**Your World First** 

C'M'S'

Law.Tax

Infrastructure Index

A new direction

### The Infrastructure Index results

The CMS Infrastructure Index analyses data across 40 jurisdictions against six key criteria to create a guide to the most attractive destinations for infrastructure investment.



8	89	88	87	87	86	86	85	85	83	80
	Netherlands	Canada	Germany	United Kingdom	Australia	Singapore	United States	Norway	France	United Arab Emirates
	1	2	3	4	5	6	7	8	9	10

National governments need to stimulate their economies by creating more projects which the private sector can invest in.

There is a lot of private capital waiting.

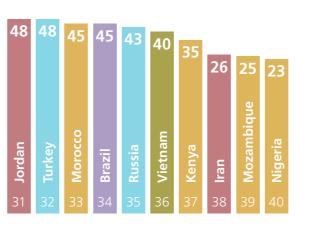
Wim Blaasse, DIF







57	57	56	56	56	54	53	51	50	49	
Mexico	Oman	Hungary	Peru	Colombia	Romania	India	Indonesia	Philippines	Bulgaria	
21	22	23	24	25	26	27	28	29	30	





Latest trends

Alternative asset classes creating new opportunities for infrastructure investors: digital infrastructure, electric charging stations, energy storage, student accommodation and rolling stock.







Traditional asset classes remain strong: roads, rail and renewables.





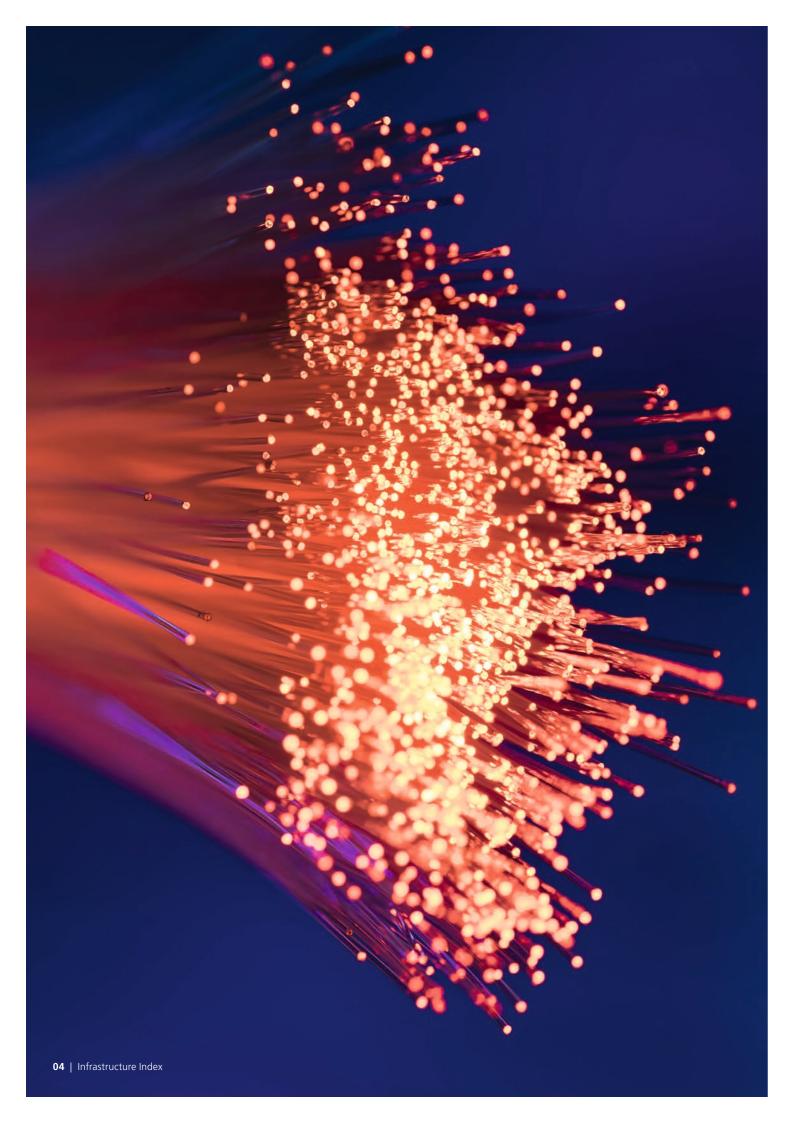
High hopes for **central and eastern European countries**, whose economies are currently experiencing expansion.



### Contents

- 05 A new direction
- Global infrastructure opportunities
- 79 The Netherlands leads the way
- 11 Interview with Wim Blaasse, **DIF**
- 13 A Brexit bump in the road
- 15 Interview with Mark Collins, CityFibre
- 16 Opportunities for investors: alternative v traditional
- 19 Interview with Ian Harding and Stefano Brugnolo,Arcus Infrastructure Partners
- 20 Europe bounces back
- 21 Case study:

  Germany overhauls roads network
- 23 Interview with Peter Coenen, **HOCHTIEF PPP Solutions**
- 25 Middle East pipeline promise
- 27 Interview with David Cox, Mott MacDonald
- 28 Americas: Canada forges ahead
- 30 Case study: Trudeau banks on infrastructure
- 31 Africa: Solar PV takes hold
- 33 Asia-Pacific: China's Belt and Road an investment bonanza?
- 34 Methodology



### A new direction

Creating an attractive environment for investors in infrastructure is no easy task. Politics and policy can make or break private participation and the flow of investment – something that has never been clearer than in this year's CMS Infrastructure Index which ranks 40 jurisdictions in order of infrastructure investment attractiveness. From China's Belt and Road to the UK's Brexit bump in the road, this report highlights ups, downs and new directions.

The Netherlands has secured top spot in this year's Index, despite the uncertainty of having 208 days with no government. A vigorous economy, a transparent and efficient procurement process, together with a multi-billion-Euro pipeline of road and water PPPs, have created an attractive, highly competitive environment for investors.

It is a different story for the UK. Ranked fourth after the Netherlands, Canada and Germany, Brexit and political uncertainty are having a considerable impact on the pipeline of projects. The National Infrastructure Commission (NIC) is warning of significant challenges unless there is stronger, strategic planning around infrastructure. Despite this, investors still consider the UK to be a strong market.

If a new direction is required, transparency and the creation of a more varied pipeline to complement the politically appealing mega-projects will be key. Governments have a large part to play. Wim Blaasse of Dutch infrastructure fund DIF comments in the report on the success of the Netherlands: The Dutch government has a "consistent policy when it comes to PPPs, as all projects which reach a certain criterion are simply procured as PPPs. It provides certainty, which in turn creates a large pipeline, which means companies can build up large teams in the country".

Plenty of capital continues to head towards Europe as the continent bounces back after years of stagnation. CEE is particularly exciting as their economies experience a significant expansion due to the favourable environment for foreign investment and EU financing.

Meanwhile, Canada is reaping the benefits of its government's focus on infrastructure and ranks second in the Index, and the infrastructure gap in many of Asia-Pacific's developing nations is rapidly being filled by the promise of China's grand plan and deep pockets.

The Middle East is continuing to diversify away from oil and take advantage of its natural solar resources. The region also has solid plans around transport, water and sewage, offering some prime opportunities for investors.

In addition, as traditional infrastructure assets classes become more competitive, investors are increasingly looking to alternatives. Examples including 4G and fibre optic networks are creating a platform for smart cities and the Internet of Things. We are also seeing investment outside of traditional PPPs to the likes of student accommodation, car parks, energy smart meters and rolling stock.

Overall, our Infrastructure Index and its five regional supplements present a positive view of the sector globally. A large project pipeline worldwide, new markets embracing PPPs and new asset classes will deliver considerable benefits. And with large amounts of private sector capital waiting to be invested, governments should be looking at how they can capitalise.

We would like to thank our research partners inspiratia and our interviewees for giving up their valuable time to share their views on the infrastructure sector in their respective markets.



Kristy Duane

Co-Head Infrastructure & Project Finance T +44 20 7524 6568 E kristy.duane@cms-cmno.com



Paul Smith

Co-Head Infrastructure & Project Finance T +44 20 7367 3475 E paul.smith@cms-cmno.com

Join the debate: **#CMSinfra**Twitter: **@CMS\_IPF** 

# Global infrastructure opportunities

Has a very ambitious PPP programme,

(4G) roads initiative.

including the flagship Fourth Generation

#### Africa Europe Netherlands (Rank 1) Africa Netherlands (Rank I) Three major road PPP projects currently The World Bank plans to invest US\$57bn in sub-Saharan Africa over the next in procurement: the €600m Blankenburg tunnel PPP project, and the €1bn A13/16 three years. Rotterdam and Afsluitdijk causeway projects. Morocco (Rank 33) Photovoltaic technologies have proven **Germany** (Rank 3) In 2016 the BVWP 2030 plan launched with popular, and the largest projects are in the aim to facilitate €270bn of spending in transport infrastructure. Kenya (Rank 37) Kenya's National Highways Authority is UK (Rank 4) currently tendering for Nairobi's Crossrail 2 – advanced discussions Southern Bypass, Nairobi-Nakuru underway, according to the National highway, Nairobi-Mombasa and Thika Infrastructure Commission. Superhighway. Norway (Rank 8) Nigeria (Rank 40) National Roads Authority recently kicked The government is backing projects to off a new motorway PPP programme, meet the nation's current energy including the Rv.3/Rv.25 (Hedmark) shortfall, aiming to source 50% of motorway concession. Nigeria's energy from renewables. France (Rank 9) Broadband is one of the most promising new markets for private investment, with a €480m project in the Alsace region financed in 2016. Czech Republic (Rank 13) Between 2018 and 2022, the Czech Republic will start delivering a programme Americas to modernise its train stations, allocating over €384m to this scheme. Canada (Rank 2) Currently sourcing funding for Réseau Spain (Rank 14) €5bn availability payment-based PPP électrique métropolitain (REM) – a Asia-Pacific CAN\$5.9bn new integrated network programme that involves investments in 2,000km of roads by 2021. linking downtown Montreal, South Shore, Singapore (Rank 6) Middle East West Island, North Shore, and the airport. Slovakia (Rank 15) A major project currently in It will be the third largest automated Rise in employment rate and 3.3% procurement is the Kuala Lumpur-UAE (Rank 10) transportation system in the world. GDP growth bring optimism in Singapore high speed railway. Infrastructure spending is country's outlook. USA (Rank 7) due to increase significantly China (Rank 20) Trump's proposed US\$1tn infrastructure Poland (Rank 17) ahead of Expo 2020, as the The world's largest energy-fromplan will bring opportunities for investors The country is now set to build the emirate upgrades its waste plant is being built in and contractors. Central Transportation Hub, expected transport, water, sewage Shenzen. The 267,000m<sup>2</sup> plant to have a capacity of around 50 million Mexico (Rank 21) and health networks. will be covered in 44,000m<sup>2</sup> of The 2017 earthquake will mean core passengers annually. solar panels and is expected to be Iran (Rank 38) infrastructure will need replacing across operational by 2019. -O- Russia (Rank 35) Italian railway company FS the country. Recently launched a tender for the and its Iranian counterpart India (Rank 27) Colombia (Rank 25) deployment of 2.5GW of renewable energy have signed a US\$1.2bn Development of international power, featuring large-scale solar and wind

06 | Infrastructure Index 07

airport Kopar-Panvel will handle

10 million passengers and grow

to a capacity of 60 million.

technologies, to be developed between

2018 and 2022.

agreement to build a

high-speed railway between

the cities of Arak and Qom.



### The Netherlands leads the way

With a vigorous economy experiencing the strongest GDP growth since 2007 and an efficient multi-billion-Euro pipeline of road and water PPPs, the Netherlands claims top spot in the rankings.

Despite the Netherlands being without a formal government for 208 days, it is expected to achieve an impressive **3.3% GDP growth** in 2017 according to the Central Bureau of Statistics. This is the highest for a decade, thanks largely to robust exports.



The country's infrastructure market is traditionally very active, with significant private investment activity. There are no fewer than three major road PPP projects currently in procurement: the €600m Blankenburg tunnel PPP project, and the €1bn A13/16 Rotterdam and Afsluitdijk causeway projects. A further project, involving the A9 Amstelveen motorway, is due to be tendered between December 2017 and March 2018.

Yet the largest infrastructure deal in the Netherlands this year involved the sale of the Dutch car park operator Q-Park, which was sold to KKR Infrastructure by a host of institutional investors for €2.8bn in August.

As the Dutch infrastructure market is the envy of Europe, it is also an intensely competitive market. Low returns are partly to blame for the financial struggles of several Dutch contractors, notably Ballast Nedam, which was spared from bankruptcy through an acquisition by Turkish company Ronesans. This competitive environment also makes it difficult for prospective new market entrants.

The largest infrastructure deal in the Netherlands this year involved the sale of the Dutch car park operator Q-Park, which was sold to KKR Infrastructure by a host of institutional investors for €2.8bn.

The Dutch procurement process is widely applauded for being transparent and efficient, with milestones broadly reached on time. The Ministry of Infrastructure (Rijkswaterstaat) has overseen the country's infrastructure development since 1798 and has built a strong reputation for high standards among infrastructure investors. That is not to say there has not been a learning curve, with some poor project structuring having led major domestic contractors into trouble in the past.

The Netherlands already has the best infrastructure in the European Union, according to the World Economic Forum (WEF), with the highest-quality ports, airports and roads, and the third-best railroads. The country hosts one of Europe's main ports, Rotterdam, and the continent's third largest airport, Schiphol.

The Netherlands has a strong incentive to further improve its infrastructure, given its population density, the highest in the European Union, amounting to 505 people per square kilometre, according to the World Bank.

The country is a global leader in renewable energy, having closed the world's largest project financing for an offshore wind farm in May 2014. Located in the North Sea, the €2.8bn Gemini project was commissioned in May 2017. The tender for the Borssele 1 and 2 offshore wind farms, amounting to a total of 700MW, was won by Dong Energy in July 2016 with a historically low bid.

The country also pressed on in September 2017 with the development of its solar, onshore wind, biomass and geothermal sectors as it awarded incentives to projects representing 3.2GW of capacity as part of its SDE+ programme.





**DIF**Wim Blaasse, Managing Partner

Wim Blaasse is Managing Partner at the Dutch infrastructure investor DIF, and has been with the company since its inception in 2005. He is responsible for all aspects of DIF's funds.

DIF has around €4.2bn of assets under management across seven closed-end investment funds. The independent fund manager has invested in around 175 infrastructure projects, representing a total asset value of circa €25bn.

The investor is active in Europe, North America and Australia, primarily in the greenfield markets. While the pipeline of opportunities is extensive in his view, "the key element is to be selective".

In Europe, DIF sees opportunities in the well-established markets of the Netherlands and Germany. More recently, Spain unveiled a €5bn road PPP programme – Plan Extraordinario de Inversiones en Carreteras. The programme consists of 20 proposed availability-based PPPs with 30-year concession periods.

"National governments need to stimulate their economies by creating more projects which the private sector can invest in" Blaasse says. "There is a lot of private capital waiting".

The Netherlands is a good example of the public sector taking the initiative according to Blaasse. The Dutch government has a, "consistent policy when it comes to PPPs, as all projects which reach a certain criterion are simply procured as PPPs", he says. "It provides certainty, which in turn creates a large pipeline, which means companies can build up large teams in the country".

The UK has seen a significant scaling back of PPP activity since the heyday of PFI came to an end with the global financial crisis. While Brexit is contributing to market turbulence, the more fundamental issue is the lack of deal flow from the PF2 programme, Blaasse says. Nevertheless, despite the significant reduction in deals, the UK remains a core market for DIF, with Highways England recently confirming the A303 and Lower Thames Crossing projects.

Further afield, DIF has no immediate plans for investment in Latin America, even though nations like Colombia and Peru are becoming more important in terms of infrastructure. "We would need to get more comfortable because there is too much political risk, and currency problems need to be addressed".

governments need to stimulate their economies by creating more projects which the private sector can invest in... There is a lot of private capital waiting.

#### **Good and bad sectors**

Whereas DIF has been an active player in the European renewables markets, the sector is now becoming difficult to invest in.

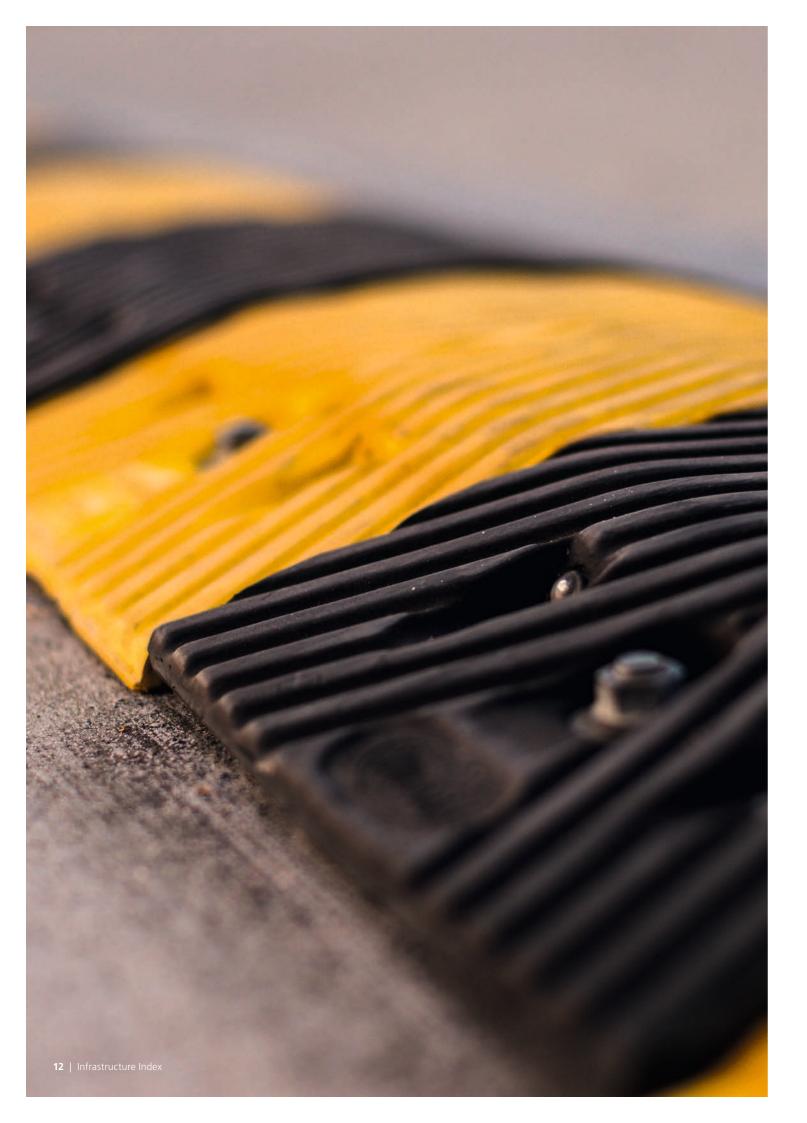
"The combination of a power price risk at quite aggressive curves and quite low IRRs, have created competitive conditions which are not attractive", he says.

The situation is being mirrored in North America, where valuations were previously based on 20 or 25 years, but are now based on 35 years, which shows market players are "stretching their assumptions".

As seen with several other traditional PPP investors, DIF has also recently branched out into regulated utilities, notably through the acquisition of UK company Affinity Water, a deal which closed in early 2017.

Affinity Water was, "more attractive" than some other regulated deals which DIF has considered, Blaasse says. The UK water provider was granted an 'enhanced' status by Ofwat in its 2014 price review, meaning it holds the best operational standard for a water company in the UK. The company's gearing is also low, with relatively little debt on its books. Affinity was acquired on "conservative" assumptions, Blaasse says, with a 20-year financing structure which "heavily mitigates the interest rate risk".

DIF is planning a limited number of new deals in the regulated utilities space. Blaasse also sees opportunities in UK rolling stock and European fibre network roll-outs in which it will invest through its newly created core fund, DIF Infrastructure V.



# A Brexit bump in the road

The Brexit referendum and the 2017 general election have created an air of political uncertainty for the UK infrastructure market, underscored by slow progress on megaprojects. While PFI opportunities have been scarce since the global financial crisis, the industry is showing a high degree of dynamism and creativity. Overall, the UK currently ranks fourth.

The UK economy has slid from a relative position of strength to registering the slowest GDP growth rate among G7 nations in the first quarter of 2017. Meanwhile, the country's sovereign credit rating was downgraded by the world's three main rating agencies – Moody's, Standard & Poor's and Fitch – in the aftermath of the Brexit referendum, losing its prized AAA rating.

The lack of political consensus over new megaprojects has been the root of frustration and delays for years, with Brexit only exacerbating the situation in the short term. Any pipeline of infrastructure projects, as well as renewable energy programmes, may find itself scuppered by the scale of work required by UK institutions in preparation for Brexit, which will dominate the agenda of government and national agencies for the foreseeable future.

There are also significant uncertainties ahead with regard to the Northern Powerhouse agenda, and devolution, which potentially opens up new opportunities in local infrastructure. The creation of the National Infrastructure Commission (NIC), which became an executive agency in January 2017, and the appointment earlier this year of Lord Adonis as its permanent Chair, is a step forward in the effort to address UK infrastructure needs independently from the election cycle. The 2017 Budget was broadly welcomed by the NIC as a clear commitment to investing in the UK's infrastructure network, however it continued to call for a clear long-term investment strategy. Philip Hammond also announced that the Infrastructure and Projects Authority will publish an update to the National Infrastructure and Construction Pipeline. This will set out a 10 year projection of public and private investment in infrastructure of around £600bn.

Despite political instability, the three H's of UK infrastructure – the Heathrow Airport expansion, the High Speed Two (HS2) rail link and the Hinkley Point C nuclear power station – have all ultimately been approved by policy-makers in recent years.

#### Investor outlook

From an investor perspective, interest in UK infrastructure assets remains high, with returns under heavy competitive pressure. The largest deal to close since the EU referendum was the **£5.4bn** sale of a **61%** interest in National Grid's gas distribution network, on which CMS advised.



The diversity of the buying consortium, which includes Macquarie, China's CIC Capital and Germany's Allianz Capital Partners, attests to the attraction of UK infrastructure. The recent decline of Sterling, meanwhile, has had varying consequences, increasing foreign purchasing power on the one hand while creating a currency mismatch for foreign owners of UK infrastructure on the other.

Despite this, the UK continues to be one of the world's most dynamic infrastructure markets, with a large number of acquisitions and refinancings. Due to the ongoing low interest rates, refinancings – often involving first generation PFI assets – represent a large portion of recently closed transactions. The quest for deals has also prompted the industry to explore less mature sectors such as energy storage, broadband, smart meters, Offshore Transmission Owners (OFTOs), student accommodation and rolling stock.

The UK can still rely on a very kind tax environment, to which Brexit may add additional pressure to slash headline corporation tax rates, as well as the presence of a world-class financing and advisory community.

#### Rail sector heats up

In July 2017, the Department for Transport awarded £6.6bn of construction contracts for the first phase of HS2, a project estimated to have total costs of £56bn.





UK firms Balfour Beatty, Costain and Carillion were among the recipients of the contracts. The procurement process for the first HS2 rail franchise operator is also underway. Transport Secretary – Chris Grayling – has confirmed the route of phase two of HS2, and decision-makers are considering the so-called HS3 rail link that would travel east to west in the north of England.

In London, Crossrail is on track for completion in 2018 and plans for Crossrail 2 are said to be in advanced discussions, according to the NIC.

Perhaps the most profound policy announcement for the rail sector of 2017 was made in August, when the state-owned operator Network Rail introduced sweeping reforms that would allow third-party financing for a "raft of opportunities" beginning in the autumn. An in-house team dedicated to third-party financing is due to be set up by December 2017, with the list of potential projects including rail stations, car parks, signalling concessions and rail lines. This adds to the busy pipeline of rail franchise tenders, which have attracted a number of new foreign operators, and the related rolling stock tenders so far dominated by Rock Rail.

Meanwhile, Welsh authorities were let down by another rail decision in summer 2017, when the Department for Transport backpedalled on a pledge to carry out electrification works on three UK rail lines: the Great Western, Midland Mainline and Lake District lines.

In the 2017 Budget Philip Hammond did, however, announce funding to accelerate the delivery of East-West Rail and the Oxford-Cambridge Expressway, as well as announcing a 'Roads for the Future' competition.

#### Slow going on roads and social

The PFI pipeline has all but dried up: **124** projects reached financial close between 2008 and 2011, compared with just **one** in England in 2016.



With little greenfield activity, PFI investors have turned their attention to optimising existing revenue streams by way of refinancing and securing new investments in the secondary market.

While the government's Transport Investment Strategy has confirmed support for private finance, few new projects have been procured under the PF2 model introduced in 2012, in part reflecting the politically explosive nature of the UK government's earlier PFI experience. The involvement of private capital in infrastructure is further exacerbated by changing public attitudes to privatisation of key assets.

Highways England began seeking financial advisers in September 2017 for the A303 redevelopment in Stonehenge and the Lower Thames Crossing. Welsh authorities also aim to launch a procurement process for the A465 expansion under a new PPP structure – the mutual investment model – potentially increasing the number of new major road PPPs in procurement.

Aside from roads, the UK government is also considering PPPs for schools, healthcare centres and military barracks, and PFI investors have increasingly ventured into the student housing market. Meanwhile, £400m of public and private investment was announced in the 2017 Budget for the creation of a network of electric car charging points.

Scotland continues to push ahead with smaller social infrastructure PPPs procured under the "hub" model. The pipeline of larger projects, all of which were being procured under the non-profit distributing (NPD) model, has dried up. This is as a consequence of Eurostat's most recent European System of Accounts rules – known as ESA10 – being finalised in late 2014 and the resultant ONS decision in 2015 to classify a number of major NPD projects, including the c.£550m Aberdeen bypass, as being under public sector control and therefore on balance sheet. The market awaits revised proposals from the Scottish government as to its preferred procurement method(s) for major infrastructure.

### Renewable energy

The renewables industry has faced headwinds over the past few years, with formal support for solar PV and onshore wind now withdrawn, although offshore wind and certain bioenergy technologies still enjoy access to incentives under the contracts-for-difference framework. In September 2017, the results of the second auction round were announced, with the winning projects coming away with strike prices that are in some cases half the value of the first round, most notably 3.2GW of offshore wind capacity.

The withdrawal of subsidies for more established technologies is driving the UK renewables market towards the development of subsidy-free projects.

The country's first merchant solar farm – built by Anesco and combined with a battery storage facility – came online in September 2017, and a number of wind developers are known to be exploring opportunities in the windiest regions, such as Scotland. Several of these may opt to sell their power via private offtake agreements with corporates or large industrial energy users, many of which have an increasing appetite to buy renewable electricity.



CityFibre

Mark Collins, Director of Strategy

& Public Affairs

The UK government's Digital Infrastructure Investment Fund, launched in the summer of 2017, has shone a spotlight on the rapidly transforming broadband market, where companies like CityFibre, Hyperoptic and Gigaclear have established a strong foothold in recent years.

"While Britain's broadband infrastructure has fallen behind, Europe and other parts of the world have been busy investing heavily in the sector, as data increasingly becomes an essential public service," says Mark.

"The government has sent a signal that they have a desire to stimulate investment and to encourage competition to enter the broadband market. What that signal gave was the confidence to invest in fibre. There is now longer-term and lower-cost debt available. Increasingly, investors such as pension funds are comfortable with what we're doing," says Collins.

"In this context, infrastructure investors have also become a major player, with limited greenfield opportunities available in other parts of the market." Collins says, "One other thing fuelling this interest is that opportunities to invest in other infrastructure are declining. Perhaps in the past investors saw us as high-risk and not core infrastructure, but now the sector allows those funds to make a higher return while having the backing of government policy."



# Opportunities for investors: alternative v traditional

A lack of opportunities on the one hand and high demand on the other, have compelled infrastructure investors to think outside the box.

In their hunt for returns, market players have sought exclusive bilateral deals, have squeezed more value out of existing assets and recycled whole portfolios. More fundamentally, they have re-built the infrastructure asset class altogether. The latter, in particular, has brought a new wave of innovation to a market long dependent on standardised PFIs for much of its deal flow.

A useful way to trace this evolution is to look at how investors have changed their risk appetite. For instance, London-based Amber Infrastructure has gone from being a plain vanilla PFI investor to venturing into greenfield regulated assets such as the Thames Tideway Tunnel. In July 2017, the group was appointed, alongside Infracapital, to manage the UK's new broadband investment fund.

Another player, the Dutch investor DIF, which also entered the regulated assets and broadband markets this year, has launched a new fund – the €350m DIF Core Infrastructure I – that partners with corporates, not public authorities, on small to mid-market investments in the unregulated, fibre, storage, telecoms and utilities sectors.

Then there is HICL, which scaled-up this year with its largest investment to date – the acquisition of southeast England's Affinity Water. Those familiar with HICL's business would not immediately consider utilities as the company's forte.

Rock Rail has shaken up the rolling stock oligopoly, having once been the dominion of leasing companies. While PFI is all but dead, UK social infrastructure specialists have found their new calling alongside real estate developers in the student housing market.

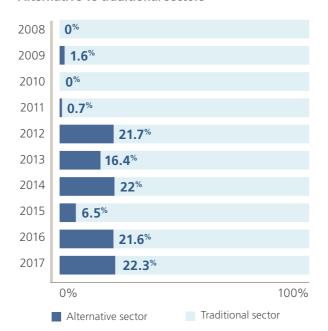
The smart meter financing market, which Infracapital kicked off with a bang in 2015, has attracted a flurry of investors including Canadian pension fund managers OMERS and OTPP, who recently partneredup with UK utility company SSE in March to finance 2.7 million new installations.

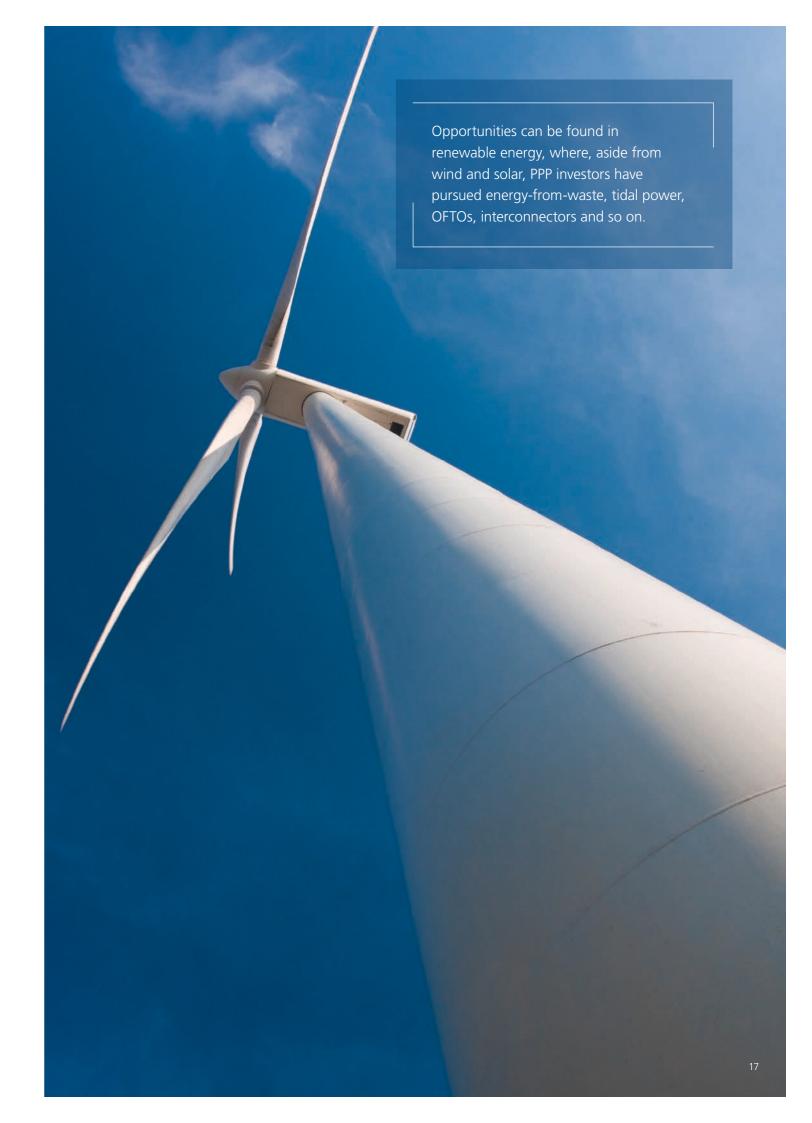
And further opportunities can be found in renewable energy, where, aside from wind and solar, PPP investors have pursued energy-from-waste, tidal power, OFTOs, interconnectors and so on. London-based John Laing's portfolio, for one, has shifted from being 100% PPP to being made up of about 25% renewables and demand projects – not to mention the fact that the majority of the pipeline lies outside the UK.

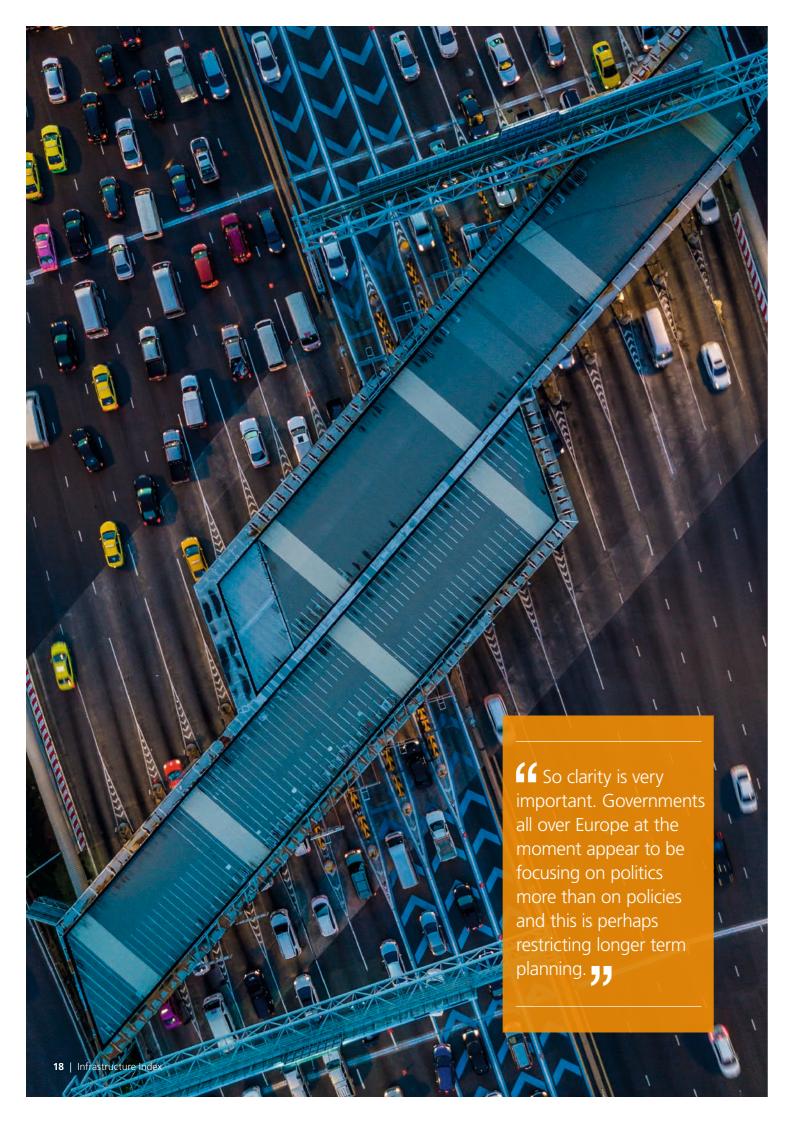
In an effort to capture all these market movements, the chart below shows a growing trend of project finance deals coming from sectors not traditionally associated with project finance.

On one level, investors are doing what they have always done – they are going to where the pipeline is. But the pipeline is not always as clearly set out as during the heyday of Standardisation of PF2 Contracts (SoPC) and requires more creativity.

#### Alternative vs traditional sectors











# Arcus Infrastructure Partners

Ian Harding, Co-Managing Partner and Stefano Brugnolo, Senior Investment Director

Ian Harding is a Co-Managing Partner of Arcus Infrastructure Partners and part of the original team that founded the business in 2009.

Stefano Brugnolo is a Senior Investment Director of Arcus Infrastructure Partners and has been responsible for the origination of new investments opportunities in the Central and Eastern European region, as well as in Italy, since 2009.

Arcus Infrastructure Partners was founded in 2009 following a management buyout of Babcock & Brown's European Infrastructure Fund, which was renamed Arcus Infrastructure Fund 1 (AEIF1). The independent fund manager deals with investments with an aggregate enterprise value of €17bn and this year extended the life of AEIF1 by 10 years.

With an exclusive focus on European infrastructure opportunities, the company is well placed to assess the current state of various markets across the continent. While it has both made and realised investments in a number of countries across the region, the UK remains a core focus.

Reflecting on the notion that the sheen has been taken off the UK's attractiveness in light of both a slowdown in procurement and, of course, Brexit, Arcus' Harding has a defiant message. He says, "The UK is a very stable, vibrant and open infrastructure sector.

"Brexit clearly is a risk, but we also see it as an opportunity. The uncertainty around it is not overly helpful, but I do think that good transactions can still be done in what are uncertain environments. You have to be extremely focused, extremely diligent and try to pick the winners that are consistent with your experience and with the market trends."

#### Polish play

Arcus has also pursued opportunities further afield, capped by the completion in January 2017 of a large-scale move into the Polish market with the A1 toll road. Having initially acquired a 25.31% stake in the concessionaire for the project, the fund manager then exercised its rights of first refusal on the stakes held by Skanska and John Laing, taking the total holding to 85%.

Arcus has so far been pleased with its experience of operating in the Polish market. Brugnolo explains, "It is a sizeable asset and we are extremely pleased with its performance, so far. We believe that Poland, from the couple of years' experience we've had actively looking at the country, has possibly all the ingredients to continue attracting private capital.

"They clearly have a very ambitious infrastructure plan, partially supported by EU funds. If they do not close themselves to international capital, they will hopefully be successful in delivering that," adds Brugnolo.

#### **Dutch attraction**

As a core European market, the Netherlands – the highest ranked market in this year's Infrastructure Index – falls well within Arcus' remit and is a market that has hosted a successfully realised investment in telecom towers for the group.

On the satisfactory exit price achieved for that disposal, Harding says, "I think part of that was the Netherlands was a good market for investment and it's very stable, both in a macro sense and now, post elections, politically.

"Other infrastructure investors globally see the Netherlands as an attractive market and, relatively speaking, low risk. We have Dutch nationals in our team and are spending increasingly more time in the market, it's certainly attractive to us," continues Harding.

#### Government role

The Netherlands has rightly been widely applauded for its transparency and efficiency in procuring its infrastructure and its approach is one that other governments could do well to follow.

Brugnolo comments, "There is abundance of private capital in the market. The role of the government should be as an enabler for private capital to be put to work to develop new infrastructure. It's really important that governments are focused on a clear and stable framework to encourage private capital into their domestic markets.

"So clarity is very important. Governments all over Europe at the moment appear to be focusing on politics more than on policies and this is perhaps restricting longer term planning."

### Europe bounces back

After years of stagnation, economic growth in the European Union is finally accelerating thanks to an increase in both domestic demand and exports.

Rank	Country	2017 Score
1	Netherlands	89
3	Germany	87
4	United Kingdom	87
8	Norway	85
9	France	83
13	Czech Republic	70
14	Spain	69
15	Slovakia	67
16	Italy	66
17	Poland	66
23	Hungary	56
26	Romania	54
30	Bulgaria	49
32	Turkey	48
35	Russia	43

The severe recession that hit most European countries during the last decade led to a cut-back in public spending, with consequences for infrastructure investment. Quantitative easing, the Juncker Plan and EIB support have provided beneficial conditions for ramping up EU infrastructure spending in the aftermath of the crisis. In many cases, politicians have embraced the cause, seeing infrastructure spending as an economic stimulant and announcing ambitious plans. But there are several stumbling blocks, ranging from budget cuts to political indecision to poorly managed procurement processes. From an investor perspective, the scarcity of bankable greenfield projects has led to fierce competition for a handful of PPPs in mature markets, with diminishing returns.

The Netherlands, Germany, France and the UK have all retained their standing as some of the world's most attractive private infrastructure markets, with timid signs of optimism coming from Spain. Meanwhile, the infrastructure market has high hopes for central and eastern European countries, whose economies are currently experiencing a great expansion, largely due to the favourable environment for foreign investment and EU financing. The region is set to receive more than €150bn funding from the European Regional Development Fund (ERDF), the European Social Fund

(ESF) and the Cohesion Fund over the period covering 2014-2020. This funding will be allocated mainly to provide modern road and railway links as well as to improve the conditions of air and water transport infrastructure. Outside the European Union, Norway is emerging as a hotspot of activity, with a massive transport plan centred on roads and rail.

#### Germany – 3rd

Germany, the European Union's economic powerhouse, has taken third place in the rankings. In 2016, the federal government launched the BVWP 2030 plan with the aim of facilitating €270bn of spending in transport infrastructure, including roads, railways and waterways.

#### France – 9th

Broadband is seen as one of the most promising new markets for private investment, with a €480m project in the Alsace region financed in 2016 acting as a pathfinder for the sector. This has since successfully been followed by the €600m Nord Pas de Calais and the €1.1bn Grand Est projects.

#### Czech Republic – 13th

There is strong and longstanding government support for infrastructure spending and, between 2018 and 2022, the Czech Republic will start delivering a programme to modernise its train stations, allocating approximately €303m to the scheme. Czech authorities are also preparing a PPP project for the D4 motorway in a bid to replicate the success of neighbouring Slovakia's similar procurement process.

#### Romania – 26th

Romania is in the midst of an economic boom.

The latest figures show a robust acceleration of GDP growth, which is expected to exceed 5% in 2017.

The Romanian government recently received a €1bn term loan from the EIB to fund transport infrastructure projects across the country by 2020. The EU-backed Cohesion Fund is providing €226m for water infrastructure, including water management and wastewater treatment projects in Romania.

Case study:

### Germany overhauls roads network

The German infrastructure market is likely to stay the course following the parliamentary elections despite the difficulties Angela Merkel has faced in forming a government. The dominant parties – the Christian Democratic Union and the Christian Social Union – have both put their support behind road PPPs, although there were opponents during the election campaign.

In an important set of reforms this summer, the Bundestag approved legislation to establish the new Federal Highway Company, a body which may pave the way for more private investment in the German road network.

As part of a broader initiative that amends the German constitution, the new reforms consolidate the country's motorway network, which currently is largely managed by Germany's 16 states. The realignment of state and federal authority is a central goal of Chancellor Angela Merkel's ruling coalition government.

While the new order will not be implemented until 2020, it will give control of Germany's motorways to the federal government, a proponent of PPPs. There has also been discussion of a partial privatisation of the new organisation, with officials pointing to the perceived successful privatisations of Deutsche Post and Deutsche Telekom in the 1990s.



The government is also retendering the nation's privately-owned toll collection company, Toll Collect, with a new operator due to be selected in 2018. The concession is currently held by a consortium of Daimler, Deutsche Telekom and Vinci, but the operator has been mired in legal disputes over its delayed start in 2005.

Germany continues to be haunted by a crisis over several traffic risk PPPs, which were procured in the run-up to the financial crisis.

The government is in the midst of a court battle over the John Laingbacked A1 expansion project, said to be on the verge of a takeover by distressed asset funds. The road, which connects the ports of Hamburg and Bremen, was hit hard by the economic downturn.

A number of other traffic risk projects are also believed to be close to insolvency – the A4, A5 and A8 – after sponsors bid too aggressively on traffic forecasts.

#### PPP track record

Although Germany has procured hundreds of school and healthcare PPPs, these projects are relatively small. It is, however, Germany's road construction programme that continues to be one of the main sources of deal flow for large-scale transport PPPs in Europe.

Originally taking its cue from the UK's PFI programme, Germany has rolled-out three waves of road PPPs since the early 2000s – dabbling with toll, shadow toll and availability-based contract structures. The market is currently busy with a list of 10 projects – representing 600km of motorways

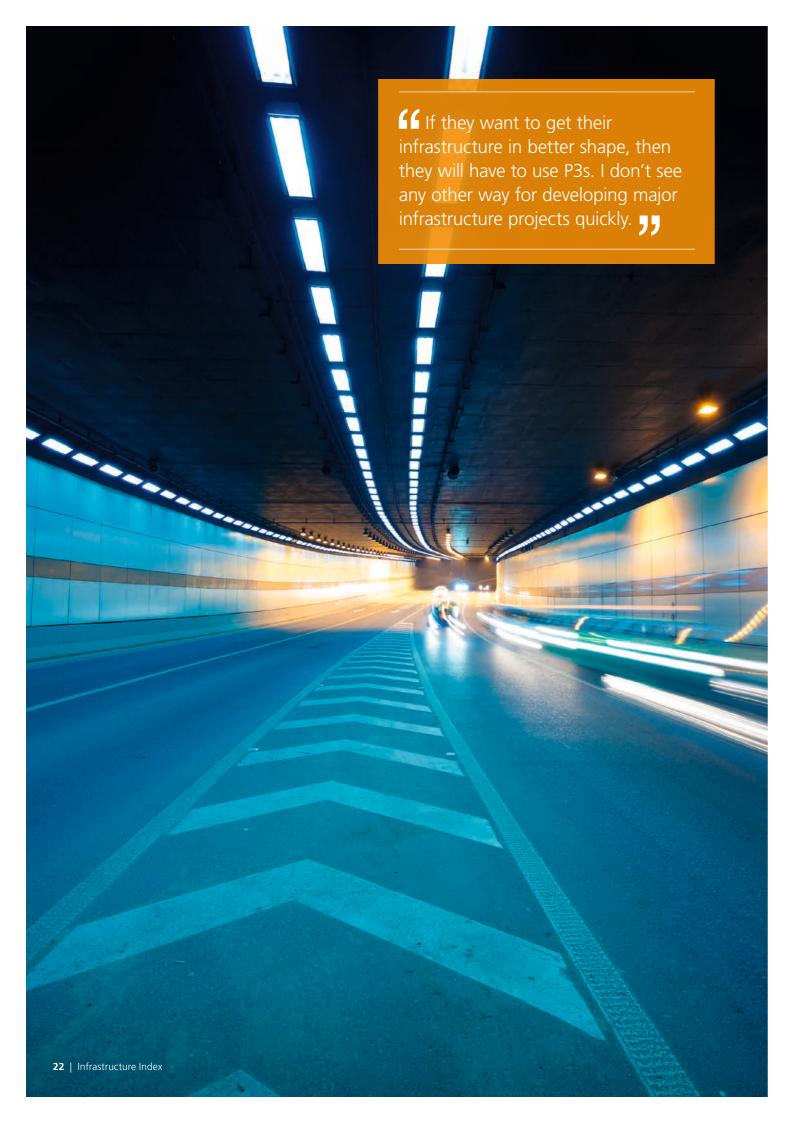
and €7bn of investment – identified by the transport minister Alexander Dobrindt and finance minister Wolfgang Schäuble in 2015.

German market players like to use the cliché "usual suspects": a handful of major construction companies that regularly compete for the one or two tenders that come to market each year.

Most notably, these include Vinci, Strabag, HOCHTIEF, BAM and more recently Eiffage. The contractors are usually paired up with infrastructure investors such as DIF, Meridiam and John Laing.

On the financing side there is a diversity of players from the EIB and German Landesbanks, to Japanese and French banks, to institutional lenders MEAG, Talanx and Allianz. However, the market for long-term project debt has been increasingly competitive since the financial crisis, leading to a dwindling number of players.

The most recent project to be financed was the €440m A7 Salzgitter-Gottingen upgrade, which Vinci and Meridiam brought to a financial close in April 2017. Meanwhile, bidding groups are currently preparing final offers for the €400m A10 / A24 project, and indicative bids for the €1bn A3 project are due in February 2018. The B-247 and A4 projects are believed to be next in line for procurement, and the government is also seeking technical advisers for the A1/A30.





# HOCHTIEF PPP Solutions Peter Coenen, Global Managing Director

Peter Coenen is the Global Managing Director of HOCHTIEF PPP Solutions. The company has been in operation since the 1990s, focusing on transportation and social infrastructure projects in Europe and North America. Presently, the company's core markets include Germany, Netherlands, Canada, USA and UK.

"There is a huge demand for infrastructure in most countries across the world," says Coenen.

However, time and again in recent years, the long-term stability that is essential for infrastructure groups has come under threat in these markets.

In Germany, which held its elections in September, there is, "a risk of the new government turning away from PPPs" says Coenen, highlighting pressure from left-wing minded politicians.

Public opinion in Germany has largely turned against road concessions, partly due to the difficulties surrounding the A1 Hamburg-Bremen expansion project, which is currently said to be undergoing a legal battle with the German government, with potential implications for other A-roads. But Coenen says the press has ignored the important fact that the A1 situation has shown that risk transfer is working, as the private sector has taken the burden of overly optimistic assumptions. At the end of the day, taxpayers have received an excellent road, built in a short time at a very competitive price. Whereas the investors have to go home making a loss, the taxpayers hardly pay anything.

Coenen is slightly more bullish about the UK, despite Brexit.

Major infrastructure projects are unlikely to stall because of Brexit, he says. Still, "small to mid-sized projects may be endangered by the decision to leave the EU," he adds. Currently, while the UK's PF2 pipeline is set to introduce large-scale PPPs, such as the Lower Thames Crossing and the A303, smaller projects may be absent.

The USA, meanwhile, has been less reliable than other countries in developing P3 projects, yet the declining quality of infrastructure will require huge investment in the years ahead. Coenen says he does not believe President Donald Trump's apparent backtracking on the use of private finance will prevail. "If they want to get their infrastructure in better shape, then they will have to use P3s," Coenen says. "I don't see any other way for developing major infrastructure projects quickly."

The Czech Republic is another land of opportunity, Coenen says. HOCHTIEF considers itself to be a "long-term player" in the country. "We have established an experienced local team, which can offer a fair value to the government when developing projects," Coenen says.

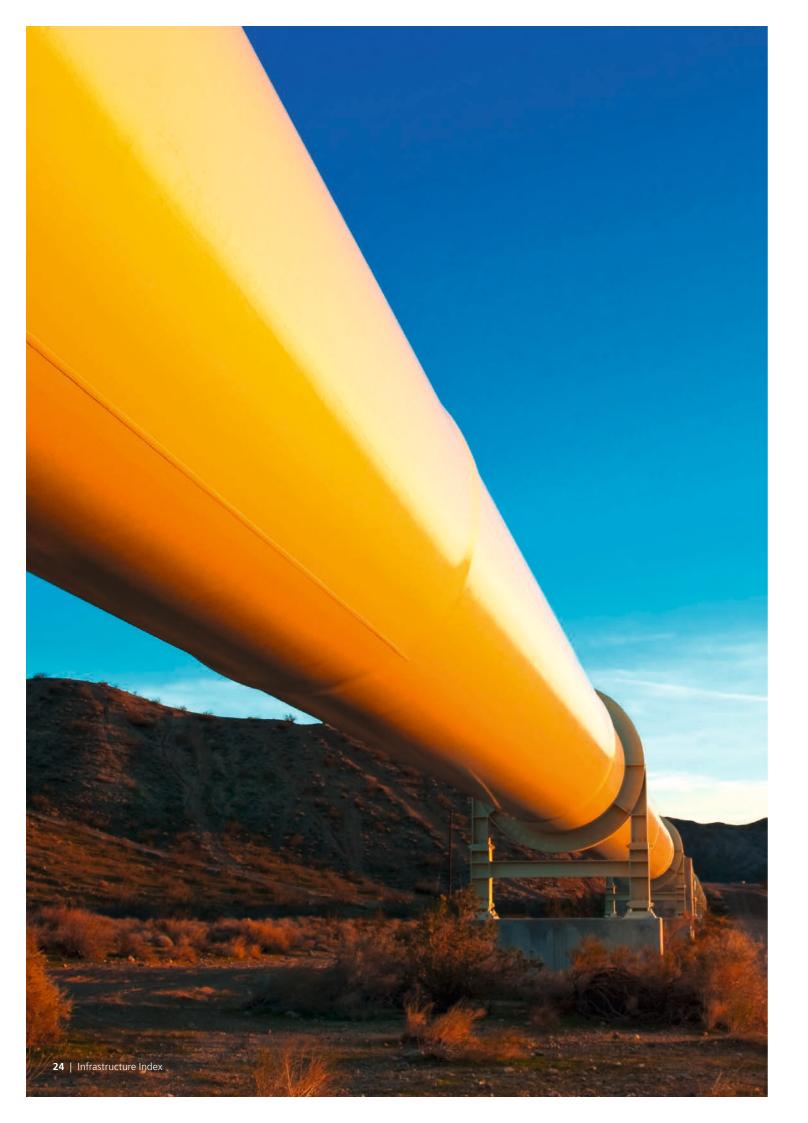
#### **Government leadership**

"Strategic thinking is key for authorities to develop projects which are attractive for private players," Coenen says.

The Netherlands has been very efficient in this regard, with many long-term plans created in the last 10-15 years, notably the Rijkswaterstaat's road PPP programme in Amsterdam. Germany, on the other hand, despite having "plenty of capital", has invested too much in short-term measures, according to Coenen. There is an, "abundance of road projects which just entail repaving asphalt, instead of constructing roads and structures from scratch," he says.

Another issue of concern for HOCHTIEF is expensive bidding costs and lack of sufficient compensation for losing bidders. "For significant infrastructure projects, sponsors sometimes spend between £10-20m on bid costs, but then only get back around £250k-500k in loser fees," Coenen says. An increase in compensation would attract more investors and therefore increase competition and better bids, he says.

Government budgets also need to be more flexible, to allow for unforeseen circumstances when developing PPP projects.
The Netherlands and the UK are more advanced in this respect than Germany. Authorities in these countries will allow for a 5-10% budget increase for a PPP project in the event of unforeseen circumstances. This compares with a 20-40% increase for a conventional project, according to Coenen.



# Middle East pipeline promise

The current environment in the Middle East provides strong incentives for the development of PPPs and privatisation, opening up new opportunities for international investors.

Rank	Country	2017 Score
10	UAE	80
12	Qatar	71
18	Saudi Arabia	64
22	Oman	57
31	Jordan	48
38	Iran	26

Members of the Gulf Cooperation Council (GCC) are increasingly looking to the private sector and abroad for new sources of capital. The current environment provides strong incentives for the development of PPPs and privatisation, opening up new opportunities for international investors. Kuwait and Dubai have already enacted PPP legislation, in 2014 and 2015 respectively, while Saudi Arabia is now envisaging sales of state assets on an unprecedented scale.

Another source of infrastructure financing may be found in the capital markets, which could be unlocked by sukuk finance. Often inaccurately called Islamic bonds, sukuk can be particularly suitable for the refinancing of existing assets. Islamic financial contracts, which have already been adopted for water and conventional energy projects, are likely to be used to structure an increasing number of infrastructure deals.

Falling oil prices have raised awareness of the need to diversify the economy away from oil. As a result, the Middle East, with a large share of the world's hydrocarbon reserves, is also rapidly becoming a renewables hub. Jordan and the UAE have already played a pioneering role in exploiting their high levels of solar irradiation, while Saudi Arabia's recent commitment to clean energy is hailed as a game changer for the regional pipeline.

#### UAE – 10th

The UAE tops our list of the most attractive Middle Eastern countries for infrastructure investment, ranking tenth globally. Infrastructure spending is due to increase significantly ahead of the Dubai Expo 2020, as the emirate upgrades its transport, water, sewage and health networks.

#### Iran – 38th

After a decade, economic sanctions against Iran were partially lifted in 2016 and the country is now eager to attract international capital and expertise to upgrade and expand its infrastructure sector – in particular railways, ports, airports and energy and power facilities. While risks remain, reflected in Iran's ranking towards the bottom of the table, there are clear opportunities in the medium term with its government looking to invest in road, rail and airport infrastructure over the coming decade.

Another source of infrastructure financing may be found in the capital markets, which could be unlocked by sukuk finance. Often inaccurately called Islamic bonds, sukuk can be particularly suitable for the refinancing of existing assets.





Mott MacDonald

David Cox, Managing Director (MENA)

David Cox is Managing Director for the Middle East and South Asia at Mott MacDonald, focusing on infrastructure opportunities in the region. He is responsible for all aspects of operations, spanning multiple consultancy and development markets.

Headquartered in London, the UK remains one of Mott MacDonald's core markets. Reflecting on the recent political and economic turbulence due to Brexit, Cox is largely optimistic. "Change creates challenges but also new opportunities," he says.

For instance, Brexit is, "pushing political attention" towards foreign direct investment with traditional trading partners, which include the Middle Eastern nations he focuses on.

Cox observes that countries are also diversifying who they do business with. "Governments are investing in multiple trading partners to negate situations like Brexit," he says.

And while investment attractiveness may have taken a hit over the past year, the UK's trade with the EU – which amounts to 44% of the UK's goods and services – "cannot be switched off."

#### Middle Eastern promise

Cox focuses on infrastructure opportunities in the Middle East and South Asia, growing economic powerhouses where the company has managed and advised on several projects, such as Turkey's Ikitelli Health Campus and Saudi Arabia's Madinah airport concession. There are opportunities in the transportation, energy, healthcare, education and science park sectors as primary investment opportunities.

Many nations in the Middle East and South Asia have embraced change in the infrastructure market in recent years, according to Cox.

One of these nations is the UAE, where investment has been fuelled by its position as a regional transport hub and due to the upcoming Expo 2020 in Dubai, with hotels, malls, and residential estates being developed as a result.

Resilience to political change, climate change, and volatility in the energy market in the region are also key.

Programmes such as Saudi Arabia's 2030 plan are vital to this resilience.

Saudi Arabia is also undergoing a "huge transformation", Cox says, not just through its sweeping 2030 reforms, but also because the nation is "serious about social change" – highlighted by the government's recent decision to allow women to drive.

Above all, Cox underscores the need for stability to maintain the "drive to spend capital" in the Middle Eastern infrastructure market.

Resilience to political change, climate change, and volatility in the energy market in the region are also key. Programmes such as Saudi Arabia's 2030 plan are vital to this resilience, Cox says.

#### Lessons to learn

Ease of doing business is also fundamental to an attractive infrastructure market, Cox notes, calling for more transparency on data and improved tax regimes.

There is currently a wide disparity in the levels of bureaucracy across the region. For instance, the UAE has reduced red tape, while Kuwait has more work to do.

Attracting global talent is also important. "There needs to be a workforce that is mobile, and businesses need to celebrate local diversity while contributing to society," he says. Cox points to the example of Singapore, before adding that Dubai is trying to create a similarly prosperous society.

Nations can learn from the region's, "openness to learn, change and take ideas from the outside", Cox says, especially regarding finance mechanisms, procurement and technology.

One instance of market leadership is the introduction of PAS 2080, the first industry standard for managing carbon emissions. Launched in May 2016, it has been proven to save costs, drawing strong regional interest from governments.

### Americas: Canada forges ahead

The Americas present a highly diverse investment landscape. Canada is a global hotspot of infrastructure activity, while the USA is anxiously awaiting more details regarding President Donald Trump's proposed US\$1tn infrastructure plan. Whilst Latin America is home to some active markets, including Colombia and Chile, other countries are suffering the consequences of a commodities slowdown and widespread corruption scandals.

Rank	Country	2017 Score
2	Canada	88
7	USA	85
11	Chile	75
21	Mexico	57
24	Peru	56
25	Colombia	56
34	Brazil	45

Canada confirms its reputation as the region's most reliable infrastructure market. Despite huge potential, the USA still lags behind its northern neighbour in terms of the state of its infrastructure and plans to finance upgrades.

Meanwhile President Trump's proposed renegotiation of the North American Free Trade Agreement (NAFTA) is a concern for the Mexican economy.

#### Canada – 2nd

Canada lives on its reputation as one of the world's most fertile grounds for infrastructure investment, with topnotch procurement procedures, a vigorous PPP pipeline and a robust community of sponsors and investors.

The Canadian government is also poised to launch the Canada Infrastructure Bank (CIB) by the end of 2017. As part of this plan, the new infrastructure bank would be endowed with CAN\$35bn in capital to invest in revenue-generating economic infrastructure, including transport, social infrastructure, electricity grids, water and broadband.

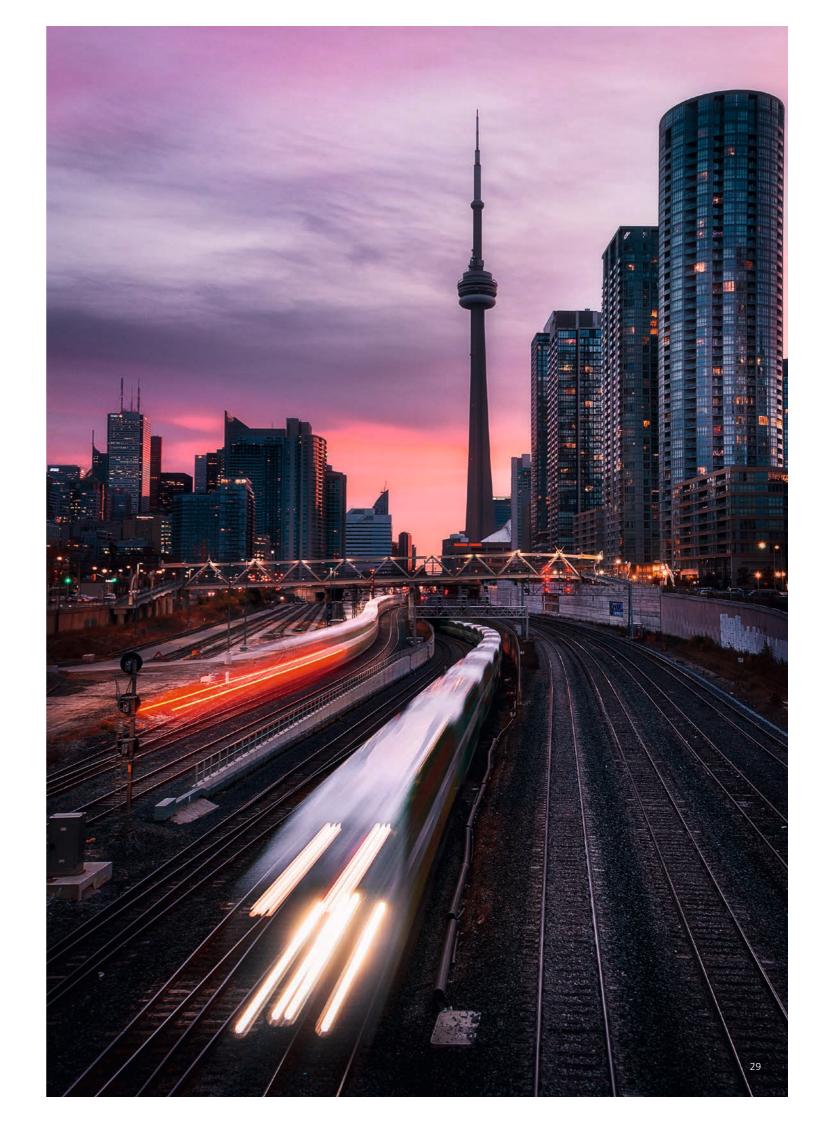
#### Mexico – 21st

In March 2017, the government announced a PPP pipeline comprising 12 road and hospital projects. Two of the country's biggest infrastructure projects are the US\$3bn Mexico City Airport expansion and the US\$3bn Port of Vera Cruz expansion. This year's most high-profile infrastructure deal was the Red Compartida national broadband roll-out, worth close to US\$1bn. As a result of the 19 September 2017 earthquake, which hit Mexico City as well as the states of Puebla and Morelos, there is an urgent need to reconstruct damaged infrastructure.

#### Colombia – 25th

Colombia has one of the most ambitious PPP programmes in the world, the flagship Fourth Generation (4G) roads initiative, which has attracted the likes of InfraRed and Partners Group. In 2016 alone, the 4G initiative brought in over US\$10bn of investment to greenfield PPPs, eclipsing both the USA and Canada.

Colombia has one of the most ambitious PPP programmes in the world.



#### Case study:

### Trudeau banks on infrastructure

After receiving parliamentary approval in June, the Canadian government is poised to launch the Canada Infrastructure Bank (CIB) by the end of 2017. Already a global infrastructure leader on several counts, Canada is embarking on a grand new experiment, with many questions still unanswered.

Prime Minister Justin Trudeau's government came to power in November 2015, having campaigned on a pledge to double infrastructure spending to CAN\$187bn over the next 12 years.

As part of this plan, the new infrastructure bank would be endowed with CAN\$35bn in capital to invest in revenue-generating economic infrastructure, including transport, social infrastructure, electricity grids, water and broadband. Under the government's plans, the bank could provide debt, equity and guarantees, as well as having an advisory role.

Wielding a AAA sovereign credit rating, the bank would also aim to leverage five times as much capital from private investors, with the government courting the country's institutional giants – CPPIB, OMERS, OTPP and CDPQ.

The Toronto-based bank has hired former RBC CFO Janice Fukakusa as its first chair, and the government is currently seeking a CEO and a board of directors.

Yet for all its promises, the CIB has political opponents both on the left and the right and the jury is still out on how effective the bank will be. In the current market environment, perhaps the first thing that comes to mind whenever a state-owned bank participates in deals in developed markets is that there is no shortage of capital; indeed investors of various shapes and sizes are hungry for infrastructure assets. Investors are more interested in knowing what is in the pipeline, but details of this remain scarce.

#### **PPP** pipeline

Bank or no bank, Canada's infrastructure market, particularly Ontario's PPP market, is in many regards the gold standard. This in terms of pipeline and efficiency but perhaps less so for returns, given the highly commoditised and competitive environment.

So far this year, there have been seven financial closes for greenfield PPP projects across Canada, according to inspiratia's dataLive. In 2016 there were 10 financial closes, coming down from a spike of close to 20 deals in 2015 and 2014 respectively. Of course, these are just the greenfield statistics.

Having financed around 50 hospital PPPs since 2008, authorities have increasingly turned their attention to transport. Ontario's Metrolinx Regional Express Rail (RER) Capital Delivery Programme is one major undertaking.



Yet for all its promises, the CIB has political opponents both on the left and the right and the jury is still out on how effective the bank will be.

While the pipeline is clearly there, and procurement processes are generally much speedier even than those in the UK, Ontario's large equity-diluting milestone payments have long been a sore spot for investors. In addition to making it more difficult to deploy large amounts of capital, critics say leaving too little long-term equity in projects can lead to insolvency.

The federal government currently makes a 50% milestone payment to provincially owned highway projects at construction completion, and the public contributions can go up even higher, to 75%. To take one example, the CAN\$5.5bn Eglinton Crosstown LRT only utilised CAN\$100-\$120m of private equity.

Aside from capital contributions, investors also take issue with restrictions on selling stakes in P3 projects and right of first refusal, which discourage secondary market competition. Currently, shareholdings sold at a profit within three years of the substantial completion require a 50% transfer of proceeds to the government.

### Africa: Solar PV takes hold

The lack of adequate infrastructure in Africa is stifling the continent's economic growth, but the wide infrastructure gap can be bridged by private investment. Attracting this money is an ongoing challenge, as high regulatory and political risk prevent most projects from achieving bankability. Currency volatility, corruption and a lack of experience in project finance add to the continent's uncertainties. But interest in solar PV and onshore wind is on the up.

Rank	Country	2017 Score
33	Morocco	45
37	Kenya	35
39	Mozambique	25
40	Nigeria	23

The World Bank plans to invest US\$57bn in sub-Saharan Africa over the next three years, and the African Development Bank (ADB) committed around US\$2bn to infrastructure across Africa in 2016. Increasingly, larger projects are using debt from Chinese state-owned banks, and will often be managed by Chinese EPCs as part of Beijing's Belt and Road Initiative. There is currently a lot of optimism concerning African renewables due to growing political will and falling costs. Clean energy is widely seen as the most effective way to address the continent's energy needs.

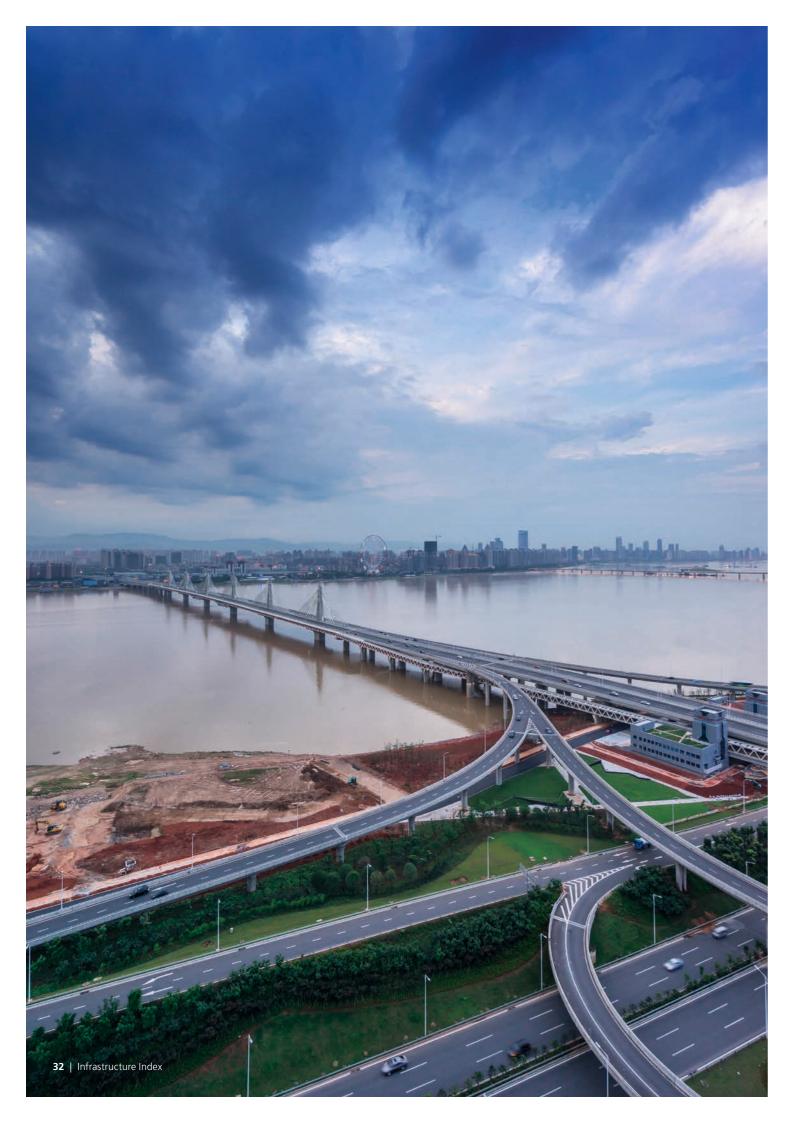
#### Morocco – 33rd

Photovoltaic technologies have proven popular, and the most ambitious projects are in Morocco, where the government has developed the €2.2bn Noor PV and concentrated solar power pipeline which, when complete, will hold a capacity of 580MW.

#### Nigeria – 40th

Nigeria has enjoyed an average of 7% growth over the past decade. That said, the country is still underdeveloped and the continued strong growth has put increasing pressure on the nation's infrastructure. There is now an urgent need for capital, with an energy investment gap estimated at US\$1.5bn and a transport infrastructure gap of over US\$3bn.

Clean energy is widely seen as the most effective way to address the continent's energy needs.



# Asia-Pacific: China's Belt and Road – an investment bonanza?

Filling the infrastructure gap is a priority for Asia-Pacific's emerging economies, which are enjoying robust demographic and economic growth. Launched by Chinese president Xi Jinping in 2013, the new Silk Road is profoundly reshaping the continent's landscape.

Rank	Country	2017 Score
5	Australia	86
6	Singapore	86
19	Malaysia	60
20	China	58
27	India	53
28	Indonesia	51
29	Philippines	50
36	Vietnam	40

The vast part of the Asian continent is set to benefit from China's Belt and Road Initiative, considered the world's largest infrastructure project since the Marshall Plan. China's ambition is to create an interconnected Eurasian region through land and sea corridors, connected by highways, railways and ports.

The vast part of the Asian continent is set to benefit from China's Belt and Road Initiative, considered the world's largest infrastructure project since the Marshall Plan.

#### Australia – 5th

Australia ranks the highest out of all the Asia-Pacific markets. Australia has an ambitious renewables plan, with a federal target of at least 33,000GWh of Australia's electricity coming from renewable sources by 2020. Given Australia's high-levels of solar irradiation, this has led to a large number of solar farms being constructed, as well as some project financed onshore wind farms. Tesla's boss Elon Musk is also in the process of building the world's largest energy storage battery in South Australia.

#### Singapore – 6th

Ranking sixth overall and second in the Asia-Pacific region, Singapore is one of the most attractive countries in the world to conduct business in. With an extremely favourable tax environment, political stability and a prosperous economy, many multinational and foreign firms choose Singapore as their headquarters for the APAC region. Although GDP growth in the country has been volatile over the past decade, it enjoyed modest growth of 2% in 2016. An infrastructure project of great interest involves the development of Changi Airport's Terminal 5.

### Methodology

The Index indices are based on the following six main indicators and further sub-indicators, as shown below:

- Economic status
- Sustainability and innovation
- Tax environment
- Political stability
- Ease of doing business
- Private participation

All of these are weighted as shown in this graph:

Annual trade (% of GDP) Credit rating Interest rates	5% 20% 5%	Economic status 30%
Environmental performance Innovation Quality and condition of infrastructure	5% 2.5% 5%	Sustainability & innovation 12.5%
Corporate tax rate Resource drain Complexity	3% 1% 1%	Tax environment 5%
Governance and stability Rule of law Regulatory stability	10% 5% 7.5%	Political stability 22.5%
Transparency/corruption Ease of doing business	5% 5%	Ease of doing business $10\%$
Government support Gross fixed capital formation Private investment	5% 5% 10%	Private participation 20%

This Infrastructure Index provides an effective tool to measure the overall attractiveness of each country for infrastructure investment, also allowing a more sophisticated analysis based on the comparison of specific parameters, such as political stability and private investment in infrastructure, among different jurisdictions. The commentary provided in this report provides a regional context for our findings, also considering major themes in the industry, track-records and project pipelines.

The scores, and subsequent rankings, of the top ten countries are highlighted below.

	Score	Private participation	Ease of doing business	Political stability	Tax environment	Sustainability and innovation	Economic status
Netherlands	89.31	17.00	7.97	21.28	4.18	9.87	29.00
Canada	88.53	17.75	8.03	21.54	4.79	9.52	26.90
Germany	87.63	17.38	8.04	20.66	3.65	9.90	28.00
United Kingdom	87.43	19.50	8.19	20.53	4.62	9.96	24.63
Australia	86.33	17.75	7.96	20.82	3.85	9.45	26.50
Singapore	86.18	10.88	8.45	22.05	4.94	9.96	29.90
United States	84.86	18.25	7.82	20.28	3.91	9.76	24.83
Norway	84.70	13.75	8.39	21.89	4.36	9.41	26.90
France	82.58	17.50	7.26	20.43	3.12	9.67	24.60
United Arab Emirates	80.44	14.75	7.14	17.98	4.98	8.49	27.10

#### About CMS

CMS is a top six global law firm, with 70+ offices in 40+ countries. With over 2,500 lawyers in the UK and a global team of over 4,500 lawyers, we have world-class bench-strength. CMS boasts one of the leading Infrastructure and Project Finance groups, advising on some of the largest and most complex projects across the globe. Our sector expertise means we have the ability to work with clients at all stages of their project lifecycle.



Real Estate – Smart, Healthy, Agile



Future of energy: the balance of power



What has 2017 meant for Transport?

#### About inspiratia

inspiratia pushes the boundaries of analytics in the global infrastructure and renewables sectors, producing the most accurate and insightful analysis, uncovering new financial information and making robust sector predictions.



inspiratia provides clients with the tools to anticipate and analyse market trends in a way that helps grow their pipeline of deals and assists with business development. Based in London and Washington DC, inspiratia has an international team of industry experts and analysts all with in-depth sector expertise and extensive professional networks. **www.inspiratia.com** 





#### Your free online legal information service.

A subscription service for legal articles on a variety of topics delivered by email.

cms-lawnow.com

Your expert legal publications online.

In-depth international legal research and insights that can be personalised. equides.cmslegal.com

CMS Cameron McKenna Nabarro Olswang LLP Cannon Place 78 Cannon Street London EC4N 6AF

T +44 (0)20 7367 3000 F +44 (0)20 7367 2000

The information held in this publication is for general purposes and guidance only and does not purport to constitute legal or professional advice.

CMS Cameron McKenna Nabarro Olswang LLP is a limited liability partnership registered in England and Wales with registration number OC310335. It is a body corporate which uses the word "partner" to refer to a member, or an employee or consultant with equivalent standing and qualifications. It is authorised and regulated by the Solicitors Regulation Authority of England and Wales with SRA number 423370 and by the Law Society of Scotland with registered number 47313. It is able to provide international legal services to clients utilising, where appropriate, the services of its associated international offices. The associated international offices of CMS Cameron McKenna Nabarro Olswang LLP are separate and distinct from it. A list of members and their professional qualifications is open to inspection at the registered office, Cannon Place, 78 Cannon Street, London EC4N 6AF. Members are either solicitors or registered foreign lawyers. VAT registration number: 974 899 925. Further information about the firm can be found at cms.law

© CMS Cameron McKenna Nabarro Olswang LLP

CMS Cameron McKenna Nabarro Olswang LLP is a member of CMS Legal Services EEIG (CMS EEIG), a European Economic Interest Grouping that coordinates an organisation of independent law firms. CMS EEIG provides no client services. Such services are solely provided by CMS EEIG's member firms in their respective jurisdictions. CMS EEIG and each of its member firms are separate and legally distinct entities, and no such entity has any authority to bind any other. CMS EEIG and each member firm are liable only for their own acts or omissions and not those of each other. The brand name "CMS" and the term "firm" are used to refer to some or all of the member firms or their offices. Further information can be found at cms.law