Financing Spanish Renewables Projects

Roundtable background reading

Thursday 5 October 2017
1pm to 4pm

Osborne Clarke
Paseo de la Castellana, 52
Planta 6
28046 Madrid

Spanish market comes back from the brink

Spain has climbed to the pinnacle of the renewables landscape once already, only to fall dramatically. It is now on its way back to the summit after three highly successful auctions. However, the glut of new projects bring with them their own risks. Nevertheless, Spain's riskWatch score has increased substantially to 70.17%, with a positive outlook.

The Spanish renewables market finds itself well and truly back in the fold after a few years in the doldrums. Investment activity almost entirely dried up, save for some M&A deals, following a moratorium on incentives offered to new greenfield projects, as well as retroactive cuts to those already developed.

Now, one could be forgiven for thinking that nothing of the sort ever occurred as market players from all sides of the industry return to a country which is currently embarking on something of a second renewables boom.

Grabbing the headlines, of course, are the trio of highly successful renewable energy auctions held since the beginning of 2016, awarding power contracts to almost 9GW of new capacity across the onshore wind, solar and biomass sectors.

While the initiative opens up a swathe of opportunities for market participants, Spain is still not without its risks, with the scale of the awarded projects ushering in new issues for project funders and developers to consider.

Policy and regulation

Since *inspiratia's* last comprehensive riskWatch update on the renewables market in Spain towards the start of 2017, the roll out of two further auction processes have brought in some new market realities for industry players to become accustomed to.

Chief among this is that the auction round introduced a glut of successful projects in both the onshore wind and solar sectors that will be developed to receive the lowest allowable revenues from power sales that were specified under the framework governing the bidding.

This factor centres around the so-called maximum percentage reduction, or discount, on initial investment that was permitted for each renewables technology included in the auctions. For onshore wind, solar and other technologies, the figures were 63.43%, 51.22% and 99.99% respectively.

In the first auction of 2017, and the second in the series of three, onshore wind utterly dominated, scooping up almost the entire 3GW capacity on offer. This was because wind developers bid with the greatest possible discount in the round, resulting in hyper-competitive prices of €43 per MWh, and pushed solar to the sidelines.

However, in the hastily-called follow up auction round, the situation was almost completely reversed with around 4GW of solar and 1GW of onshore wind given the nod. This 5GW total was well above the initially targeted 3GW of capacity,

Phone: +44 2073519451 Email: clients@inspiratia.com

but increase was made possible by a confidential clause in the framework governing the programme which allowed the government to expand the total size, but only if it resulted in no additional costs to consumers.

This latter point was made possible by the fact that winning projects will only receive the market price for power they produce, with only a partial price floor in play providing floating opex compensation at a level around €21-24 per MWh. All projects are required to be operational by the end of 2019.

Project Drivers

Not only are project developers reactivating their interest in Spain after the unveiling and successful roll-out of the recent renewables auctions, funders are naturally following and beginning to make their peace with the country too.

The motivations behind this are ones that will be familiar to anyone following the wider infrastructure space over the past few years: such is the intense competition and suppressed returns in mature markets elsewhere that financiers are off in search of any market that can provide an alternative.

And, Spain will be familiar to most, despite holding some painful memories for those who have previously operated in the market. The figure above illustrates the sudden withdrawal of greenfield projects from the market a few years back. The market now awaits a fresh injection of greenfield deals to punctuate the continued deal flow in the secondary market.

But tantalisingly, such is the sudden advancement of the renewables sector in the southern European nation, there also is emerging appetite for even financing merchant projects, particularly those with a benevolent solar irradiation or wind speed profile. This will make the funding of the projects that are only backed by market rate power sales an awful lot easier.

In addition, the larger companies that picked up huge tranches of the capacity on offer may find that a high-performing asset, if funded on balance sheet and as cheaply as possible, would be perfectly acceptable without a firm price floor. This will particularly be the case if a long-mooted general rise in wholesale power prices occurs sometime well in advance of the life of the assets. Others will no doubt sell on elements of their portfolios.

Power market

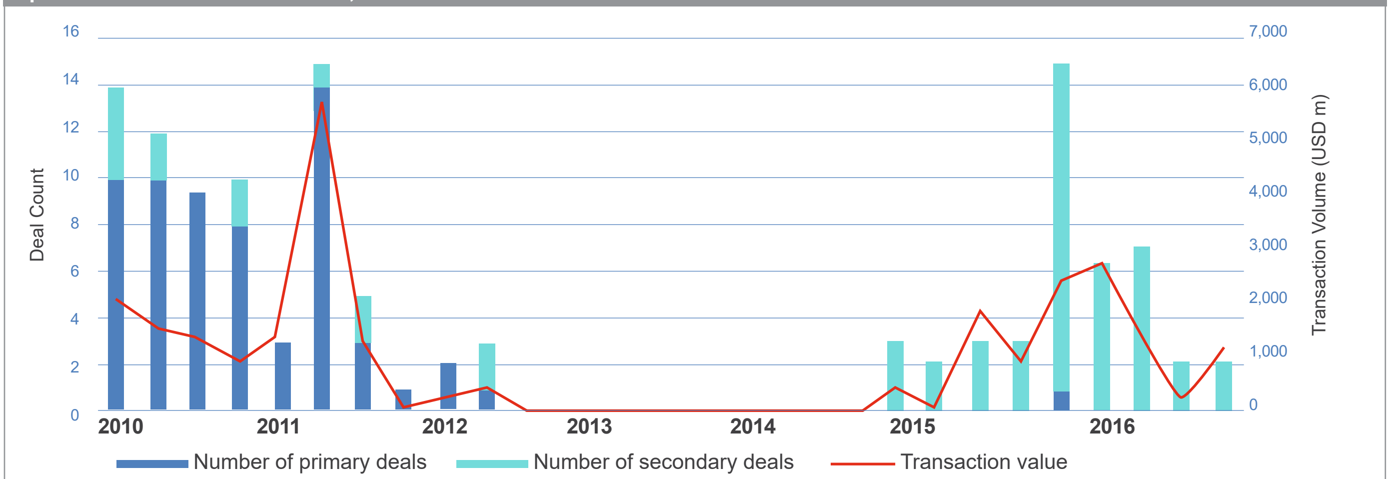
Permitting requirements during the tenders were not particularly demanding, with locations not needed to be specified before bidding. This could very well lead to potential M&A activity at a pre-construction stage, but this may bring its own issues into play.

Aside from some successful bidders potentially offloading, others had bid before even acquiring the projects. This situation will now need to play out in high speed with the 2019 deadline date for construction looming in the near distance. Some of the projects in this category are also understood to be a way off being ready for construction to commence and there are strict deadlines for this to occur too.

Any bottleneck in supply chains could also affect the ability of developers to get projects off the ground in a speedy fashion, with the wind sector understood to be particularly exposed to this risk. More than 3GW of onshore wind capacity will be in need of parts and components in the coming couple of years and so there is potential for delays in construction, which would naturally impact ability to meet deadlines, or at the very least a race to the top in prices which would eat into the viability of financial models.

A government objective behind holding the auctions was to achieve its 2020 renewable energy targets – objectives that were set at EU level. However, one potential upshot of the success of the auctions is that if there is a sizeable failure rate among the glut of projects required to come online almost simultaneously then this could put that ambition in jeopardy.

Spanish renewables deal volume, 2010 - 2016



Source: inspiratia | dataLive

Macroeconomics and politics

Following its protracted double-dip recession in the wake of the global financial crisis, Spain's economy has rejuvenated and it is currently enjoying its most prolonged expansion for over a decade. This rebound has naturally allowed the government to loosen some of its previously strict fiscal binds and this has fed through into supporting both renewables and the wider infrastructure industry after years of austerity.

The current growth rate is lingering just above 3% and is forecast to stay at this kind of level for a while to come if the country does not face any large-scale exogenous shocks. Growth has also finally taken a large chunk out of the unemployment rate in Spain, which has fallen to around 17% at the last count. While this figure is still high by EU standards – in fact the second-worst in the bloc – it is well down from its peak of over a quarter of the working age population, which was reached in 2013. The rate is expected to continue to decline for the foreseeable future.

The eventual return of Mariano Rajoy as prime minister of Spain following general elections in 2015 and 2016 has done much to calm the political situation in the country, which was until then threatening to be fractured and potentially forcing investors returning to the market following the barren years to think twice.

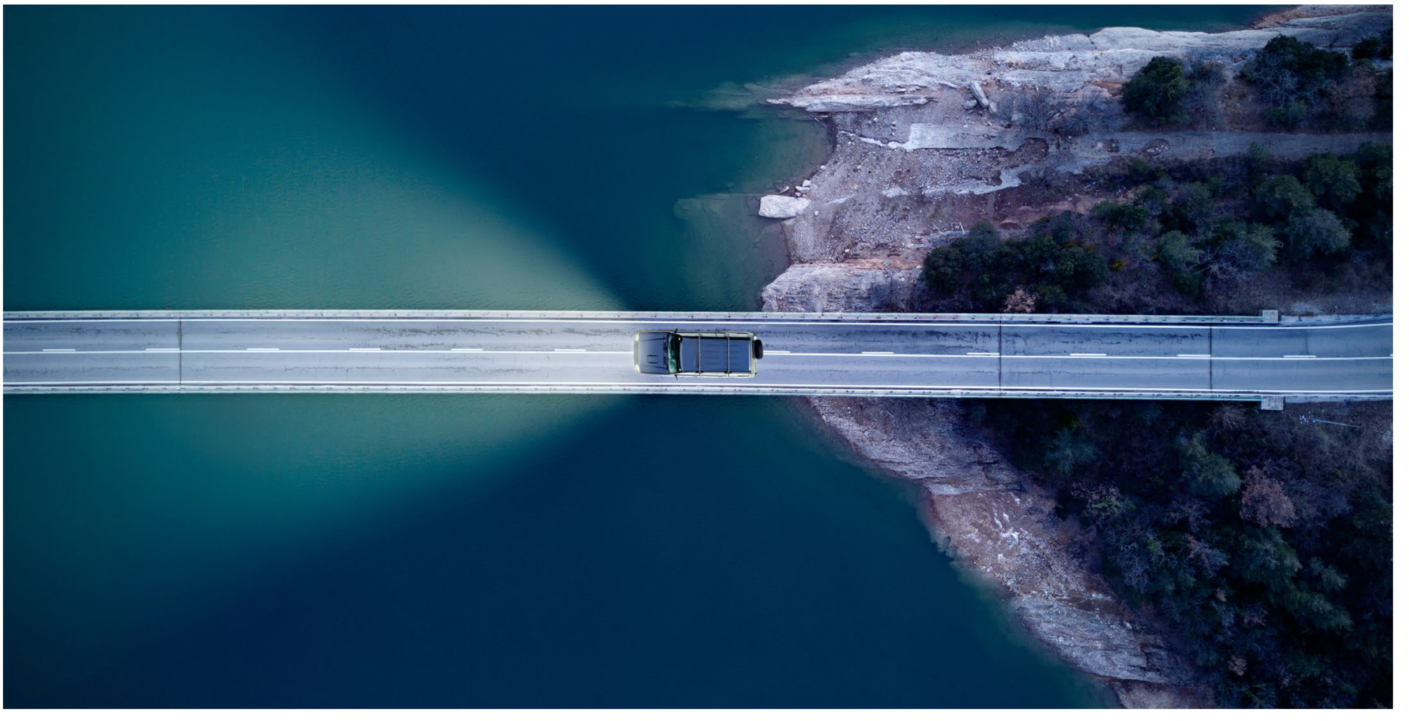
However, Rajoy's remains without a majority in parliament and must rely on votes from other parties to pass critical legislation, such as budgets. That said, this has, of course, not stopped the reintroduction of the renewables energy auctions, nor has it precluded the comeback of a road PPP programme, demonstrating that Spain is not stuck in legislative limbo as a result of the recent elections.

But, one potential bump in the road for the Madrid government is the impending Catalan independence referendum due to be held on 1 October. The decision by the regional government of Catalonia to hold the poll has precipitated a constitutional crisis between itself and the national administration over the legality of the action. Should the vote come up in favour of independence, then it has the potential to unleash dramatic repercussions across the political landscape.

Spain	Q3 2017	Outlook
Overall Score	▲ 70.17	▲ 71.29
Policy and Regulation	▲ 67.15	▲ 67.92
Project Drivers	▼ 71.25	▲ 74.65
Power Market	▼ 77.00	■ 77.00
Macroeconomics	▲ 85.71	■ 85.71

Phone: +44 2073519451 Email: clients@inspiratia.com

Spain's resurgence prompts cautious optimism



Spain was not too long ago a market hit by paralysis, as project developers and funders withdrew to safer ground in the face of both economic threats to projects and the ensuing regulatory risks imposed by a government seeking to cut costs. Now, a pipeline has returned, but it too is not without its dangers.

Much has been written over the years about how the greenfield infrastructure and renewables markets in Spain dried up in the wake of 2007's global financial crisis, and what that meant for those operating in the country.

As we all know, many toll-based transport schemes went bankrupt as a result of a drawn out economic slump experienced by the nation in the aftermath of the crash, throttling traffic volumes and rendering the projects' business models unsustainable.

And in the renewables space, this was of course compounded by retroactive cuts to tariffs previously awarded to projects in order to balance the books in the electricity system after public finances had taken such a hit. Despite some years now passing, arbitration proceedings lodged by investors against the Spanish government over this issue are only just beginning to unwind.

All this paints a picture of a market that has left participants burnt by their all too recent experiences there, perhaps precluding any from returning in a hurry.

But, of course, the Spanish government is once again dangling the carrot in both the renewables and infrastructure PPP sectors, hoping to win back the confidence of an investment community that had deserted it. It is doing this through the twin initiatives of a string of large-scale energy capacity auctions, of which it has held three in the past 18 months or so, as well as a more early-stage roads PPP programme.

Competitive bidding

All involved in the clean energy industry in Spain will naturally have the past tariff cuts still fresh in their minds. However, such is the clamour for fresh opportunities in markets the world over, the appetite in the recent auctions would suggest that all is now forgiven.

Furthermore, it would be an extremely foolish Spanish administration that would repeat that kind of tinkering with the regulatory regime, even if future economic or political forces are tempting it to do so.

Regardless, the extremely competitive nature of the bidding in the auctions has ultimately rendered the support on offer as negligible. Essentially, a floor price is guaranteed at a level which is below the natural floor of power prices in Spain and so is of minimal effectiveness.

Phone: +44 2073519451 Email: clients@inspiratia.com

Simply put, winning projects are effectively merchant in nature and if the guaranteed floor price is ever called into play, then this would have serious consequences for the viability of most of the power industry in Spain owing to the seriously low price of energy that would imply.

Financing merchant projects is one thing, and there is broadening appetite for this in Spain. Other financing options include projects with corporate PPAs, as illustrated by recent developments in the market. For all the enthusiasm shown for the auctions, attracting long-term debt for winning projects will be no easy task.

Permitting

Additionally, the auctions have introduced other risks for projects that successfully bid into them. The most immediate of these centres around permitting issues that some may face in the aftermath of their success in the process, particularly in areas with a glut of developments seeking building consent.

"What some bidders were doing was bidding before acquiring projects," says Manuel Cabrerizo, partner at Voltiq.

"Some of them are quite some distance away from construction and there are strict deadlines for both starting and finishing construction."

The construction deadlines and their associated penalties, a standard practice in renewable energy capacity auctions across the globe, were applied to ensure a healthy level of bidding with viable projects that would ultimately get built.

This factor is crucial for Spain in order to help it meet its 2020 EU clean energy objectives, with projects awarded in the country this year needing to be ready by the end of 2019. If not, then the penalties may involve some projects surrendering bid bonds placed to take part in the auctions, creating a risk for those that were supplied or guaranteed by funders.

Supply chain

Added to the permitting risk is the bottleneck in the supply chain that may be created as a result of such a large amount of capacity needing to be built at roughly the same time, owing to the auction's construction deadlines. In the two rounds run so far in 2017, the first one saw onshore wind sweep up nearly all of the 3GW capacity on offer, while the next 5GW round was dominated by solar projects in the south of the country.

While it is predicted that the solar supply chain will be able to accommodate the increased demand from developers, the experience of onshore wind schemes may differ. If orders for turbines are all to materialise at around the same time, this may test supply and perhaps lead to higher costs or risk delays in construction.

Despite the risks highlighted, which are not all unique to the market, the fact we are even talking about such a large greenfield renewables pipeline in Spain is a remarkable result for the country and one that should garner significant interest from funders – for the right projects at least.

And Voltiq's Cabrerizo is optimistic for the future of projects in Spain, even if the new reality involves minimal guaranteed price floors, or no price support whatsoever.

"If there is equity and debt appetite for merchant projects, that has nothing to do with the floor, rather the nature of the equity and debt markets right now," he says.

"There is appetite for merchant financing. We think the answer is PPAs and a merchant market, that is a market we do see."

Road to recovery

Away from renewables, there is also the tantalising proposition of the €5 billion (£4.6bn US$5.9bn) road PPP programme announced last month [July] by the government of prime minister Mariano Rajoy.

The Plan Extraordinaro de Inversiones en Carreteras, as it is known, will facilitate investments into some 2,000km of roads across the country between now and 2021 and has so far drawn a lot of comment and interest from market participants.

Aside from introducing a new pipeline into the Spanish infrastructure market, the programme represents much more to the politicians behind it. It is hoped it will right some wrongs of the past, finish off some of the projects that were abandoned in the wake of the financial crisis and bring the country out of a prolonged period of austerity.

The noises so far coming out of the government – details are still rather scant – is that much work is being done to address risks that have scuppered some of the older highway schemes in the country. As was widely reported at the time of the announcement, toll-roads are out in favour of availability payments; a perhaps obvious choice given the troubles experienced by the former model in Spain.

Furthermore, the financial might of the EIB will be behind the programme, likely in the form of an EFSI guarantee under the Juncker Plan. This should provide comfort for many of the lenders looking at getting involved with the pipeline.

Beyond that, the detail on risk allocation for projects is still in need of being sketched out, but much care will undoubtedly be taken to ensure this is done in a fashion that learns from past experiences.

Some of the aspects that will need addressing include expropriation risk and how the availability payments are applied, as inspiratia detailed last week [8 August].

Regardless, much like the renewables pipeline, interest will almost undoubtedly be high for the road programme, given the lack of opportunities elsewhere in other highly competitive markets. Also, owing to the rather limited size of the offering announced so far, who would bet against it being followed by further, potentially more ambitious programmes in the road sector and beyond?

All this points to Spain being firmly back on investors' radars, albeit with some caution, as the big question is still whether the country's plans will actually result in the delivery of new infrastructure.

Phone: +44 2073519451 Email: clients@inspiratia.com

Spain lays foundations for PPA market

As a further sign of the returning confidence in Spain's greenfield renewables market, utilities, industrials and corporates are increasingly keen on signing long-term offtake contracts with subsidy-free projects – a trend that inspiratia expects to develop significantly after the summer.

On 24 July, dairy company Calidad Pascual signed a power purchase agreement (PPA) to buy power from wind farms owned by EDP Renováveis. The contract will be effective for five years, from 1 January 2018 to 31 December 2023.

Spain's first corporate PPA further highlights the country's shift to merchant revenue models. A sizeable amount of the renewables capacity that did not manage to secure any form of remuneration in Spain's recent – and heavily discounted – 17 May and 26 July auctions is forecast to come to market regardless, without public subsidies and instead underpinned by fixed price PPAs.

Corporate PPAs, defined as long-term agreements according to which businesses – rather than electricity companies – buy power directly from energy generators, offer the latter the chance to develop bankable projects when subsidies are not available. On the other hand, PPAs allow corporate offtakers to purchase power at a fixed price, providing a hedge against the volatility of electricity prices, as well as enhancing their environmental credentials.

The increasing interest in long-term utility and corporate PPAs is part of Spain's shift towards being a fully-merchant market for new projects, made possible in part by technological advances, but also by the country's favourable market environment and improving macroeconomic fundamentals.

"Spain has a very mature renewables sector with the presence of big players, competitive production costs, good locations and technologies" says Santiago Blanco, director and area manager for energy in Spain and Portugal at DNV GL.

"The biggest challenge will concern the volatility of the pool market price and the future evolution of market conditions. Today, most of the risks are not about technologies, but about how to compete," Blanco adds.

> "The biggest challenge will concern the volatility of the pool market price and the future evolution of market conditions. Today, most of the risks are not about technologies, but about how to compete."
>
> *Santiago Blanco, director and area manager for energy in Spain and Portugal at DNV GL*

Transition to grid parity

With bidders offering the maximum discount in the recent auctions, Spain is already in the process of developing a large amount of subsidy-free capacity. The prevailing sentiment is that a shift to unsubsidised, quasi-merchant projects would be a natural development for the Spanish renewables market.

Progress is happening fast and, in the coming months, the industry expects important developments, with large power consumers eager to lock in their energy costs for the next 10 years or so.

Jorge Álvarez Vitores, head of consultancy at consulting and engineering firm Enertis Solar, says, "Spain is not yet a mature market for PPAs. We saw the first three-way agreement last week, that allows the consumer to buy energy produced by existing wind farms through an electricity marketing company. In our opinion, we will see the first direct contracts between consumers and new power plants before the end of the year, when spot market prices are expected to be around €50 per MWh".

"One of the current barriers of the PPAs, aside from the long term commitment, is that since the LCOE of renewable projects is steadily decreasing, some offtakers believe that if they wait to sign some months, even years, they may get a better PPA," Vitores adds.

Bankability

While the market for long-term PPAs is still nascent in Spain, the interest is growing from both industrial and financial offtakers, as shown by the recent move by financial advisory firm Voltiq to partner with Spain-based Our New Energy to advise on PPAs.

"Access to finance will not be facilitated only by entering into a PPA with a solvent offtaker, which is of course an important parameter. Generators also needs to be mindful of the quality of the offtake arrangement," says Manuel Cabrerizo, partner at Voltiq.

"Is it a take-or-pay? Does it allow for the intermittency of renewables? Or does it come with the obligation of having to deliver firm power, around the clock? All that needs to be properly structured, from a commercial, legal as well as technical point of view," Cabrerizo adds.

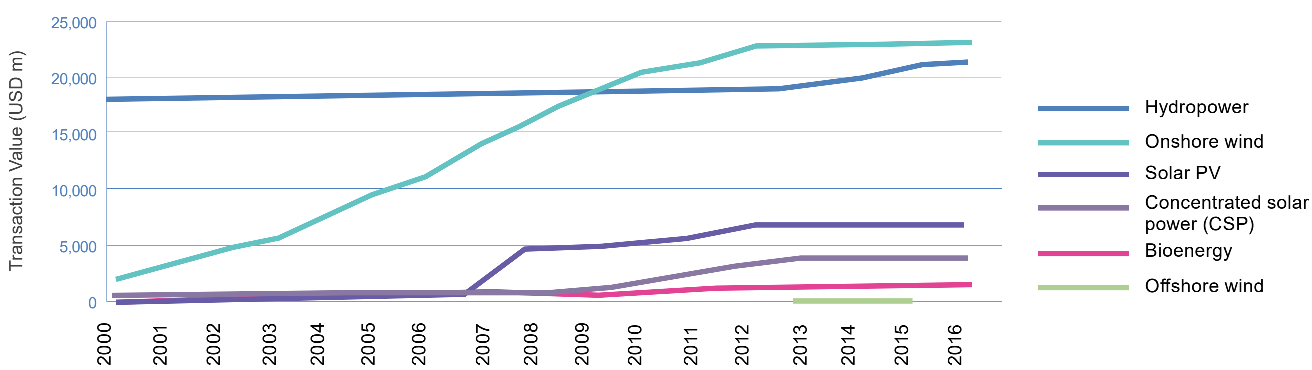
While developers have the equity and the desire to invest, the main challenge is represented by the fact that banks are not always keen on taking on merchant risk.

"Some banks are exploring the possibility to enter into project finance contracts without PPAs, for example by increasing the debt service cover ratio. But the most common approach will be through a PPA with physical power delivery and hybrid structure" says Luis Castro, partner at Osborne Clarke.

> "Some banks are exploring the possibility to enter into project finance contracts without PPAs, for example by increasing the debt service cover ratio. But the most common approach will be through a PPA with physical power delivery and hybrid structure"
> *Luis Castro, partner at Osborne Clarke*

In the US, corporate offtakers such as Google, Microsoft,

Installed capacity in Spain, 2000-2016



Source: IRENA, inspiratia

Phone: +44 2073519451 Email: clients@inspiratia.com

Amazon and Walmart are sourcing their energy requirements from renewable energy, as inspiratia recently analysed. Also in Europe, Google has a dominant position, followed by diverse companies such as Nestle, BT and Thames Water.

In Spain, the most likely actors to enter the long-term PPA market will be other investment grade utilities, thanks to their low credit risk, as well as credit-worthy industrial offtakers, with robust balance sheets. However, only financially strong players that can guarantee steady revenues will be successful in securing non-recourse debt.

"If you don't have a good long-term PPA, it's difficult to obtain leverage. If public entities, such as metro and train authorities, enter into corporate PPAs, that would be a game-changer – but that's a matter of political will," says Matías Gallego, technical director of Vector Cuatro.

Project bonds

The interest of international market participants is not limited to Spain's greenfield market. Aside from long-term PPAs, inspiratia expects project bonds to play an increasing role in the next two quarters.

"In this moment, the interest of institutional investors is also focused on Spain's secondary market. Currently, project bonds amount to 5% to 10% of the financing deals, but this is going to increase in coming months," says Osborne Clarke's Luis Castro.

Project bonds work with operational plants that have proved to have returns sufficient to ensure investor confidence. While bonds make the cost of financing cheaper, the assets need to provide a stable cash-flow, guaranteeing reliability in terms of returns.

Phone: +44 2073519451 Email: clients@inspiratia.com