
- ▶ Events
- ▶ Changes
- ▶ Unitary charge, value testing and refinancing
- ▶ Warranties and undertakings

- ▶ Confidentiality and intellectual property
- ▶ Indemnities and liability
- ▶ Step-in
- ▶ Insurance and reinstatement
- ▶ Termination
- ▶ Hand-back and disengagement
- ▶ Dispute resolution
- ▶ Miscellaneous terms

#### **Schedules, including:**

- ▶ Conditions precedent
- ▶ Contractor warranted data
- ▶ Financing
- ▶ Review procedures
- ▶ Performance regime and payment mechanism
- ▶ Change compensation principles
- ▶ Termination payments

Source: [www.treasury.govt.nz/statesector/ppp/standard-form-ppp-project-agreement](http://www.treasury.govt.nz/statesector/ppp/standard-form-ppp-project-agreement)



Governments are increasingly recognizing their role in helping the private sector control bid costs. Standardizing processes and contracts helps lower bid costs by making tender processes more efficient.

## Engaging the market

Many governments have developed initiatives that enable projects to access the vast pool of available funds held by institutional investors, which can compete with banks by providing longer-tenor debt and can mitigate refinancing risk. Around the world, perceived barriers for institutional investors are being overcome through innovative financial structures and different forms of credit enhancement – not to mention the appetite for high-yield assets.

**Table 2: European initiatives to promote institutional investment in infrastructure**

Name	Features
<b>Pan European Bank to Bond Loan Equitization (PEBBLE)</b>	<ul style="list-style-type: none"> <li>▶ 85% provided by amortizing A Notes, subscribed for by institutional investors, which have a long tenor (20-25 years)</li> <li>▶ 15% tranche first-loss B Loan, funded by commercial banks and subordinated to the A Notes but have a much shorter tenor (8-10 years) and amortize in advance of repayment of A Note principal</li> <li>▶ A construction revolver facility, funded by commercial banks for the purpose of construction costs (including cost overruns) and periodically refinanced by A Notes and B Loans</li> <li>▶ Associated hedging, provided by commercial banks.</li> </ul>
<b>Capital Lease Infrastructure Program (CLIP)</b>	<ul style="list-style-type: none"> <li>▶ Consortium of 80 of the world's largest pension funds</li> <li>▶ Funder takes ownership of the "to be built" asset and leases it to the contractor</li> <li>▶ Asset passes to the borrower at the end of the lease</li> </ul>
<b>Hadrian's Wall Capital</b>	<ul style="list-style-type: none"> <li>▶ Single debt instrument at a spread over gilt, with debt under the investment-grade notes in two tranches:</li> <li>▶ Senior tranche of A Notes, issued as senior bonds in the capital markets</li> <li>▶ First loss subordinated tranche of B Notes placed through a fund</li> <li>▶ Initial investments provided by the Development Bank of Japan, European Investment Bank and Aviva Life &amp; Pensions</li> <li>▶ Hadrian's Wall Capital provides monitoring and surveillance of projects, with some controlling creditor rights</li> </ul>

The evidence from markets such as Canada, where institutional investors have become involved successfully, is that the value of eliminating refinancing risk (and associated fees) outweighs the additional cost of longer-tenor debt.

## Bond financing for PPPs: Canada

A project bond market has emerged in Canada and is now the primary financing source for PPP projects. The bonds were generally issued at a credit rating above A- (with some issued at BBB+), supported by an equity participation of 7% to 20%. The tenor achieved on this market is generally 20 to 30 years (up to 35 years) and pricing has been at about 200 basis points over the yield-to-market on government bonds of similar duration. The spread to which bidders commit is typically benchmarked with spreads of a basket of comparable bonds traded in the market.

Financial instruments are not a cure-all. But evidence from mature PPP markets around the world appears to show a strong case for government investment in establishing long-term bond platforms. Governments have also sought to drive more effective financing solutions into PPPs by structuring the procurement process itself, with innovations ranging from deferring the financing competition to locking in the rates of return provided by bidders for the term.

## Scotland's Non-Profit Distributing model

In Scotland, the Non-Profit Distributing (NPD) model has been developed by the Scottish Futures Trust as an alternative to the PFI model used elsewhere in the UK.

While retaining most of the underlying objectives and principles of PFI, the NPD model is distinguished by its approach to equity returns, specifically that:

- ▶ Returns are capped to ensure that the private sector makes a "normal" level of investment return and that these returns are transparent
- ▶ Operational surpluses generated by the project company are reinvested into the public sector

## Managing the contract

Periodic review of PPP contracts can help evaluate whether projects are meeting their objectives and adapting to changing conditions and whether the project company is efficiently delivering the required services.

Although review obligations are frequently built into PPP contracts, or are legally required, a robust and accepted methodology has yet to be developed for retrospectively assessing how well PPP programs as a whole meet their objectives.

### **NPD: public interest director**

The appointment of an independently nominated public interest director to the project company's board is a unique feature of the NPD model in Scotland. The principal roles of the public interest director are:

- ▶ Monitoring the project company's compliance with core NPD principles
- ▶ Bringing an independent and broad view to the board
- ▶ Watching for conflicts of interest and managing board decisions when other directors have conflicts of interest
- ▶ Reviewing opportunities for, and instigating, refinancing
- ▶ Reviewing opportunities for, and instigating, opportunities for realizing cost efficiencies and other improvements in the project company's performance (on the premise that, in the absence of equity return, other directors have no incentive to explore or promote these)

The Scottish Futures Trust nominates a public interest director for each NPD project. In addition, the procuring authority is entitled to appoint an observer to participate in the project company's board meetings (but not vote).

Source: Scottish Futures Trust, NPD Model Explanatory Note

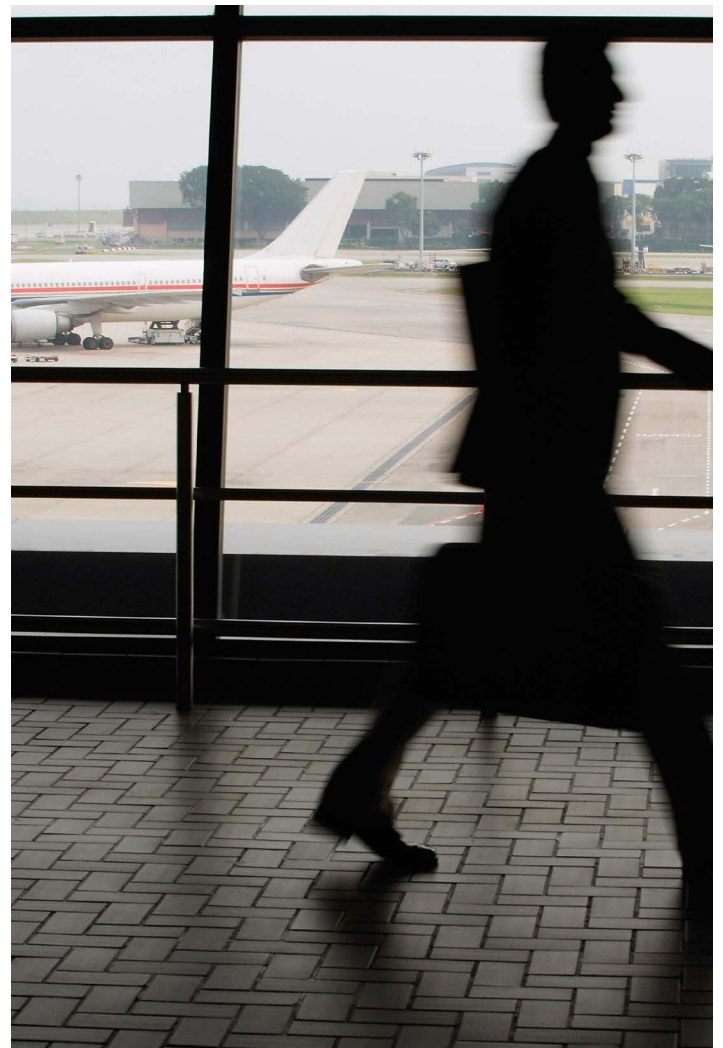
We see a growing focus on change management for PPPs during the term, recognizing that they must demonstrate the flexibility to adapt while respecting the private sector's need for a degree of certainty to be able to commit to long-term participation in contractual arrangements.

Because the government faces inherent challenges in efficiently managing change, planning for change during the project development phase is essential. Identifying the areas that are most likely to require flexibility often calls for innovative forms of scenario and trend analysis.

### **Dispute resolution in New Zealand**

New Zealand's standard form PPP contract specifies the following process for resolving disputes:

- ▶ If the parties cannot reach an agreement, the dispute generally goes to the disputes panel, which has four members (two nominated by the public sector partner and two by the private sector partner). The panel can agree that a dispute is resolved only if both parties' nominated members agree and they are able to use mediation.
- ▶ If the panel cannot reach an agreement, the dispute goes to an independent expert, selected from a panel of approved engineers, accountants and other subject-matter experts provided by independent organizations.
- ▶ For disputes under NZ\$1 million, the independent experts' decision is final. Otherwise, either party may refer it to the courts.



# Conclusion

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Infrastructure investment and development are top priorities for governments globally. While rapid urbanization pressures emerging markets to develop critical new infrastructure, developed economies need to expand existing infrastructure because of aging assets and sustained underinvestment.

As infrastructure demand increases and fiscal constraints grow, the PPP model continues to evolve to help governments meet these burgeoning infrastructure challenges. Around the world, governments and the private sector are innovating and intervening, and lessons are constantly emerging for PPP practitioners, financiers, existing sponsors and new entrants.

EY's dedicated PPP advisory teams are at the forefront of recent developments, giving us insight into these lessons. With this perspective, we can assist governments in proactively intervening in the capital markets, including developing financial and nonfinancial incentives to boost market engagement with PPP procurement. We also have firsthand experience in generating efficiencies through standardizing principles, processes and documents. And we have deep and broad experience in assessing value-for-money before, during and after the project.

# The state of global PPP markets

## UK

The UK continues to lead the way in developing privately financed infrastructure delivery.

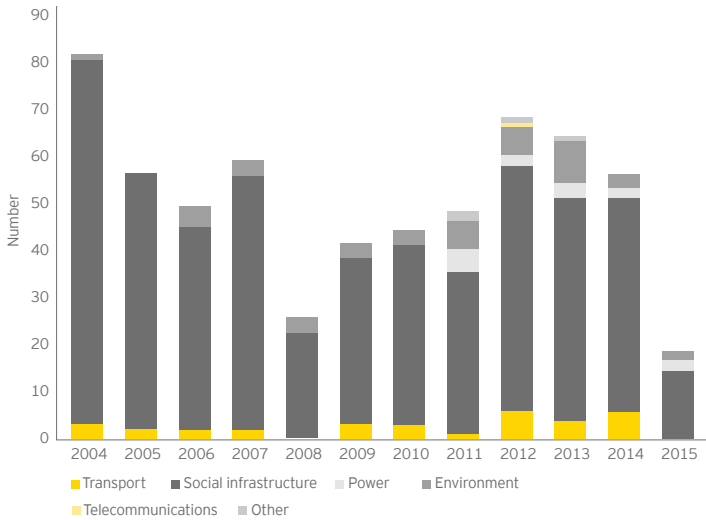
Of particular note is the way the PFI model has been scrutinized, updated and improved. Despite mounting criticism and political pressure, the UK Government has reaffirmed its commitment to PPP structures as a means of efficiently delivering infrastructure priorities.

Outside of the PFI/PF2 approach, developments in Scotland have demonstrated how governments can address some of the perceived weaknesses of the model while retaining market confidence and developing a robust pipeline.

The UK has a strong framework of institutional support, guidance material and standard documentation at the local as well as the national level.

Financing conditions for UK projects continue to improve, with a growing trend toward longer tenor and participation by institutional investors.

**Figure 2: number of PPP projects by sector – UK**



Source: InfraDeals

## Continental Europe

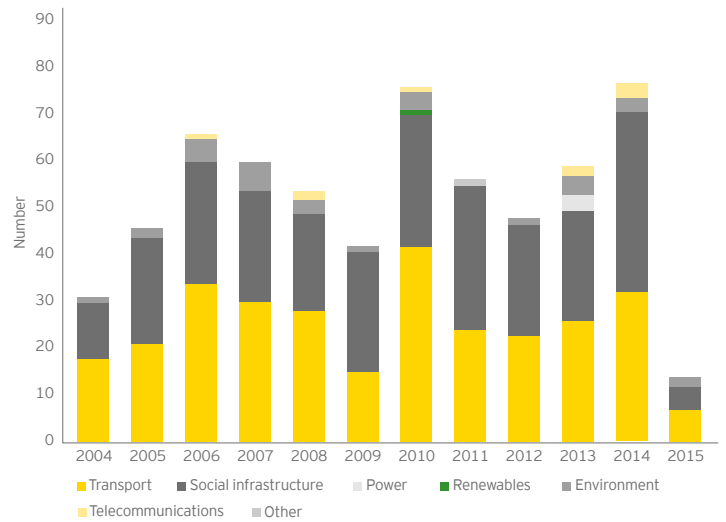
Even though the region was hit hard by the global financial crisis, countries in continental Europe remain active in developing and delivering PPP programs and projects, particularly France, Germany, Belgium, the Netherlands and Spain.

EU members have benefited from a range of pan-national initiatives to improve the efficiency of PPP financing solutions, including the use of credit assistance and support through measures such as the Europe 2020 Project Bond Initiative. Market-led initiatives have also helped revitalize the investor market and expand the role of long-term debt solutions for PPPs.

However, institutional and governance arrangements are not uniform across the region, and the use of standardized processes and documentation – although advanced in some countries – remains patchy.

Contract renegotiation and termination have been high on the agenda in the European market, following experiences in France and Spain in relation to toll roads where the allocation of revenue risk and responsibilities to the contractor resulted in either excessive profits or project failure.

**Figure 3: number of PPP projects by sector – continental Europe**



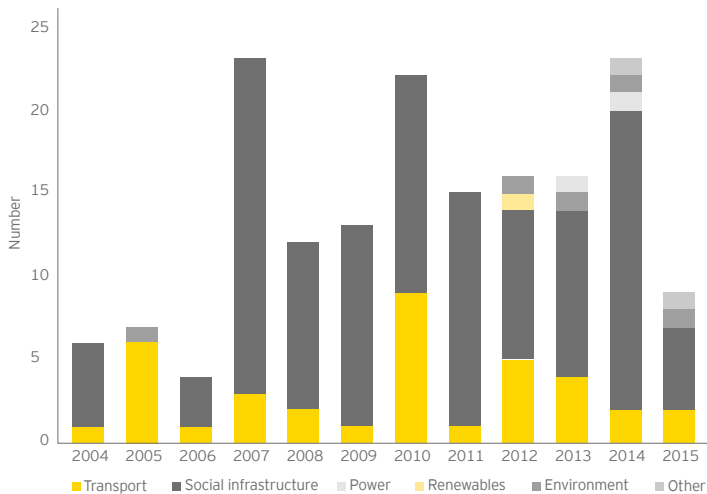
Source: InfraDeals

## Canada

With an enviable number of successfully completed deals, and a pipeline of PPP projects that shows no sign of fading, Canada is clearly doing a number of things well. These include:

- ▶ Demonstrating unambiguous political commitment to the PPP model by providing legal, administrative and – most important – financial support to projects procured as PPPs
- ▶ Offering continuous opportunities with a clear pipeline of projects in various sectors driven by multi-year infrastructure plans at all levels of government
- ▶ Benefiting from the emergence of a PPP project bond market since the financial crisis, providing efficiencies in financial structures and eliminating refinancing risk
- ▶ Pursuing innovation in risk allocation and procurement
- ▶ Achieving efficient procurement through standardized documentation, condensed procurement timetables and market familiarization
- ▶ Seeking intrajurisdictional collaboration (e.g., by sharing template documentation)
- ▶ Encouraging PPP development at the municipal level

**Figure 4: number of PPP projects by sector – Canada**



Source: InfraDeals

## US

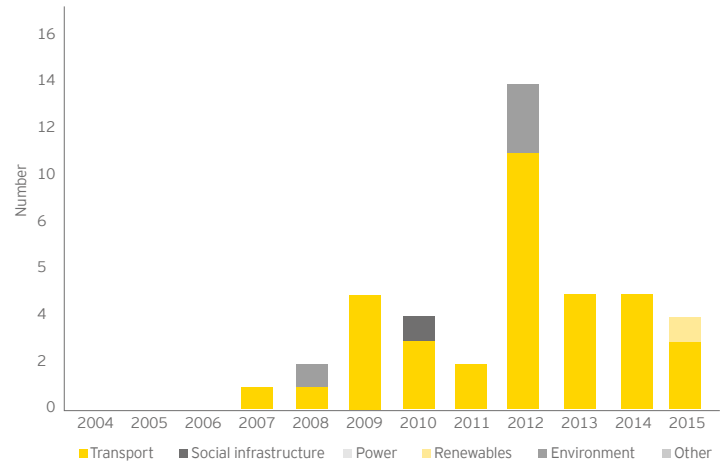
The US market has a growing infrastructure task complicated by pressure on government budgets and skepticism toward private involvement in infrastructure delivery in some sectors.

PPPs are on the rise in the transportation sector, including large projects involving roads and public transit. This trend is reflected in the development of federal and state institutional and administrative frameworks for PPPs, which continue to focus on transportation.

Governments continue to support using long-term debt instruments to finance PPPs, as well as initiatives such as TIFIA and the Water Infrastructure Finance and Innovation Act, and tax concessions for government and municipal bonds.

However, US procurement practices still vary by both jurisdiction and sector, with little cross-jurisdiction collaboration and few moves toward standardizing processes and documents.

**Figure 5: number of PPP projects by sector – US**



Source: InfraDeals



## Latin America

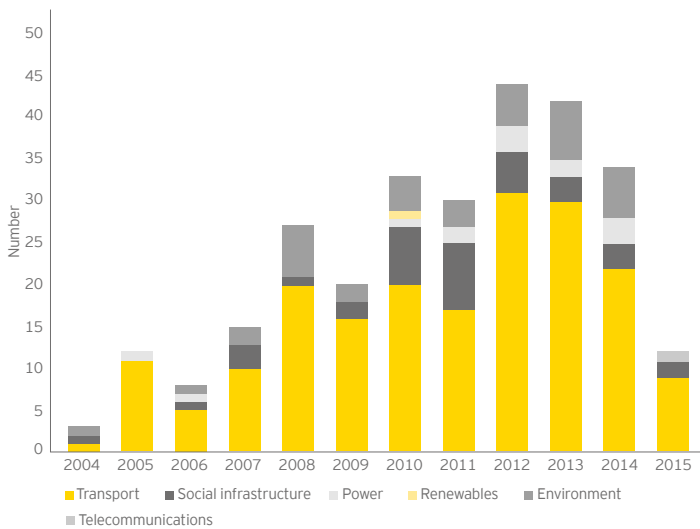
PPPs are an important part of meeting Latin America's growing infrastructure needs, and some countries, especially Brazil, have strong pipelines and established markets.

Although many jurisdictions are trying to develop institutional and governance frameworks for PPPs, a number of components of the project development life cycle are less developed than in other markets. For example, VFM assessment is in the early stages, as is the move to standard or template documents.

In Latin America, a high proportion of PPPs have been renegotiated during the term, triggering a renewed focus on appropriate project planning and robust risk allocation.

The region's PPP markets rely on financial support from national and international development banks. However, the appetite for private investment is growing, encouraged by the ability of governments to honor guarantees and other obligations.

**Figure 6: number of PPP projects by sector – Latin America**



Source: InfraDeals

## Asia

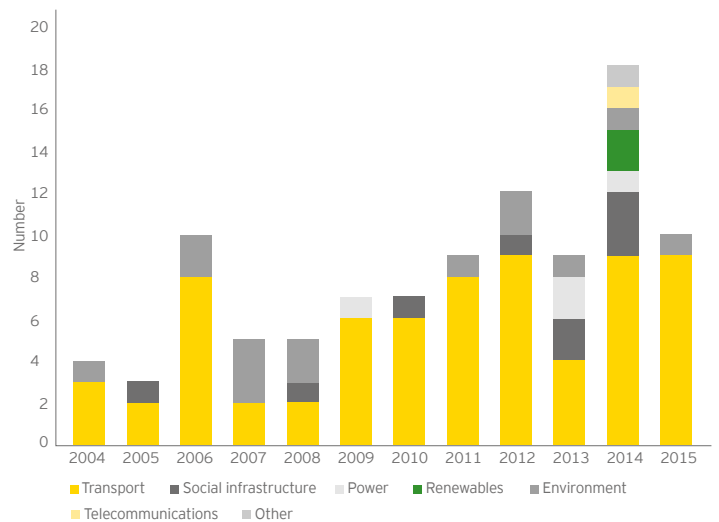
Asia is expected to be one of the largest markets for infrastructure development over the next decade, as nations turn to PPPs to help meet their infrastructure needs and keep pace with rapid growth. Indonesia, China and India, in particular, have announced ambitious infrastructure programs, with PPPs intended to play an important role. China has invited private investors to help fund, build and operate more than 1,000 proposed projects.

The challenges and opportunities for PPPs are by no means homogenous and differ greatly across the region. Although the PPP model is established in Singapore, South Korea and Japan, most markets in Central and Southeast Asia are relatively immature.

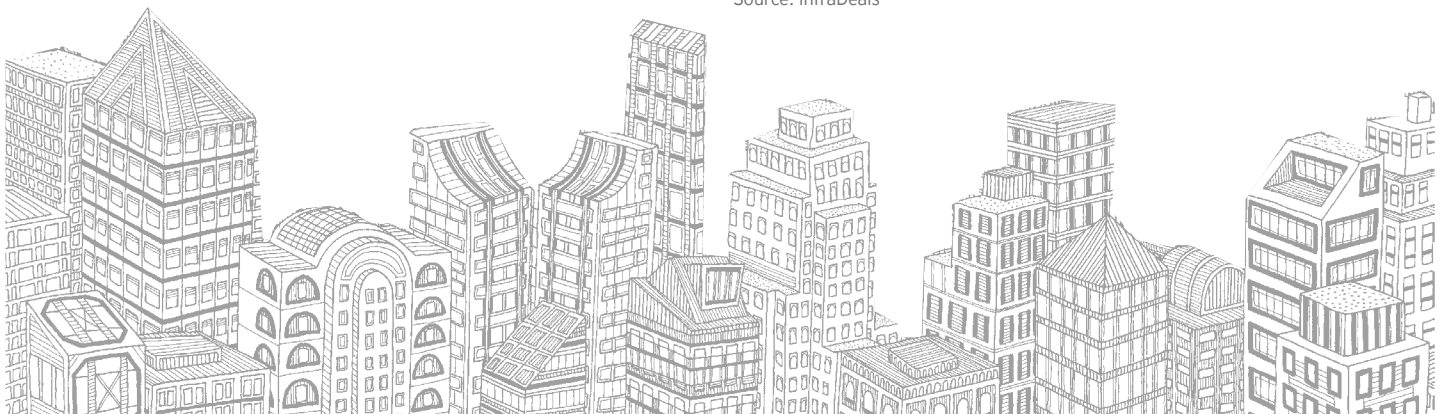
Asia has seen significant growth in specialist infrastructure funds – a trend that is expected to continue as large institutional investors look to invest in the region, providing significant financial resources for PPP investment.

Governments are also developing mechanisms to encourage PPP investment and address barriers to PPP development. One example is the Indonesia Infrastructure Guarantee Fund, which supports private sector PPP investment through a government guarantee.

**Figure 7: number of PPP projects by sector – Asia**



Source: InfraDeals



## Australia

Australian governments, especially at the state and territory level, have delivered a number of PPPs in a range of sectors. However, the pipeline remains lumpy because the project development process is slow and infrastructure is highly politicized – and therefore subject to electoral cycles. Little progress has been made at the local government level.

Australia places a greater emphasis on the role of the PSC in evaluating bids, but this has highlighted some of the key challenges around the development and implementation of a rigorous quantitative value for money assessment tool for PPPs. Some state governments have addressed this in recent years.

Lending remains dominated by short-term bank debt, with little successful action to stimulate bond markets to encourage institutional investors.

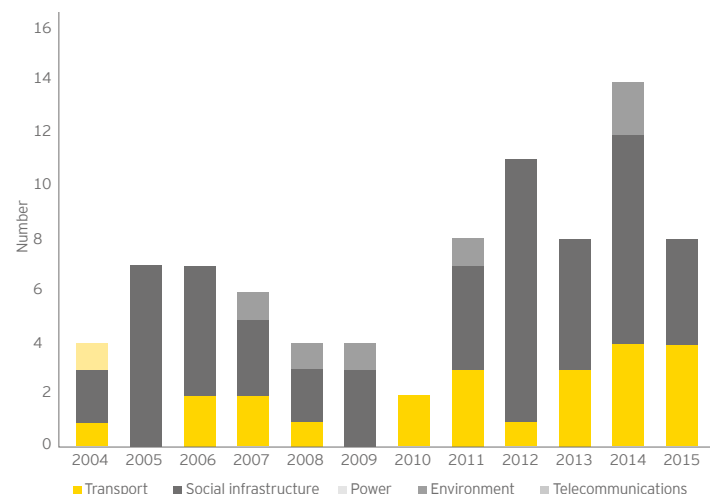
Australian governments have not standardized contractual documentation despite a broad range of guidance at both the Commonwealth and state and territory level. As a result, most procuring authorities require lengthy time frames to develop documents and undertake negotiations at the successful bidder phase.

## New Zealand

In New Zealand, PPPs have yet to reach maturity, with challenges related to promoting market engagement, embedding procurement practices and establishing a pipeline. However, in recent years, the government has worked to develop procurement processes, establish dedicated PPP and infrastructure resources, publish guidance material and draft standardized documentation.

The country has been willing to deviate from standard practices when it sees fit, including with “full services” and “payment by results” models for social infrastructure PPPs.

**Figure 8: number of PPP projects by sector – Australia and New Zealand**



Source: InfraDeals

## Africa

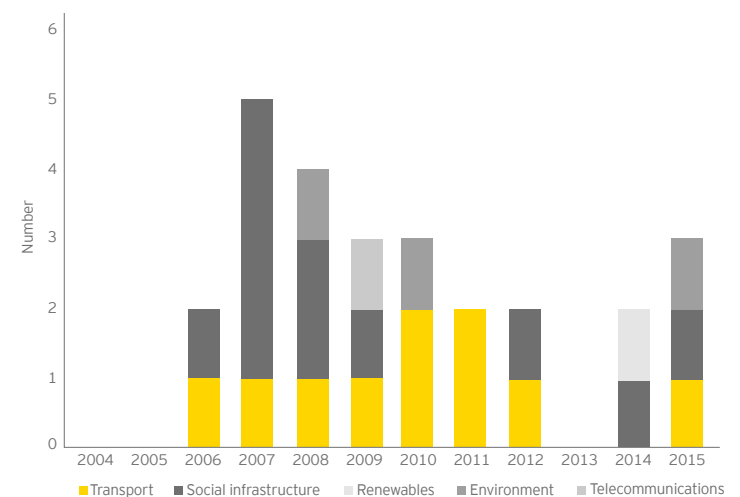
Many African countries have poorly developed infrastructure, making investment essential for the continent to grow and compete. In light of fiscal constraints, governments are increasingly recognizing PPPs as a mechanism to bridge the infrastructure gap. The countries adopting PPP regulatory frameworks and legislation include Angola, Ghana, South Africa, Tanzania, Kenya, Cameroon, Senegal, Mauritius, Egypt and Zambia.

To date, PPPs in Africa have predominantly occurred in the transportation, telecommunications, water and social infrastructure sectors. South Africa has led the way, completing a number of successful transportation and social infrastructure PPPs.

Across the continent, PPP markets largely rely on government and regional development bank investment and credit enhancements. However, especially before the global financial crisis, some PPPs have been financed entirely with equity, including in the telecommunications sector, where private infrastructure funds provide the investment.

Despite recent progress, PPP development in Africa remains constrained by limited financial markets, inadequate legal and regulatory frameworks in many countries, an absence of technical skills within government agencies, and political and national risks.

**Figure 9: number of PPP projects by sector – Africa**



Source: InfraDeals

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Source of all data: InfraDeals. The regional overview PPP graphs have been developed from InfraDeals greenfield and brownfield PPP financial close data. The brownfield data includes secondary market sales, although this is immaterial to the overall data and graphical presentation. InfraDeals data is based on publicly available information, resulting in some incomplete data.

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