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NORTON ROSE FULBRIGHT

European energy infrastructure opportunities

Connecting the dots

September 2015

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Introduction

How does the Juncker plan link in with the Energy Union and how does the Cohesion Fund interact with the Projects of Common Interest? Are the new guidelines from EIOPA relevant to energy infrastructure and where does the Capital Markets Union fit in?

Over the last couple of years, there has been a flurry of activity from the European Commission and the agencies of the European Union, particularly in the energy market. We have seen the launch of the Projects of Common Interest, the Juncker Plan, the Energy Union and the Capital Markets Union. As investors, financiers and other stakeholders start to appreciate that there might be more than just words to these initiatives, they quickly realise that it is difficult to get to grips with how the initiatives interact with each other and with other, already existing, support initiatives.

Very sizeable investments are required to meet the European 2020 targets and even larger amounts of money will be required to meet the even tougher 2030 targets. In the energy and energy infrastructure space, there is €5.85 billion from the Connecting Europe Facility, potentially €240 billion of the €315 billion Juncker plan and a whole framework provided under the Energy Union to support growth and investment. At the same time, what used to be a wall of debt has been replaced by a wall of funds, with infrastructure funds, pension funds and financial institutions looking to provide capital. However, there is a disconnect between the funds available and the projects that need funding.

With the European Council having approved the Energy Union in March[1], the European Parliament having approved the Juncker plan in June[2] and the third round of calls for PCI funding due in September, there is certainly momentum. To maintain this momentum, however, it is important that the stakeholders understand the interaction and see the pipeline of opportunities. As a number of single initiatives, it is not unlikely that they will fail; a siloed approach – where the energy initiative is separated from the capital markets initiative for example – is bound to fail. Taken together, however, they may well work.

We believe that these investment initiatives for Europe could assist in creating significant opportunities for investors, financiers, governments, promoters and contractors on a global scale. Investors worldwide, particularly pension and insurance funds, are looking for predictable returns, both as equity investors and debt providers. Faced with a more benign monetary policy environment and low interest rates together with a requirement for long-term investments in infrastructure, and attracted by a combination of relative value, low but stable yield, long-term matching of asset and liability and benefits of diversifying portfolios, a growing number of institutional investors are seeking to invest in infrastructure debt and equity. At the same time, many banks that had previously curtailed long-term lending are now back, which, together with several new-entrant banks, are particularly targeting ancillary income opportunities. Matching the availability of abundant funds with a willingness to explore innovative, but risk-mitigated, structures and viable projects will create opportunities.

Understanding the whole picture is paramount; however investors, project promoters and other stakeholders find it difficult to navigate the labyrinth of European initiatives. This briefing explains the programmes and initiatives, connects the dots and looks at them in the context of managing risk and finding finance against the regulatory backdrop.

Norton Rose Fulbright has extensive experience advising clients on all aspects of energy infrastructure and infrastructure projects and transactions across Europe. We would welcome the opportunity to discuss this with you in more detail.

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1 European Council, press release,19 March 2015
2 European Parliament, press release, 24 June 2015

The context

European energy infrastructure is ageing and development in the energy sector is slow. The European Union and European Commission have set high investment targets to be met in 2020 and 2030. To meet these targets the energy sector will require significant investments in the form of EU funds as well as funds from Member States and private investors; and a sufficient pipeline of viable energy projects to be invested in.

The European Union and European Commission have implemented a number of initiatives and funds over recent years with the aim of aiding these requirements. However, there has been minimal progress in bringing them together into a clear framework to help project developers and investors use them for greatest benefit. This briefing endeavours to connect the dots.

Navigating the labyrinth

Funds and initiatives can provide financial and regulatory backing throughout the lifetime of projects and thus help promote the creation of viable projects.

Initiatives have been set up with frameworks that should aid projects to be set up and run smoothly. For example, becoming a Project of Common Interest can accelerate a project's planning and permit granting procedures, the Juncker plan includes creating a portal with vetted projects to promote awareness of potentially viable projects and unlocking private investments through EU support, the Capital Markets Union aims to make capital accessible to SMEs and the Energy Union has laid down regulations to help implement infrastructure projects.

Funds can provide much needed financial backing in a risk averse market and can be linked to particular initiatives, for example the Connecting Europe Facility has set aside €5.85 billion just for energy PCIs, or they can be set up separately in order to fund projects that fulfil certain criteria such as the European Regional Development Fund that funds low-carbon and efficient projects.

Finding finance

It is important to understand the full spectrum of funds and initiatives available to projects so that the resources available can be used efficiently to the maximum benefit.

An important source of funds for projects also comes in the way of private investors. EU funds can be used to help leverage private funds and so increase a project's access to capital. However, private investors come in many different forms that all have different investment profiles so that, for example, venture capital and private equity may want high-risk and high reward investments whereas pension and insurance funds may be looking for safer, long-term investments.

Regulatory considerations

While EU funding can and should play a vital role in many European energy projects it is important to remember the overriding EU regulations that may have an impact, in particular the unbundling, state aid and public procurement regulations.

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Currently the European internal market does not work properly – the energy system is underperforming. The fragmentation and market design does not allow for sufficient investments and competition. Energy islands continue to exist in the EU; countries and regions are not properly connected and cannot reap the benefits of the internal energy market. European electricity and gas transmission systems, particularly connections across borders, are insufficient to bring about the internal energy market.

The energy sector across Europe has evolved rapidly over recent years. The changes in the power generation mix today and in the future require a different approach to the structure of Europe's grids that transport power and gas. Reasons for the new approach to Europe's energy infrastructure include:

- the move away from centralised nuclear power generation in some markets requiring new or enhanced electricity transmission lines
- Europe seeking gas supplies from new markets to enhance security of supply and competition amongst suppliers
- utility scale renewables being typically further away from populated areas than traditional utility power
- taking advantage of the cost effective power generation located in markets, which are not currently connected to the largest demand centres
- the intermittent nature of renewables requiring emphasis to be placed on reducing balancing costs and ensuring security of supply across Europe
- the rising penetration of low-carbon generation

Energy generation is in a rapid transitional phase, the likes or speed of which is unprecedented. Generation has and is still going through a paradigm shift in Europe. Where state monopolies used to run generation, transmission, distribution and sales, only fragments remain. Generation used to be where the demand was, so that large power plants – coal, gas and nuclear – were located next to industrial centres. There is now a disconnect between the location of generation and the location of demand.

The European debate on the generation of energy has expanded from only focusing on meeting climate change and emissions targets to addressing issues such as the cost and reliability of energy supply from reliable sources in a low carbon world – an energy trilemma.

The current energy infrastructure across the EU is outdated and inefficient and bottlenecks prevent efficient transmission of electricity and gas from one part of Europe to the other and from one country to another. The electricity networks need to be better integrated and more powerful. New gas pipelines are required so as to allow a more diverse palette of sources of gas supply. Energy islands and disconnected regions need to be brought out of isolation and Europe's energy markets need to be better integrated. To date, there has been limited support for cross-border transmission at an EU level. Energy infrastructure has been a matter for each Member State and each country has had a domestic focus on the development and structure thereof. Now, energy infrastructure has been elevated to a European level.

To get power from source to user, modern transmission networks are needed. The European energy infrastructure is ageing and not adjusted to more intermittent renewables. The EU has recently agreed on even more stringent goals, aiming to lower CO_2 emissions by 40 per cent compared to 1990 as against previously 20 per cent and achieve a 27 per cent increase in renewable share. This changing generation requires adaptation of the transmission networks and grids.

Funding requirement

The EU estimates that in the next six to ten years, around €200 billion will be needed for the construction of trans-European gas pipelines and electricity transmission grids; more specifically: €140 billion for high voltage electricity transmission systems, storage and smart grid applications, €70 billion for gas pipelines, storage, LNG terminals and reverse flow infrastructure (to allow gas to flow in both directions) and €2.5 billion for CO_2 transport infrastructure. Compared to the period 2000 to 2010, this would mean a 30 per cent increase in investments in the gas sector, and a 100 per cent increase in the electricity sector.

In the same vein, many institutions agree that there is a global energy infrastructure investment requirement of at least US$50 trillion until 2035. It is estimated that more than €1 trillion will need to be invested into EU's energy sector the next five years alone and the International Energy Agency estimates that the investments required to maintain the reliability of Europe's electricity systems will require investments in excess of US$2 trillion to 2035[3]. This is capital expenditure, which does not include debt and equity, that will be required to acquire and fund the acquisitions of many of these assets; the total figure therefore, conservatively speaking, would probably be close to the double.

Whereas the European financial markets have suffered a lack of funding during the last six to seven years due to the global financial crisis, this funding gap certainly seems to have gone, at least for the most attractive projects. Some PCIs could be well suited for the debt capital markets but there is obviously a different appetite for taking long term bond type risk for commercially viable projects in well-trodden western Europe as opposed to taking any significant financial risk for eastern European projects outside the Eurozone. There remains a perceived funding gap between the required funding and the available funding for the commercially less viable projects.

Traditionally, only banks have been able to provide consistent funding to (underfunded) government pipelines of infrastructure projects. They have the organisational expertise (together with their technical and legal advisers) to structure project risks so that their organisations can bear them. They also have the experience needed to supervise projects in construction, monitoring borrowers, considering waivers and consents on a case by case basis, restructuring projects when necessary. Investing independence means they have been able to price for and accept sometimes considerable project risk. However, the long term global need for infrastructure has simply outgrown the capital available from banks at the same time as banks' ability to provide debt has declined. The credit crunch hit project finance lenders hard, particularly in Europe, wiping some out and forcing others to drastically slim down their operations. As the deal flow slowed, investment teams sometimes lost the critical mass needed to survive and disbanded. Basel III will make it increasingly difficult and expensive for surviving project finance bank lenders to offer debt on the 20, 30 or 40 year tenor over which project finance facilities are often repaid.

3 International Energy Agency, Special Report, World Energy Investment Outlook, 2014

The need for a unified energy policy

On 25 February 2015, the European Commission adopted a Framework Strategy for a Resilient Energy Union with a Forward-Looking Climate Change Policy (the Framework). The purpose of the Framework is to outline the European Commission's vision of an *Energy Union* – one of the key priorities of President Juncker's political guidelines – and the main actions that have to be taken in the next few years to achieve this goal.

The EU is the largest energy importer in the world, with more than half of its energy being imported at an annual cost in excess of €400 billion. The European energy sector is currently facing a number of challenges: although the EU has energy rules set at the European level, in practice, it has as many national regulatory frameworks as it has Member States[4]; on top of the ageing energy infrastructure, the retail market is not functioning properly and many household consumers have too little choice of energy suppliers.

Obviously, energy policy cannot be assessed on its own. Just as it is important to connect the dots between the programmes for funding, it is equally important to analyse and understand the effects of and synergies between energy security considerations, including security of supply and national security interests and Member States' individuality and sovereignty in relation to energy policy. This analysis, however, is beyond the scope of this briefing.

Energy infrastructure and interconnectors on the agenda

Energy infrastructure is high on the European energy agenda. The Energy Union aims to streamline the regulatory regimes across the EU and to mobilise funds to upgrade and extend transmission systems, in particular interconnectors; a vision of an integrated, continent-wide energy system where energy flows freely and competitively across borders based on best use of resources. The European Commission envisages an energy market that inspires investor confidence based on price signals and stable regulation, which reflects long-term investment needs.

The fact that energy can be transported across Europe will allow peak demand to be mitigated not only where there is renewable energy in abundance, but also where renewable energy is lacking but demand for energy is high. Interconnectors thus allow increased diversity of supply in that they, when fully built out and optimised, will, for example, provide renewable energy generated in the North Sea and in Norway to energy intensive industry in Germany or gas from North Africa to France via Spain; in addition, it will contribute to avoiding excessive investment in peak generation. This is technically feasible, politically achievable and, in many cases, commercially viable but requires significant funding, cooperation and regulatory alignment. These benefits apply to most of what has been named *Projects of Common Interest*.

'the interconnection of the electricity markets must be a political priority for the European Union at all levels in the years to come'[5]

4 The 28 EU Member States at the date of this briefing are: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden and United Kingdom.

5 Energy Union Package, Communication from the Commission to the European Parliament and the Council, Achieving the 10% electricity interconnection target, Making Europe's electricity grid ready for 2020; COM(2015) 82 final

Energy infrastructure

Infrastructure – from French infrastructure (1875); infra- + structure (n.). The installations that form the basis for any operation or system. Originally in a military sense.

Infrastructure has a wide scope today and includes anything from 'core infrastructure' such as ports, airports, bridges, tunnels and roads to energy infrastructure which includes anything from power and renewable power generation, electric and energy systems to transmission and distribution of electricity and gas. In this briefing we are using energy infrastructure and energy infrastructure investment in a wide sense.

Lack of investment and pipeline

While there is a clear need for investment in energy infrastructure and interconnectors, there is a lack of it. The lack of growth and investment in Europe is detrimental to the welfare of the more than 500 million people in the EU. The global financial crisis hit Europe hard and many EU countries are still struggling with high unemployment, limited growth (if any) and ailing investments despite huge needs. As a consequence of the economic and financial crisis, the level of investment has dropped off considerably. Compared to the peak in 2007, the current average levels of investment is reportedly 15 per cent lower, with some Member States, such as Greece (minus 67 per cent) and Spain (minus 38 per cent), having seen their investments halved.

According to the European Commission and the European Investment Bank (EIB), the main reason for weak investment levels is low investor confidence, rooted in low expectations of demand, fragmentation of financial markets and lack of risk capital that catalyses investment[6]. For these reasons, together with a lack of confidence in the common currency and high levels of indebtedness in parts of Europe, access to credit remains difficult, in particular for long-term financing of projects and for small and medium sized companies (SMEs) in hard-hit Member States.

This lack of investment has been exacerbated by austerity measures in most if not all Member States. It is neither possible nor advisable for the EU and its institutions to provide all of the funding required to bring back growth and investment to Europe.

The European Commission has further acknowledged that corporates and projects in the EU are too dependent on bank debt, which makes the real economy less resilient in case of a banking crisis. Comparing to the United States, the EU average of capital markets (debt and equity) against bank debt is 30 to 70 whereas in the United States, the ratio is the opposite. The European Commission aims at delivering a framework under which the reliance on bank debt will be less dominant – the *Capital Markets Union*.

Another obvious problem is the perceived lack of viable projects in the pipeline. During the global financial crisis, commentators and policy makers were focused on the funding gap – hence credit enhancement as a tool to promote investment. While the gap still exists, it has arguably moved from a shortage of debt, to a shortage of projects that benefit from ready government backing. For investors to move into a certain country or investment space, there needs to be a sufficiently substantial pipeline of investable, bankable and feasible projects. Only one or two projects or a vague promise of a pipeline is not sufficient. One of the most important tasks for the European Commission is to ensure that there is a visible, transparent and accessible pipeline of investable, bankable and feasible projects. While there have been some bright spots across Europe – the Netherlands and Scotland being particularly notable – it remains to be seen if the European Investment Project Portal (EIPP) will be a success and the project pipeline across the continent will pick up in the coming years.

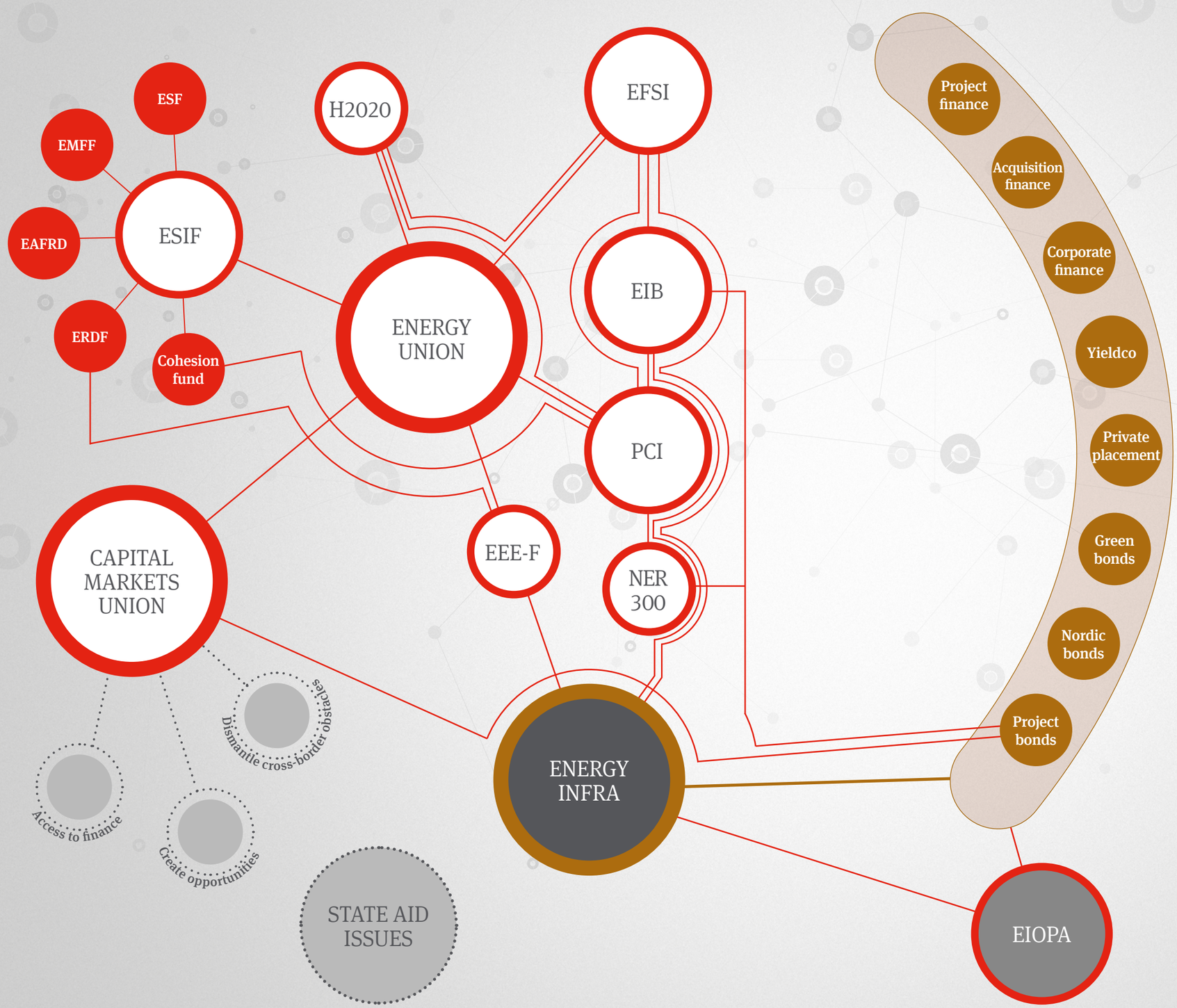
6 European Investment Bank, Fact sheets

Need to connect the dots

So far, there have been a number of initiatives to promote and incentivise investment in energy infrastructure: Projects of Common Interest (PCIs) (including the Connecting Europe Facility (CEF)), EU Cohesion Policy Funds, the EIB's Project Bond Initiative, the European Energy Programme for Recovery, European Fund for Strategic Investment (EFSI) and financing under the European Structural and Investment Fund (ESIF), pooling resources to finance economically viable investments that counter market distortion and fragmentation. The Energy Union is intended to bring cohesion to the existing financing schemes to maximise impact.

However, neither the Capital Markets Union nor the Energy Union can be approached in isolation. The success of the Energy Union is dependent on the financing made available, both publicly and privately. Ultimately, only properly integrated European capital markets will bring the required funding across EU for the Energy Union. Thus, only by connecting the dots and avoiding silos can these next steps in the development of the EU be the success the European Commission is seeking.

Connecting the dots



As the figure opposite is intending to illustrate, the initiatives and programmes created by the EU and the European Commission over the last couple of years connect, and sometimes overlap. For energy infrastructure – in its broadest sense – this means that there are, or should be, huge opportunities to make the most of the available funding. These overlaps and connections between funds and how they impact on potential projects are possibly best explained using examples.

- An example could be an interconnector construction project in eastern Europe, in particular if it links an energy island to the rest of the EU, will most likely qualify as a PCI, and thus qualify for grants for work and studies. Having PCI status is attractive to investors as it brings speed, less bureaucracy and firm political and regulatory backing. The project may also be able to obtain funding from the Cohesion Fund, provided it is in a low GNI Member State and possibly the EAFRD in case the project is in a rural area. Whilst potentially interesting to private capital, it would need to be bankable and feasible to attract private capital.

- Another example could be an energy efficiency project (that is not a PCI) which could obtain funding from EEE-F, Horizon 2020 and ERDF. Again, if in a rural area, it could benefit from EAFRD and if (also) in a low GNI Member State, the Cohesion Fund could be a potential source of funds. Private capital may well be interested but the levels of bankability, feasibility, proven technology and support would determine the interest.

- A further example could be a PCI qualifying gas pipeline or LNG storage facility that is partially or jointly owned by a TSO in a western Member State. The TSO can be a joint investor or even acquired outright. As a PCI, the facility would benefit from CEF funding as well as the added benefits of being a PCI and it could be eligible for EFSI funding. It would quite likely attract significant interest from private capital, so the query would be whether the CEF and EFSI funding would risk crowding out the private capital.

Trying to form a picture, navigate the thousands of pages available and connect the dots is near impossible. There are significant overlaps, with many programmes covering the same areas such as energy efficiency, renewable generation, interconnectors and smart grids. However, the programmes come across as disconnected and this incoherence leads to inefficiencies.

However, funding alone is not the only issue anymore. As these initiatives and programmes were initiated during the financial crisis, the focus was on making sure that the lack of bank funding could be replaced. Now, institutional investors, but also banks that were invisible in this space only a few years ago, are in this space. The initiatives and programmes are therefore to some extent behind the curve.

A transparent pipeline of bankable and feasible projects, easy and comprehensible access to the EU funds and a more straight forward, aligned structure of initiatives and programmes should now be the focus. We would urge the EU and the European Commission to take on the gargantuan task to simplify the access to funding, connect the programmes more clearly and make the project pipeline transparent.

Navigating the labyrinth – the EU initiatives

Projects of Common Interest

On 14 October 2013, the European Commission adopted a list of 248 key energy infrastructure projects, labelled 'Projects of Common Interest' or PCIs, in electricity and gas transmission, storage and liquefied natural gas (LNG), as well as in smart grids and in oil. These PCIs have been selected by 12 regional groups established by the Guidelines for Trans-European Energy Infrastructures Regulation (EU) No 347/2013. The CEF replaces the funding available under the TEN-E programme that was in place during the period 2007-2013. The list of PCIs is undergoing regular updates and we are expecting to see a more limited number of PCIs proposed in accordance with the timelines outlined by ENTSO-E and ENTSOG.

The PCI initiative is a step in the right direction from the European Commission. Due to the scale of investment required, the interest in regulated energy infrastructure assets and current abundance of capital and dry powder, the PCIs represent a significant opportunity for investors, financiers, governments, promoters and contractors on a global scale.

Which projects can become PCIs?

In order for a project to become a PCI, it needs to be necessary for at least one of the stated priority corridors and the overall benefits of the project must outweigh its costs on a cost-benefit basis. It also needs to:

- involve and have a significant impact on at least two Member States or be located in one Member State but have significant cross-border impact
- enhance market integration and contribute to the integration of Member States' networks
- increase competition on the energy markets by offering alternatives to consumers
- enhance security of supply
- contribute to the EU energy and climate goals
- be listed in the most recent Ten-Year-Network Development Plan and have Member State support.

Once the PCIs are identified they are intended to benefit from:

- accelerated planning and permit granting procedures
- a single national competent authority which will act as a one-stop-shop for permit granting procedures
- fewer administrative costs for the project promoters and authorities due to a more streamlined environmental assessment procedure, whilst respecting the requirements of EU law
- increased transparency and improved public participation
- increased visibility and attractiveness for investors thanks to an enhanced regulatory framework where costs are allocated to the countries that benefit most from a completed project
- possibility to receive financial support under the €5.85 billion CEF.

The importance of PCIs

The fact that the EU has come up with a continuously evolving list of 248 projects evidences the importance and the significance of these interconnectors in the wider energy mix and targets. Based on the current time scale of permitting, developing, financing and constructing interconnector projects, the targets are not achievable. Equally, as these projects inherently involve more than one country, there is a potential conflict between the countries' regulators and regulatory regimes. Each Member State has now been required to nominate one single authority to deal with all PCI related permitting issues, which should lead to lower administrative costs and, it is hoped, more transparency and thus aid in speeding up development.

In order to achieve the goals of a more connected Europe there will also need to be an aligned and transparent regulatory framework. Regulatory uncertainty is one of the main deterrents to investment in energy infrastructure and an ambiguous or changing regulatory environment will not attract investors' funds, which will instead be deployed elsewhere in a globally competitive environment. Whilst the available funds are more abundant than only a year ago, they are still finite and it is important that Europe retains the momentum of the current interest from the global investors.

As an example of the PCIs bringing an end to energy isolation and energy islands within the EU, the final stage of the high voltage electricity transmission station providing an 'energy bridge' between Poland and Lithuania, LitPol, was officially opened near Siedlce in eastern Poland on 16 July 2015.

Complex implementation

The implementation of the PCIs and the CEF is very complex. It requires cross-border cooperation and regulatory alignment. It is up to the Member States to agree on how the tariff regimes shall be implemented to incentivise and simplify private investments. Whereas this has been progressed in certain Member States, others are a long way behind.

Conflicting regulatory regimes

There is an inherent conflict of law issue with each cross-border PCI as at least two Member States will inevitably be involved. The parties involved need not only to agree the terms of the many contracts, but also which laws will govern the construction agreements, the operation and maintenance agreements, the funding arrangements, the joint venture and partnership arrangements, the intragovernment arrangements and any other contractual arrangement that is relevant. The approval process will require the approval of at least two national regulators, notably with regard to cost allocation. Coordination between these regulators is important as the national regimes differ with regard to how investments are accounted for and remunerated and how taxes are applied. Moreover, there are likely to be mandatory provisions under the laws of one Member State that may conflict with mandatory provisions of the other Member State. These differences and complexities will need to be explored and assessed in detail in every single project and ways will need to be found to bridge these issues.

Asymmetric impact

A new internal electricity line can benefit the origin country by reducing its internal congestion, but also border-countries by increasing transits. A gas reverse flow infrastructure on the territory of one Member State can be for the sole benefit of its neighbour, if the latter has only a single other gas supply route. Similarly, a new cross-border line (for example, Austria-Italy for electricity and Hungary-Slovakia for gas) can, in fact, permit increased transit for both the immediate neighbours and third countries, which are indirect beneficiaries.

As a result, internal as well as cross-border investments can positively impact the functioning of third country networks, without any explicit participation from the concerned network operators to the incurred investment cost. This can lead to free riding due to the asymmetry between benefit distribution and cost allocation. In the gas sector, the investment risk for new transmission networks is moreover strongly linked to the upstream and downstream commitments.

In addition, as more Member States are interconnected, the identification of benefits will be increasingly complex and difficult to predict. Indeed, the indirect benefits of a new electricity line on the territory of two Member States to several others can be very difficult to predict for the indirect beneficiaries as these benefits depend on various factors such as long term price differentials. Given these uncertainties, benefits and revenues might not be quantifiable at all *ex ante*.

There is currently no common European or region-specific framework for benefit identification and cost allocation. For more complex projects, the absence of this framework has often led to complex and lengthy decision making negotiations between individual operators and national regulatory authorities or even made certain projects impossible to realise. More specifically for gas, the lack of transparent, timely and efficient coordination across borders creates uncertainty for market participants and risks for network operators. Under the current narrow framework, operators have few incentives to develop cross-border investments when benefits go to another area.

The general public

Although not direct stakeholders, the general public's indirect support and acceptance is important. It is very likely that projects of this scale will meet significant opposition from affected populations. Such opposition has been one of the main reasons for significant delays in carrying out energy infrastructure projects to date. The PCIs are addressing these issues through streamlined and accelerated permitting processes, however the practical implementation remains to be resolved.

The Connecting Europe Facility

EU co-funding

The aim of the CEF is to accelerate investment in trans-European networks, to leverage funding from both public and private sectors and contribute to the EU's mid-term and long-term decarbonisation objectives.

PCIs are eligible for EU co-funding, but it is by no means automatic. A sufficiently attractive framework for long term financing, including adequate regulatory incentives and long-term regulatory certainty (including cross-border cost allocation) is a pre-condition for infrastructure development. The CEF provides direct and indirect EU funding that is available for transport, telecommunication and energy projects with an aggregate amount in excess of €33 billion, €5.85 billion of which is designated for energy infrastructure PCIs. The CEF funding is being provided in part directly by the EU and in part indirectly through 'entrusted entities' the most important of which are the EIB for debt and the Marguerite Fund for equity.

However, it is intended that the market should have investment priority and if there is not sufficient investment appetite, regulatory solutions should be explored to increase this appetite; project promoters and national regulatory authorities are expected to explore these routes together. Where both these options have been exhausted, in that there is insufficient market appetite and regulatory reform does not help, EU funding can be made available subject to conditions, which are explored further below. Certain PCIs are commercially non-viable, but are deemed socio-economically beneficial. If these have significant positive externalities, they are well placed to qualify for grants.

The EU financial support focuses on completing the internal energy market, ensuring security of supply, promoting sustainability, including ensuring transmission of renewable energy from generation to centres of demand and attracting public and private investments.

Support under the CEF will be provided in two forms – grants and financial instruments – the latter making up no more than 10 per cent of the CEF. PCI promoters will be encouraged to explore using financial instruments before applying for grants. Grants and financial instruments are subject to different application procedures, different EU parties are involved and different implementation plans apply.

The CEF will be made available in tranches until 2020 in accordance with a set budget. It should be noted that the EU has not accepted any contingent liability; the CEF budget will not go beyond what has been set aside. Despite the different requirements across the priorities and sectors, the CEF funds are not earmarked.

The CEF will assist in leveraging any funding shortfall but it will require significant amounts to be provided by the market. The nature of the investments, i.e. regulated assets providing long term steady cash flow, suits financial investors such as insurance companies, pension funds and infrastructure funds. These investors can team up with Transmission System Operators (TSOs), other network operators and promoters to fund these projects. The recent upsurge in readily available long term liquidity from these debt providers in particular, but also increasingly from traditional banks, will mean that the viable, primarily western European PCIs will not necessarily suffer from lack of funding. The PCIs that have positive externalities, are required for socio-economic reasons and are required for dealing with security of supply, but that are not economically viable, will most likely still suffer from limited funding.

TSOs ordinarily develop projects using their own balance sheets enhanced by loans from commercial banks and international financial institutions and are typically financed through corporate finance or by governments, whereas project finance mechanisms are less commonly deployed. TSOs might also seek equity investments, yielding the investors a steady return. The PCIs, however, are different in that they do not easily lend themselves to be dependent on TSOs balance sheets and ability to attract funding, notably due to the cross-border nature of many PCIs. In addition, a number of projects are less commercially viable than others, yet carry significant importance for the energy infrastructure in order to reach the 20-20-20 targets as well as the new targets to 2030. TSOs are increasingly facing difficulties to access long term debt and some TSOs may have exhausted their financial resources.

Grants

Project promoters can apply for grants for studies and grants for construction works. Grants for works, however, will be available only to those projects that face difficulties in their commercial viability despite their positive impact in contributing to the ending of isolation, intra-Member State solidarity, security of supply or technological innovation. The EU has set up a number of criteria that need to be met for a PCI to be eligible for grants and any application will be subject to scrutiny.

As a result of the first call for proposals to receive grants under the CEF in 2014, €647 million were allocated to 34 key energy infrastructure projects; the allocation of €150 million following the second call for proposal was announced on 13 June 2015. The deadline for the third call for proposal is in September 2015.

Financial Instruments

Whilst only a limited number of projects will be eligible for grants, all projects are eligible for financial instruments. Financial instruments can be provided in the form of equity instruments, debt instruments and credit enhancement measures. Enhanced loans, project bonds and equity instruments will be available outside any call for proposals. They will be offered and managed by international financing institutions, such as the EIB. Financial instruments are available in addition to and complimentary to EIB's traditional lending and they address market failures or sub-optimal investment situations. However, despite the number of TSOs that will require funding to meet the investment requirements, there are currently no financial instruments available that support the corporate financed TSO PCIs.

PCIs to be supported by financial instruments shall be selected on the basis of maturity, sectorial diversification and geographical balance and shall represent European added value, in respect of the European 2020 Strategy and present leverage effects. During 2014-2016, priority will be given to PCIs aimed at ending energy isolation, eliminating energy bottlenecks and completing the energy internal market.

It is expected that the financial instruments under the CEF will facilitate a leverage from 6 up to 15 times the funds provided, first through leveraging the EIB's funding and then by the EIB itself leveraging the private funding.

PCIs should not be confused with the important projects of common European interest, which form part of the European Commission's State Aid Modernisation (SAM) initiative, aimed at fostering growth and competitiveness in the EU which are 'aimed at encouraging Member States to channel their public spending to large projects that make a clear contribution to economic growth, jobs and the competitiveness of Europe. Where private initiatives fail to materialise because of the significant risks and the transnational cooperation such projects entail, Member States may fill the funding gap to overcome such market failures and boost the realisation of projects that otherwise would not have taken off'[7]. The IPCEI Communication is based on Article 107(3)(b) of the Treaty on the Functioning of the European Union (TFEU), which allows Member States to grant aid to promote the execution of an important project of common European interest. It is difficult, however, to assess how the IPCEI fits in with the other initiatives.

Further reading: European energy infrastructure opportunities – Projects of Common Interest: http://www.nortonrosefulbright.com/knowledge/publications/120068/european-energy-infrastructure-opportunities-projects-of-common-interest

7 European Commission, press release 13 June 2014; State aid: Commission adopts new rules to support important projects of common European interest

The Energy Union

The proposed Energy Union aims to bring greater energy security, sustainability and competitiveness to the European energy market. To achieve this, the Framework focuses on five mutually-supporting 'dimensions':

- energy security, solidarity and trust
- a fully integrated internal energy market
- energy efficiency as a contribution to the moderation of energy demand
- decarbonisation of the economy
- research, innovation and competitiveness.

The regulatory environment in the EU is fragmented with, in effect, 28 individual regulatory regimes. European electricity and gas transmission systems, particularly interconnections, are insufficient to bring about the internal energy market. Substantial investments are needed, yet infrastructure investors cite lack of investment opportunities and regulatory burdens as key issues for the infrastructure market in 2015[8].

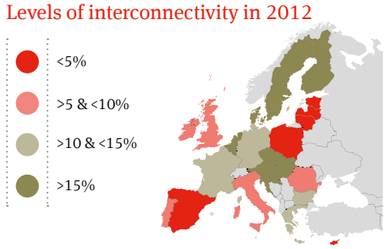
In its ambitious communication of 25 February 2015[9], the European Commission has set itself 15 action points for the implementation of the Energy Union, one of which is to support the implementation of major infrastructure projects, particularly PCIs, and to bring together information on infrastructure projects to maximise the impact of available financial means.

Impact on energy infrastructure

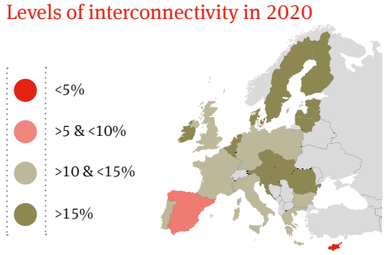
The Energy Union is intended to bring:

- strong focus on investments in interconnectors
- aligned regulation and more centralised oversight, incentivising long-term private investment and funding
- cohesion of financial resources.

Levels of interconnectivity in 2012



Levels of interconnectivity in 2020



The EU needs to reach a minimum electricity interconnection target of 10 per cent by 2020 to achieve a resilient energy market and to implement the Energy Union. As the map to the left illustrates, the interconnectivity across the Member States varies dramatically, leaving some Member States in the periphery with only little or no connection to their neighbours.

Interconnectivity will reduce energy dependency and the investment requirement in peak power generation and storage, as electricity can be transported to where it needs to be and is needed to meet the EU's ambition to be world leader in renewable energy. It is intended that this interconnectivity target will increase to 15 per cent by 2030. These ambitious interconnectivity targets shall primarily be met through the implementation of the PCIs, 75 per cent of which the European Commission believes will be implemented by 2020. This is an ambitious target. If successful, the interconnectivity map would look very different.

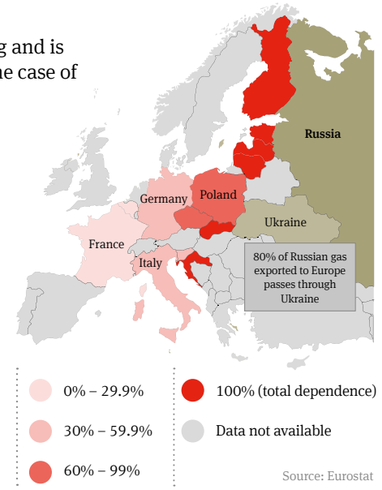
8 Preqin Investor Outlook: Alternative Assets H1 2015
9 Energy Union Package, Communication from the Commission to the European Parliament and the Council, Achieving the 10% electricity interconnection target, Making Europe's electricity grid ready for 2020; COM(2015) 82 final

Impact on gas

The EU has little indigenous natural gas remaining and is therefore increasingly dependent on imports, in the case of some Member States entirely from a single source.

The current geopolitical situation in regions close to the EU has called attention to the fragility of the European gas market. The EU needs a stable energy supply to grow and energy security remains at the top of the agenda.

In a scenario where oil and gas prices are low, the Commission wants to take the opportunity to reset the EU's energy policy in the direction of the Energy Union.



Impact on renewables

With climate change, a low carbon and sustainable Europe and a desire to limit the dependency on imported energy driving the EU's energy policy, a focus on renewable energy sources should be at the core of the Energy Union.

Despite the strong focus on climate change, the Energy Union paper is surprisingly thin on detail for renewable energy. Whilst it would have been a brilliant opportunity to address some of the low hanging fruit in the drive to achieve the 2030 targets, the Commission has chosen to limit itself to broad political statements and plans to propose a separate Renewable Package, including a new renewable energy directive for 2030 and practices for renewable energy support schemes be launched in the next two years.

Communication and transparency

The European Commission will issue an annual report on the basis of the Member States' reports. This report, which will be an important element of the comprehensive annual stocktaking foreseen in the Framework, as it will include a full state of play on all PCIs; with recommendations on speeding up projects and increasing the flexibility of the PCI list should the deadline of 2020 for the delivery of the 10 per cent interconnection capacity not be met. If needed, the European Commission will propose further measures in order to achieve this target.

National plans will include projections for the energy system and greenhouse gas emissions based on existing policies, notably a reference projection that does not include the effects of the planned policies described, and a policy projection with the planned measures.[10]

It is intended that a transparent monitoring system will be put in place to streamline reporting and planning requirements and to assess performance according to key energy and climate indicators (energy prices and cost, competition, diversification of energy imports, and infrastructure targets) based on single integrated national plans for the post-2020 period and biennial reports on the implementation of the national plans. These implementation reports will be important instruments to assess progress in implementing the Energy Union objectives.[11]

Further reading: The Energy Union: http://www.nortonrosefulbright.com/knowledge/publications/126396/the-energy-union

10 Discussion Paper on the preparation of the Energy Union Governance, Meeting of Directors General for Energy and Climate, 15 July 2015
11 Discussion Paper on the preparation of the Energy Union Governance, Meeting of Directors General for Energy and Climate, 15 July 2015

The Capital Markets Union

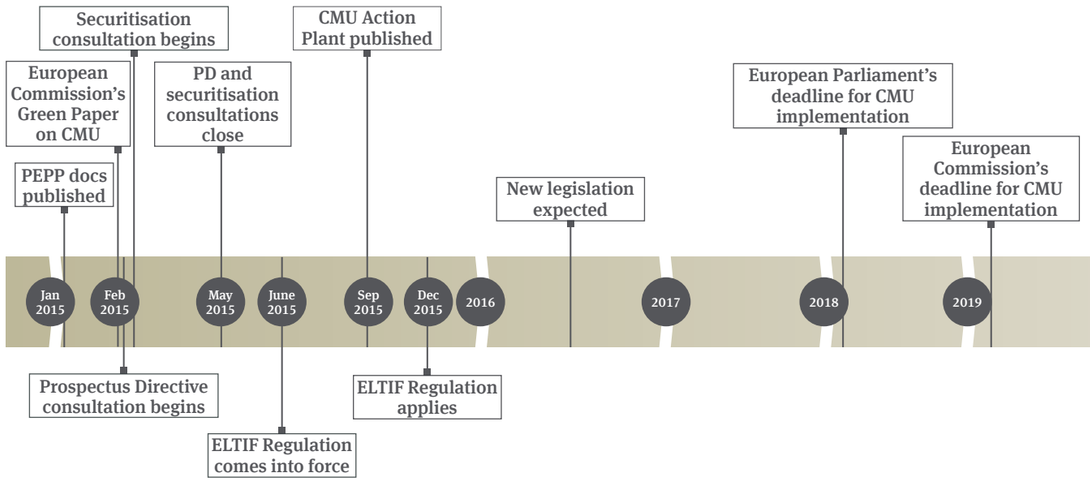
The European Commission has recognised that corporates in Europe remain largely reliant on bank finance, which led to vulnerabilities during the financial crisis when banks retrenched and tightened their balance sheets. One of the main aims of Capital Markets Union[12] (CMU) is to make the capital markets more accessible to small and medium-sized enterprises (SMEs) so that they are less reliant on bank loans. Other aims include attracting more investment into the EU from the rest of the world and making the financial system more stable by encouraging a wider of range of funding sources. CMU is also about reducing or eliminating obstacles to cross-border investment, and encouraging greater accessibility and growth in non-bank finance.

At the moment, CMU is a catch-all for a broad variety of changes, both legal and practical rather than a single piece of legislation. The European Commission is pushing ahead with a number of projects that will fall under the three pillars of:

- increased access to finance
- creation of investment opportunities
- dismantling obstacles to cross-border investment.

The European Commission is expecting to publish its 'Action Plan' in September, with some concrete proposals to be published within the following few weeks. Early actions will include a comprehensive package on securitisation with updated calibrations for Solvency II Directive (Solvency II)[13] (which governs European Insurance companies) and the Capital Requirements Regulation (CRR)[14] (which governs European credit institutions), and proposals to review the Prospectus Directive[15]. Some areas such as taxation, securities regulation and insolvency law, which differ across national lines, may only involve incremental changes to break down barriers to investment. This may take considerable time.

CMU timeline



12 Green Paper: Building a Capital Markets Union COM(2015) 63 final
13 The Solvency II Directive (2009/138/EC) (as amended significantly by the Omnibus II Directive (2014/51/EU))
14 Capital Requirements Regulation (Regulation 575/2013)
15 Prospectus Directive (2003/71/EC) (as amended) and the Prospectus Regulation (809/2004) (as amended)

The European Commission intends to have a comprehensive package of CMU initiatives in place and implemented by Member States by 2019; however, on 9 July, the European Parliament adopted a non-binding resolution on building a CMU urging the European Commission to put in place the building blocks for a fully functional CMU no later than 2018. The European Parliament called on the European Commission to speed up its work on the Action Plan and put forward legislative and non-legislative proposals as soon as possible to achieve the objective of a fully integrated single EU capital market by the end of 2018.

Three pillars of CMU

Increase access to finance

SMEs find it difficult to attract capital as they seek to expand, and are overwhelmingly reliant on bank funding. CMU is intended to move the EU closer towards a situation where, for example, SMEs can raise financing in the capital markets as easily as large companies; costs of investing and access to investment products converge across the EU; obtaining finance through capital markets is increasingly straightforward; and seeking funding in another Member State is not impeded by unnecessary legal or supervisory barriers.

Prospectus Directive

In early 2015 the European Commission also launched a consultation on changes to the Prospectus Directive. The consultation is a root and branch review of what the Prospectus Directive was trying achieve and whether it is fit for purpose in its current form. The European Commission found that participation by SMEs in the debt capital markets remained very low, and in some cases the Prospectus Directive may be counterproductive. For example, market participants have said that prospectuses are overly long documents that are neither read nor understood by retail investors (which is contrary to the stated aim of investor/consumer protection), and the process of drawing up a prospectus and getting it approved by national regulators is perceived as expensive, complex and time consuming, especially for SMEs. In addition, the requirement to produce a prospectus is triggered at different levels across the EU.

The Prospectus Directive review is intended to ensure that a prospectus is required only and when it is truly needed, that the approval process is as smooth and efficient as possible and the information required is useful and not burdensome to produce and that barriers to seeking funding across borders are reduced.

Securitisation

The European Commission is also consulting on how to revitalise the market for highly transparent, simple and standardised asset-backed securitisation (ABS) products. This will mean singling out a category of qualifying ABS for favourable (or at least, less punitive) regulatory treatment under the CRR and Solvency II, and favourable liquidity requirements for EU banks. The result, however, could mean that any securitisations that do not fit into this category will not benefit from this initiative.

The securitisation consultation considers ways to reduce duplication in disclosure requirements for securitisations. For example, securitisations usually involve a prospectus, transaction summaries for the central banks, and the Credit Rating Agency Regulation[16] requires that all 'structured finance instruments' include further structural disclosure and ongoing, loan-by-loan disclosure of the underlying assets. In addition, the CRR requires additional disclosure to investors so that investor credit institutions can meet their due diligence requirements.

Private placements
Private placements may be have the potential to offer investment opportunities for long-term investors and to broaden financing options for SMEs. Many SMEs are inherently potentially riskier investments than large multinationals and as a result, investors generally require more, rather than less, disclosure.

In order to reduce barriers to non-bank lending in the EU, a number of industry bodies have recently published an industry market guide and standard form bond documentation, adapted for use in pan-European private placement transactions. While this has occurred independently of any European Commission initiatives, the European Commission applauds the efforts of private industry, and considers their efforts to fall under the CMU umbrella.

Create opportunities for investors

Tighter regulation and increased regulatory capital requirements placed on traditional lending banks has led to a growing trend of non-bank lenders, such as pension funds, insurance companies and investment funds looking to diversify their assets, and plugging the funding gap for corporates. CMU is intended to encourage this investment by non-bank lenders on a cross border basis by increasing the classes of investments available.

ELTIFs
The Regulation on European long-term investment funds (the ELTIF Regulation)[17] establishes uniform rules on the authorisation, investment policies, and operating conditions of EU alternative investment funds that are marketed as European long-term investment funds (ELTIFs). An ELTIF is a type of investment vehicle that allows investors to invest into companies and projects that need long-term capital, such as energy, energy infrastructure and climate change technologies. It is only in its preliminary stages as it was adopted by the European Council on 20 April 2015, came into force on 8 June 2015 and will start to apply from 9 December 2015.

The ELTIF is intended to boost non-bank funding for companies and projects requiring long-term capital. Its' aims are firstly, to strengthen Europe's 'real economy'[18] by providing new access to finance for long-term projects, particularly projects with tangible assets and developing infrastructure; and secondly, to address the needs of investors by providing long-term, stable returns. The intention is to make ELTIFs available to all types of investors, such as insurance companies and pension funds, and to create standardised, transferable investments that can be traded in the secondary markets. The European Commission has begun the process of amending Solvency II to allow investment in ELTIFs, and to put in place the necessary changes to incorporate infrastructure as an asset class for insurance companies.

Only funds that qualify as EU alternative investment funds (AIFs) that are managed by AIF managers (AIFMs), who are in turn authorised under the EU directive on AIFMs, are eligible to market themselves as ELTIFs. On top of the requirements already imposed on AIFs, ELTIFs are also required within five years of being set up to invest at least 70 per cent of their capital in 'eligible investment assets' (as detailed below). Although, the remaining 30 per cent does not have to be invested in long-term investments but can be in liquid assets for example securities, bank deposits, money market instruments and undertakings for collective investment in transferable securities (UCITS).

The ELTIF focuses on 'eligible investment assets'[19] that fall within long-term asset classes, which require long-term commitment from investors in order to be developed. These eligible investment assets include:

- equity or quasi-equity instruments
- debt instruments
- loans granted by an ELTIF
- direct or indirect holdings of individual real assets that require an up-front capital expenditure of at least €10 million.

The ELTIF targets both professional and retail investors within the EU as it is hoped the broader investor base will allow more capital to be raised for European business. Each ELTIF will produce a prospectus, which must be prepared in compliance with the prospectus directive. The prospectus will contain the rules or instruments of the ELTIF, it will specify an 'end of life' of the fund i.e. the fund will run for a specified length of time, during which investors will (in theory) have no right to get their money back.

This funding vehicle is investor focused and, due to the nature of the long-term investments eligible for ELTIF money, it is expected that investors will gain long-term and stable returns. However, the funds are also required to include various investor protection measures (particularly crucial as they are open to retail investors). As a general rule ELTIFs are subject to diversification rules, meaning they limit risks by not concentrating their funds in a small number of assets. For example, ELTIFs cannot put more than 10% of their funds in an individual real asset, interest in any single ELTIF nor asset issued by the same qualifying portfolio undertaking.

Whilst ELTIFs are more restricted than normal AIFs, it is believed that as ELTIFs benefit from an EU cross-border passport, and thus allowing them to offer the fund to investors across the EU, they will be attractive to investors. ELTIFs are also only required to make distributions to the extent income is not required for future investments and income capital appreciation realised on the disposal of assets must only be disposed of if they result from a net profit.

It is yet to be seen what impact ELTIFs will have on the European energy market.

Crowdfunding
The CMU consultation considered whether there are barriers to the development of appropriately regulated crowdfunding on a cross-border basis. The European Securities and Markets Authority (ESMA) reported that although many current initiatives are developed outside the existing legal requirements, this has negative effects for both investors and crowdfunding platforms. More regulation will be proposed to ensure better investor protection, and offer better development possibilities for crowdfunding platforms (for example, by allowing the passporting of crowdfunding activities to other Member States).

16 CRA Regulation (Regulation 1060/2009) (as amended significantly by the CRA III Regulation (Regulation 462/2013))
17 Regulation on European Long-Term Investment Funds ((EU) 2015/760)
18 http://europa.eu/rapid/press-release_MEMO-13-611_en.htm

19 http://www.ey.com/Publication/vwLUAssets/New_European_regime_for_long-term_funds_proposed_-_December_2013/$FILE/New_European_regime_for_long-term_funds_proposed-December_2013.pdf

UCITS and AIFs
Two frameworks, the UCITS regime[20] for mutual funds, and the Alternative Investment Fund Managers Directive (AIFMD)[21] for investment fund managers established a European framework of regulation, where the regulatory costs of setting up funds, becoming authorised managers and selling them across borders varies between Member States. Reducing costs for setting up funds and cross border marketing would lower barriers to entry and create competition. The European Commission is currently looking for ways that CMU can lower these costs through greater standardisation and regulatory convergence. In addition, the ELTIF Regulation sets out uniform rules on the authorisation, investment policies, and operating conditions of AIFs that are marketed as ELTIFs.

Dismantle obstacles to cross border investment

There are many long-standing and deep-rooted obstacles that stand in the way of cross-border, pan-European investment. These range from obstacles which have their origins in national law — insolvency, collateral and securities law — through obstacles in terms of infrastructure like a lack of access to credit data, particularly for SMEs, right through to tax barriers.

The European Commission is reviewing the functions and operation of the European Supervisory Authorities (ESAs), and looking for ways where convergence of regulatory powers of the ESAs might reduce the extent to which national supervisory regimes result in differing investor protection levels, barriers to cross-border operations and disincentives to companies seeking financing outside their home Member States.

In a non-binding resolution[22] on CMU, the European Parliament called on the European Commission to analyse in depth, on a country-by-country basis, the current situation in the capital markets, to assess where and to what extent EU-wide impediments to investment via capital markets exist, and to indicate how they may be removed or minimised.

Access to SME credit data
Credit scoring provides investors and lenders with information on the creditworthiness of SMEs. While credit rating for loans has traditionally been done in-house by bank investors, institutional investors often lack the resources to analyse the credit risk of small companies. As a result, around 25 per cent of all EU companies and around 75 per cent of owner-managed companies do not have a credit score. The European Commission wants to develop a standardised set of comparable information for credit reporting and assessment that could help to attract funding to SMEs.

Tax issues
The European Commission recognises that tax is an area to be explored to find ways of addressing barriers in respect of withholding tax procedures for example, or problems of double taxation. National divergences in the treatment of withholding tax has been identified as a potential obstacle to the development of a deeper cross-border market for private placements. The applicability of withholding tax on bond payments may depend on the location of the issuer and investors, and availability of exemptions. There may also be anti-avoidance rules preventing artificial structuring of transactions to obtain the benefit of the exemption.

Insolvency laws
Barriers to making cross-border investments are also caused by differences in insolvency proceedings. The European Commission is looking to identify ways to address conflict of law issues, and to encourage cooperation between national authorities. The European Commission recognises, however that advocating for changes in national laws in this area will be a longer term challenge.

20 UCITS IV Directive (2009/65/EC) which recast and replaced the UCITS Directive (85/611/EEC)
21 Alternative Investment Fund Managers Directive (2011/61/EU)
22 European Parliament resolution of 9 July 2015 on Building a Capital Markets Union (2015/2634(RSP)

European Structural and Investment Fund

The European Structural and Investment Fund (ESIF) was created to help support the Europe 2020 strategy by aiming to reduce the disparity in levels of development between regions (as defined under the nomenclature of territorial units for statistics 2013 classification[23]) across the EU. In order to maximise the impact of ESIF and help direct funds, 11 thematic objectives[24] were set out in a new, single set of rules[25] (the ESIF Rules), which govern the EU's ESIF investments for the period 2014-2020. The purpose of the ESIF Rules is to establish a clear connection with the Europe 2020 Strategy, improve coordination, guarantee consistent implementation and make access to the funds as straightforward as possible. The ESIF Rules came into force on 22 December 2013 and are common to all five ESIFs:

- European Regional Development Fund (ERDF)
- European Social Fund (ESF)
- Cohesion Fund
- European Agricultural Fund for Rural Development (EAFRD)
- European Maritime & Fisheries Fund (EMFF)

The key funds relating to financing energy projects are the ERDF and the Cohesion Fund, which are explained in more detail below. Although the EAFRD provides some relevant funding, it is limited to rural areas and is therefore mentioned only in passing.

How Member States get funds

The Member States administer 75 per cent of the funds and the remaining 25 per cent is managed by the European Commission directly. Under the ESIF Rules, Member States are required to submit 'strategic plans with investment priorities'[26], known as Partnership Agreements, which set out how they would use the five ESIFs.

The creation of the Partnership Agreements is a bottom-up process as national authorities consult and consolidate the plans of various levels of government, interest groups and local as well as regional representatives regarding use of the ESIFs. The Partnership Agreement is then negotiated with the European Commission and, if approved, the European Commission will allocate a budget to the Member State.

After a Partnership Agreement is adopted a Member State's Operational Programme can be approved. The Operational Programmes are produced through a collaboration of the European Commission and Member State in which they break down the investment priorities and objectives of the Partnership Agreements into 'concrete actions'[27].

Application for funds within the Member States

Once approved, the Operational Programmes are implemented in the Member State by their own 'managing authorities'[28]. For example, the managing authority for EDRF programme in England is the Department for Communities and Local Government (DCLG). The DCLG has locally based teams throughout England to ensure the EDRF programme is implemented[29]. These authorities can work on a regional, national, multi-regional or multi-national level and are responsible for managing programmes backed by EU funding. The managing authorities select, implement, monitor and evaluate the individual projects in line with the priorities and targets agreed with the European Commission.

23 http://ec.europa.eu/eurostat/web/nuts/overview
24 http://ec.europa.eu/regional_policy/en/policy/what/glossary/t/thematic-objectives
25 Regulation (EU) No 1303/2013
26 http://europa.eu/rapid/press-release_MEMO-14-2043_en.htm
27 http://europa.eu/rapid/press-release_MEMO-14-331_en.htm
28 http://ec.europa.eu/regional_policy/en/atlas/managing-authorities
29 https://www.gov.uk/erdf-programmes-how-they-are-managed

Those organisations that apply for funding need to be developing some form of project and can include public bodies, private sector organisations (with funds being preferentially targeted at SMEs) that can include foreign firms working within a Member State, universities, associations, non-government organisations and community and voluntary organisations.

Whether projects are eligible for funding will depend on the region/Member State they are in, as the selection criteria and investment priorities vary depending on the Operational Programmes that have been implemented in the relevant region.

European Regional Development Fund (ERDF)

The ERDF is one of the five ESIFs and aims to 'strengthen economic and social cohesion in the European Union by correcting imbalances between its regions'[30], in other words, 'reduce economic disparity within and between Member States by supporting economic regeneration and safeguarding jobs'[31].

As detailed above (in the section discussing applications for funds within Member States), to apply for ERDF funding applicants must send their applications to the managing authority for the region or Member State that their project will be within.

What is the ERDF for?

Funds from the ERDF go towards projects in all 11 thematic objectives; however, the European Commission has stated the key thematic objectives supported under the ERDF are: (1) research, technical development and innovation; (2) access, use and quality of information and communications technology; (3) competitiveness of SMEs and (4) shifting to a low-carbon economy. It appears the most relevant objective for energy projects, and so the most likely source of funding, is the objective to support a shift towards a low-carbon economy.

For the first time the European Commission has set a mandatory minimum spend for the 2014-2020 of ERDF money on projects that support a low-carbon economy. The European Commission requires 20 per cent of national ERDF funds to be spent on this area in developed regions, 15 per cent in transition regions and 12 per cent in less developed regions[32]. Currently, Member States have gone beyond this target. ERDF should support investment in[33]:

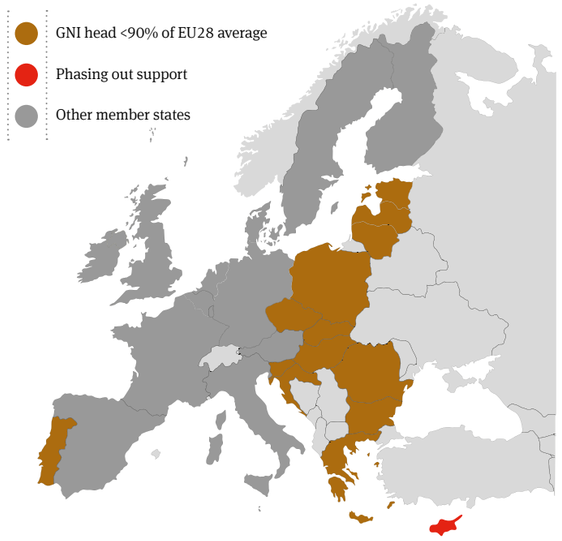
- increasing use of renewable energy
  - funding is channeled towards projects that will increase the amount of energy from renewable sources that is produced and distributed within the EU. Funding will also go towards projects that help to raise awareness of renewable energy.
- decreasing energy use
  - projects that help to reduce energy consumption by increasing energy efficiency and smart energy management in buildings (both residential and industrial) will get more funding. Money will also go towards projects that aim to develop technology to help reduce emissions and promote sustainable urban mobility.
- promoting smart energy systems
  - investment will be put into projects that are developing 'smart grids' for more efficient electricity distribution.

30 http://ec.europa.eu/regional_policy/en/funding/erdf/
31 http://europeanfundingnetwork.eu/funding-advice/programmes/european-regional-development-fund
32 http://ec.europa.eu/regional_policy/en/funding/erdf/
33 http://ec.europa.eu/regional_policy/sources/docgener/informat/2014/fiche_low_carbon_en.pdf

- encouraging an integrated approach to policy-making and implementation
  - funds will be used to also promote research and innovation in low-carbon technologies and promote low-carbon strategies in urban areas.

The Cohesion Fund

The Cohesion Fund is another ESIF and so is again governed by the ESIF Rules, which determine the selection, management and monitoring of projects. As detailed above in the discussion on ESIFs, prospective projects looking for funds must apply to their relevant managing authorities. Its aim is to 'reduce economic and social disparities and to promote sustainable development'[34]. The EU currently invests around 34 per cent of its total budget through the Cohesion Fund on economic development on a national and regional level. It is a fund which can only be applied for by Member States whose Gross National Income (GNI) per inhabitant is less than 90 per cent of the EU average. The Member States eligible in the 2014-2020 funding period are: Bulgaria, Croatia, Cyprus, the Czech Republic, Estonia, Greece, Hungary, Latvia, Lithuania, Malta, Poland, Portugal, Romania, Slovakia and Slovenia, as shown below.



Source: http://ec.europa.eu/regional_policy

One of the two sectors to which the Cohesion Fund applies is the environment. Projects within the energy sector may be able to get funding if the project falls within the scope of this sector. The Cohesion Fund supports projects that comply with EU environmental legislation and help to provide infrastructure to cope with new environmental challenges. The Cohesion Fund provides long-term investment in infrastructure and so funding for projects relating to energy and transport can partially overlap with funds from the ERDF. Money will be put towards projects that directly benefit the environment such as water and waste water treatment, improving air quality etc. but also projects that indirectly support the environment, for example investing in sustainable energy[35].

34 http://ec.europa.eu/regional_policy/en/funding/cohesion-fund/
35 http://ec.europa.eu/environment/pubs/pdf/factsheets/cohesion.pdf

Synergies between ESIF Funds

The ERDF, Cohesion Fund and (in rural areas) EAFRD are expected to be utilised to help promote renewable energy and energy efficiency within the EU. The ERDF will help to support research and innovation in low-carbon technologies. Once technologies have been developed the ERDF and Cohesion Fund are both designed to help support projects that utilise such technologies to improve renewable energy production, high-efficiency co-generation, public buildings that are energy efficient and use renewable energy, smart distribution grids and/or integrated low-carbon strategies[36].

The ERDF and EAFRD can also be combined to promote development of renewable energy projects. The EAFRD focuses funding into rural areas and so, for example, rural energy projects can be developed in which the ERDF could be used for installation of equipment such as biomass boilers and the EAFRD could be used in parallel to support increased agricultural production of biomass.

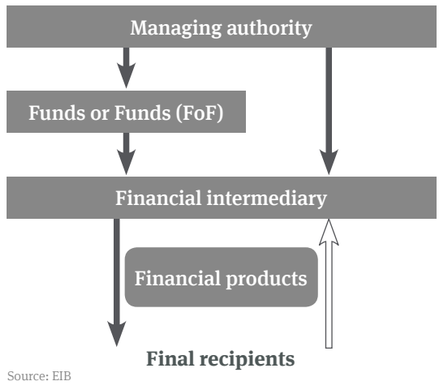
ESIF money is placed into financial instruments

Managing authorities that receive funding through one or more of the ESIFs are increasingly placing the money into financial instruments, transforming the funds into financial products (e.g. loans, guarantees, equity and other risk-bearing mechanisms). These financial products can be used to complement simple grants that can be given out to projects. The European Commission is encouraging, through a new more stringent legislative framework, the use of financial products as they are a more efficient and sustainable way of providing funding.

As demonstrated in the diagram below, managing authorities usually place money into 'fund of funds' (which are funds investors invest in rather than directly investing in stocks, bonds and other securities) or a financial intermediary (e.g. banks, building societies or unit-trust companies). Fund of Funds can then invest in financial intermediaries and financial intermediaries can provide financing to the chosen projects by offering them financial products. Money may then be returned to the financial intermediary from the recipient for example, as interest if the financial product used was a loan.

EIB has suggested that the use of financial instruments will lead to multiple benefits which include:

- a leveraging effect: the financial instruments will help to mobilise both public and private investors as they help to reduce the risk investors are subjected to regarding projects
- revolving funds: as financial instruments will be repaid and so these funds could be reinvested into other projects
- expertise: gaining financial instruments through the EIB group and financial intermediaries allows projects to gain the experience and financial expertise from these specialists
- incentivise better performance: as most financial instruments are repayable they will only be offered to projects that are more financially sound than required if merely giving a project a grant, adding additional comfort to potential investors.



Source: EIB

36 http://ec.europa.eu/regional_policy/sources/informing/dialog/2014/3_guidance_beneficiaries.pdf

Horizon 2020[37]

The European Commission has stated that Europe is facing an 'innovation emergency'[38] as, relative to our wealth, much less is being spent on R&D in Europe than other parts of the world. It is feared researchers may leave Europe and move to more favourable regions. Horizon 2020 is a fund that was set up to be the largest research fund in Europe with €80 billion and is a means by which Europe hopes to implement the initiatives of the Innovation Union and Europe 2020. These initiatives aim to drive up investment and so help Europe compete with the rest of the world in research, innovation and development.

The purpose of providing these funds is to enable Europe to produce world-class science, remove barriers to innovation and encourage and facilitate public and private sector collaboration in innovation. The fund was set up to facilitate this by having a simple structure with minimal 'red tape'[39], being open to everyone and aims to help get funds to projects quickly to allow them to get underway without delay.

What does it fund?

Horizon 2020 focuses funding on three key pillars. Two, 'excellent science' and 'industrial leadership' provide funding focused at enabling more innovative research and encouraging business (particularly SMEs) respectively. However, the third pillar of funding focussed towards 'societal changes' is relevant to those to the energy industry.

The pillar of 'societal challenges'[40] has a 'challenge-based approach'[41] towards allocating funds and so will endeavour to use resources and knowledge from diverse fields and technologies to combat challenges faced by society within the EU. Most relevant to the energy market, one focus of 'societal change' funding is on secure, clean and efficient energy.

Secure, clean and efficient energy has a budget of €5.931 billion for non-nuclear energy research between 2014-2020. The main priorities of this 'programme'[42] are to:

- increase energy efficiency focusing funding on building, industry, heating and cooling, SMEs providing services and products in the energy sector and integration of information and communications technology
- invest in low carbon technologies to secure energy supplies, complete the energy internal market and help fund affordable, resource-efficient and cost-effective technology
- invest in 'smart cities', which are sustainable developments in urban areas.

How to obtain funding

Specific areas that are funded by Horizon 2020 are announced online as calls for proposals (or 'calls'). An online 'Participant Portal' has been set up as a single port of call for anyone interested in applying for funding. The Participant Portal sets out a simple process for applying for funds and helps people manage their proposals throughout the lifecycle of the proposal and project.

37 http://europa.eu/rapid/press-release_MEMO-13-1034_en.htm
38 http://ec.europa.eu/research/innovation-union/index_en.cfm?pg=why
39 http://ec.europa.eu/programmes/horizon2020/en/what-horizon-2020
40 http://ec.europa.eu/programmes/horizon2020/en/h2020-section/societal-challenges
41 http://ec.europa.eu/programmes/horizon2020/en/h2020-section/societal-challenges
42 http://ec.europa.eu/programmes/horizon2020/en/h2020-section/secure-clean-and-efficient-energy

The application process requires applicants to respond to a 'call' that will set out conditions the proposals must fulfil, and so applicants must select calls that are suitable for the area and profile of the desired funding target. While it is possible to gain funding for individual researchers or teams, many calls require a team of at least three partners as most funding goes to collaborative projects with at least three organisations from three different Member States. The portal provides a partner search service to help prospective applicants find other organisations to participate with.

Once bids have been submitted all proposals are evaluated by a panel of independent specialists in their fields. The Participant Portal panel checks the proposals against a list of criteria to see if they should receive funding.

Impact on investors

Much like in the discussion about ESIF funds, Horizon 2020 funds should help to fill in the gap left by 'risk-averse' debt and equity finance from traditional financing sources. It is hoped Horizon 2020 funds will help increase private investment into grass-root research and innovation by providing start-up/growth finance and thus reduce the risk for private investors.

Synergies

There are clear overlaps in funding opportunities between ESIF and Horizon 2020, in fact as the European Commission believes 'it is of the utmost importance to ensure optimal synergies between the funds'[43] the ESIF Rules were drafted in order to promote synergies in their use. Both Horizon 2020 and the ERDF can be used in projects that support research and innovation in low-carbon energy and also projects that are increasing energy efficiency. The two funds can combined within the same projects (so long as the same costs within the project are not financed twice) or in successive projects/phases so, for example, Horizon 2020 funding could be applied for during the innovation phase and ESIF money used to help sustain the project.

Parts of the funds intended for Horizon 2020 have been re-allocated to the 'Juncker plan', as described in more detail below.

43 http://ec.europa.eu/regional_policy/sources/docgener/guides/synergy/synergies_en.pdf

European Energy Programme for Recovery

The European Energy Programme for Recovery (EEPR) was established in 2009 as a €3.98 billion fund to finance key energy projects. It was set up in response to the global financial crisis and provided financial assistance to the energy sector. The European Commission sent out a single call for proposals for the entire EEPR on 19 May 2009 and so no further allocations of funds will occur, although some selected projects are still receiving funding. It was hoped the EEPR would speed up energy investment and help to improve energy security for vulnerable Member States.

Under the EEPR the European Commission also launched the European Energy Efficiency Fund (EEE-F) in 2011. It is a public-private partnership that provides market-based financing for commercially viable energy efficiency and renewable energy projects.

European Energy Efficiency Fund

EEE-F offers financial products specifically to energy efficient projects. €146 million of EEPR funds (which was unallocated after the 2009 call for proposals) were used towards the facility dedicated to sustainable energy[44]. €125 million of the fund was put into a dedicated 'European Energy Efficiency Fund', which is operated by a professional fund manager to provide financial products to investment projects. A further €20 million was set aside for grants to develop services that provide technical assistance to projects.

What the EEE-F provides

EEE-F has been set up to provide senior and junior debt, mezzanine instruments, guarantees or equity financing, as well as the possibility of leasing structures and forfeiting loans. The fund does not provide simple grants or subsidies to projects. Projects may be granted 'market-based financing'[45] and so will have to pay back the amount borrowed plus interest. The maximum investment the EEE-F will make in a single project is €25 million.

It should be noted that while it is possible to combine EEE-F funding with funding from national or local schemes it is not possible to combine it directly with funding from other EU programmes. However, it may be possible to indirectly combine funding from other EU programmes if the project applying can be split into different phases so that EU funding is applied to separate phases.

Eligibility

The EEE-F is particularly relevant to the energy market as it is set up to invest in renewable and efficient energy projects. The fund can be applied for by municipal, local and regional authorities and public and private entities acting on behalf of authorities. EEE-F can be invested in three categories of projects[46]:

- energy saving and energy efficiency investments, which includes buildings that incorporate renewable energy, combined heat and power projects (CHP), local infrastructure and energy efficient/renewable energy technologies with potential for innovation and economic growth
- renewable energy sources investments, which includes medium to low distribution networks, smart-grids, energy storage, microgeneration and decentralised energy sources
- clean urban transport investments

44 http://www.managenergy.net/news/articles/74
45 http://www.eeef.eu/tl_files/downloads/Frequently%20Asked%20Questions%20EEEF.pdf
46 http://www.eeef.eu/investment-categories.html

How to obtain funding
Deutsche Bank is the Investment Manager of the EEE-F; therefore it is their job to find and evaluate investments. Unlike other funds, there are no calls for proposals and so applicants can apply to the Investment Manager[47] for EEE-F money at any time. There is no application form, and so those hopeful of gaining funding for their projects should provide details of the project to the Investment Manager. There is no set time during the life of the projects that applications must be made but it is advised that they are made during the development phase, preferably when sufficiently progressed so information is available to be given to the Investment Manager.

The Investment Manager will initially screen those who apply for funding to assess their eligibility, looking mainly at selection criteria (which will vary depending on the type of project) and whether the project aligns with the fund's investment criteria. If eligible, the Investment Manager will then carry out due diligence on the project by looking at risk-return considerations and ultimately decide on funding.

While all the initial EU contribution has been allocated[48], one of the benefits of this fund is there is no deadline for applications as EEE-F has been set up to invest on an ongoing basis so that as money if paid back by a project this money can be invested in new projects. This is very similar to how EIB is envisaging that ESIFs are to be used.

Impact on investors
The EEE-F is structured as a public-private partnership and thus is open to investment from private investors. It has a risk/return structure and as it provides market-based financing, it is intended to generate a profit from supporting energy projects. Investors in the EEE-F can include institutional and professional investors as well as 'well-informed investors' within the meaning of the Luxembourg SIF law[49]. Deutsche Bank is one of the funds investors.

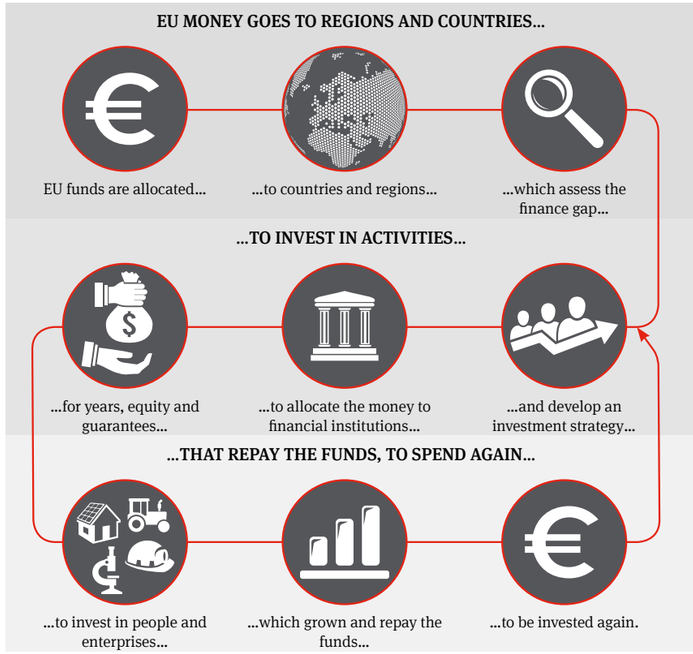
47 http://www.eeef.eu/Application-eeef-financing.html
48 https://ec.europa.eu/energy/sites/ener/files/documents/EEPR2014.pdf
49 http://www.cssf.lu/fileadmin/files/Lois_reglements/Legislation/Lois/L_130207_SIF_upd_120713.pdf

Converting EU funding into financial instruments

It appears that the European Commission is keen to maximise the impact of the EU budget and sees the use of financial instruments as a means of achieving this. In 2011 the European Commission published a communication on the budget for Europe 2020[50] in which using financial instruments to leverage EU funds was set out as a 'principle underpinning' the budget.

The diagram below illustrates the potential path of EU funds (using ESIF as an example) that are placed into financial instruments that are offered to selected projects under different schemes. The diagram clearly shows the potential for funds to be recycled back into future projects.

How ESIF financial instruments work



Source: https://www.fi-compass.eu/sites/default/files/publications/fi-compass-article-the-investment-plan-explained.pdf

We would expect that received EU funding or eligibility for EU funding will be an important factor in the due diligence of European energy infrastructure assets and investments going forward.

50 http://ec.europa.eu/health/programme/docs/maff-2020_en.pdf

NER 300

NER 300 was one of the world's largest funds dedicated to the innovation of low-carbon energy demonstration projects. The fund was created in order to promote environmentally safe carbon capture and storage (CCS) and innovative renewable energy technologies on a commercial scale. The aim was to establish a demonstration programme for all Member States that includes the best CCS and renewable energy technology projects. The fund was managed by The European Commission and regulated by its Decision[51].

However, as there were only two 'calls' funded by NER 300, it is no longer open for new projects to apply to for 2014-2020. On 23 October 2014 the European Council published their conclusions on discussions regarding the 2030 climate and energy policy framework, which sets out funding plans from 2020-2030. After consultations the European Leaders mandated a successor programme to NER 300, 'NER 400'. This fund will get 400 million carbon allowances and it is hoped this will raise over €9 billion for investments in CCS and renewable energy projects[52]. The Council stated that NER 400 fund would extend projects covered under NER 300 to include 'low carbon innovation in industrial sectors'[53].

Infrastructure investment classification

The European Insurance and Occupational Pensions Authority (EIOPA) has previously analysed and reported on the treatment of insurance and pension funds' long-term investments, in particular in infrastructure. A previous report was received negatively as it was seen as too adverse to insurance and pension funds investing in long-term infrastructure assets. Following prompts from the European Commission, EIOPA is currently assessing a more granular treatment of infrastructure investments within the framework of Solvency II, analysing both debt and equity investments, including the treatment of unrated debt[54].

The main focus areas of EIOPA's work in this respect are to:

- develop a definition of infrastructure investments for regulatory purposes
- explore possible criteria for long-term infrastructure assets
- analyse risk and prudential treatment of long-term infrastructure assets
- identify existing regulatory requirements
- explore whether Solvency II is sufficient
- explore financial stability issues

Doing so, EIOPA is turning to the stakeholders in the industry. The consultation period for a discussion paper is on-going and will be followed by a consultation period for the advice to the European Commission.

We welcome this approach, but it is, again, important that the dots are connected so that these investments are looked at together.

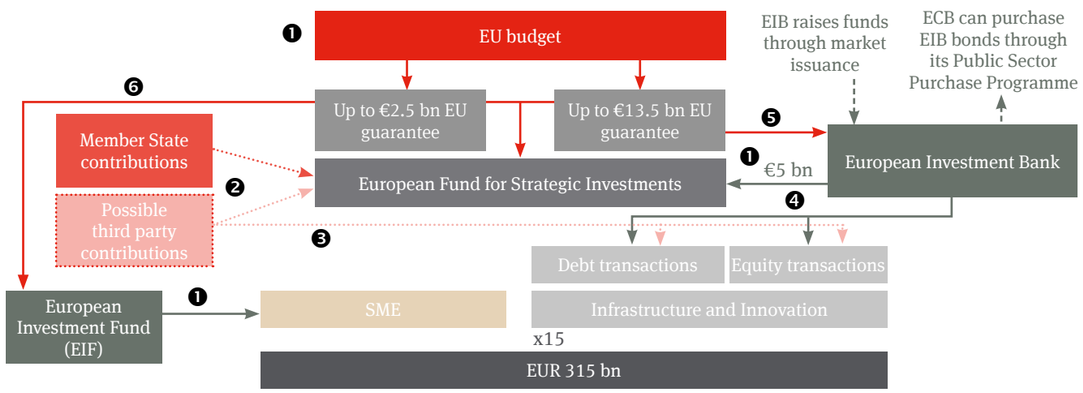
51 Decision (2010/670/EU)
52 http://www.ner300.com/?p=363
53 http://cdn.fleishman-hillard.eu/wordpress/files/2014/10/Conclusions-on-the-2030-Climate-and-Energy-Policy-Framework-FH-Analysis.pdf
54 European Insurance and Occupational Pensions Authority, Discussion paper on Infrastructure Investments by Insurers, 27 March 2015

European Fund for Strategic Investment – the 'Juncker plan'

On 26 November 2014, the European Commission announced its investment plan for Europe[55], which is intended to facilitate investments in excess of €315 billion across the EU in the next three years alone. Outlined by the President of the European Commission, Jean-Claude Juncker, on 15 July 2014[56], the investment plan is required in order to stimulate growth and investment in the EU28. The new European Commission under Juncker is clearly set to push this through and have managed to get it through the required decision bodies in record time; the European Parliament approved the investment plan on 24 June 2015.

The European Fund for Strategic Investment (EFSI) is established as a distinct, clearly identifiable and transparent facility governed by the EFSI Regulation[57] and the EFSI Agreement[58]. EIB is providing €5 billion to EFSI on its own risk without support from the EU budget and the EU is contributing €16 billion from its budget in the form of an EU guarantee, which, in aggregate and with a multiplier of 15, could facilitate over €315 billion of investments. ❶

The European Fund for Strategic Investments



EFSI is open ended and initially focuses on investments to support strategic investments of European significance in infrastructure, notably broadband and energy networks, as well as transport infrastructure, particularly in industrial centres; education, research and innovation; and renewable energy and energy efficiency; and support SMEs and mid-cap companies, in each case through utilising already existing EU funds in order to leverage private investments and to de-clutter the regulatory environment on an EU as well as on a national level. The investment plan is a package of measures to be implemented in order to unlock public and private spending of at least €315 billion over the next three years[59], meeting the perceived mismatch between desired investment sizes and the size of projects. The plan consists of three steps:

55 Communication from the Commission to the European Parliament, the Council, the European Central Bank, the European Economic and Social Committee, the Committee of the Regions and the European Investment Bank, An investment plan for Europe, COM(2014) 903 final, 26 November 2014
56 Opening statement in the European Parliament Plenary Session, Jean-Claude Juncker, 15 July 2014 (then presidential candidate)
57 Regulation (EU) 2015/1017 of the European Parliament and of the Council of 25 June 2015 on the European Fund for Strategic Investments, the European Investment Advisory Hub and the European Investment Project Portal and amending Regulations (EU) No 1291/2013 and (EU) No 1316/2013 — the European Fund for Strategic Investments
58 Agreement on the management of the European Fund for Strategic Investments and on the granting of the EU Guarantee between the European Union and the European Investment Bank dated 22 July 2015
59 Communication from the Commission to the European Parliament, the Council, the European Central Bank, the European Economic and Social Committee, the Committee of the Regions and the European Investment Bank, An investment plan for Europe, COM(2014) 903 final, 26 November 2014

- mobilising increased finance capabilities without increasing public debt
- supporting investment in key areas
- removing barriers to investment.

Whereas, at first glance, it could seem hardest to fulfil the first two objectives, it is not unlikely that it is the last which will prove the most problematic. The predictability and coherence of the regulatory framework is a fundamental element of the risk assessment of any investment. According to the IEA[60], the European policy makers face difficulties as they seek to progress towards ensuring energy security, environmental stability, low prices and economic competitiveness.

Under the EFSI Agreement, EIB is tasked with providing finance and making investments supported by the EU guarantee partially through first loss piece cover on a portfolio basis for debt type transactions and with full cover for equity type transactions. SME transactions, which are implemented through EIF, are treated differently and their financing is beyond the scope of this briefing. ❶

EIB has been tasked with implementing EFSI and will do so in addition to its normal business, but on a complementary basis and shall apply its investment principles as adjusted by the EFSI Regulation and the EFSI Agreement; however EFSI has its own management and investment committee. The investment period should, in effect, start this autumn and continue until 2020 with the last investment decisions being made in 2019. Despite EFSI not being operational yet, the EU and the European Parliament have encouraged EIB to start investing and will allow investments made from 1 January 2015 to be folded into EU guarantee cover once EFSI is fully operational, provided that such "warehoused" investments fulfil the requirements laid down in the EFSI Regulation and the EFSI Agreement. Reportedly, EIB already has almost €5 billion worth of such warehoused investments.

So as to allow for an increase of its resources, Member States as well as third parties (including regional governments, national promotional banks or institutions, regional banks or public agencies owned or controlled by Member States, private sector entities and entities outside the EU) can contribute to EFSI, in each case subject to entering into an agreement with EFSI. ❷ Member States may contribute in the form of guarantees or cash but others only in the form of cash. Third parties are also encouraged to co-finance projects with EFSI, either on a project-by-project basis or through investment platforms. No such contributor will, however, have any rights concerning the EFSI governance nor will it be able to influence the selection of investments. ❸

On 16 July this year, the United Kingdom announced that it will contribute £6 billion (approximately €8.5 billion) to projects benefiting from finance by EFSI, which means that Britain is the ninth country to contribute to the Plan after Germany, Spain, France, Italy, Luxembourg, Poland, Slovakia and Bulgaria, even before the EFSI becomes operational. In February, Germany and Spain announced that they would contribute €8 billion each. In March, France and Italy also announced €8 billion in pledges. In April, Luxembourg announced that it will contribute €80 million, and Poland announced that it will contribute €8 billion. In June, Slovakia announced a contribution of €400 million and Bulgaria announced it would contribute €100 million.

This means that €49.08 billion has been added to the initial €21 billion resulting in a current almost €71 billion fund. Using the 15x multiplier, this would mean facilitating investments in excess of €1 trillion.

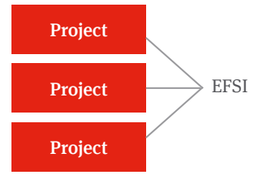
60 International Energy Agency, Special Report, World Energy Investment Outlook, 2014

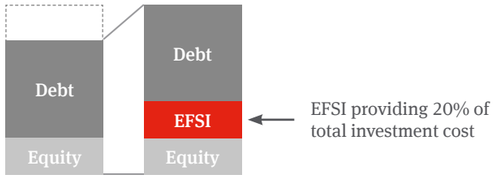
Debt and equity transactions

The EU guarantee of €16 billion can be used to for a wide range of financial products including debt, equity and guarantees, allowing EFSI to adapt to market needs and encourage private investments. EFSI should not be a substitute for or crowd out private market finance but rather act as a catalyst for private investment.

The key that will unlock this is what the EU calls a 'multiplier'. The unclear way in which this term has been communicated may have led to misunderstandings. Some critics, it seems, have understood 'multiplier' to mean 'leverage'. It is unfortunate that this is not made clearer in the new EFSI Regulation as more clarity in this respect would be desirable.

The multiplier effect that the EU is aiming to achieve is that the EFSI funds are conservatively leveraged three times from capitalisation to utilisation and five times from utilisation to project completion.





Intended to be launched this year, the EFSI funds will be mobilised as financial instruments so as to attract and incentivise private financing. An assumed 20 per cent project support would result in a total project value five times the invested EFSI amount. Thus, the €63 billion become €315 billion.

This means that every euro of risk protection provided by EFSI could generate up to €15 in what the European Commission calls the 'real economy' that would otherwise not be generated. EFSI will assume substantial risk support to encourage and incentivise private financiers and investors. It is not intended that any EFSI support or financing should crowd out any private financing or investment.

The EU guarantee will support debt as well as equity transactions ❹, €13.5 billion of which are to be used for infrastructure (in its wider sense) and innovation €11 billion of which are earmarked for supporting debt transactions and €2.5 billion to fully back equity investments. ❺ The remaining €2.5 billion are intended to support EIF backed SME funding. ❻ The type of debt transactions are not limited and can include loans, guarantees, counter-guarantees, loan substitutes/de-linked financing, syndication platforms, portfolio products and any other form of funding or credit enhancement products, in each case directly or indirectly via financial (sub-) intermediaries, on either a senior or subordinated basis, contingent or not. These are transactions that are financed from EIB's own resources and partially covered by the EU guarantee.

Eligibility

The criteria for selection are intended to be simple and clearly stated and include:

- targeting higher societal and economic value according to a cost-benefit analysis
- being consistent with EU policies
- providing 'additionality'
- maximising the potential for leveraging other sources of funding
- being technically viable

The selection process is carried out on a bottom-up basis and is not dissimilar to other project identification processes that the European Commission has initiated, such as the PCIs. Interestingly, there is no restriction on project size.

It is important that the selection process and criteria do not become too complicated or entangled in red tape.

Investment platforms

As the investment period is limited but the amounts that are to be put to use are large, the use of investment platforms are encouraged. This is, again, a broad concept that includes special purpose vehicles, ELTIFs, managed accounts, contract-based financing, risk-sharing arrangements or any other arrangement by which entities channel financial contributions in order to finance a number of investment projects. Their scope is also broad in that they can be:

- platforms that group together a variation of projects in a given Member State
- platforms that group together projects form several Member States or regions
- thematic platforms that group together investment projects in a given sector

EIB can use the EU guarantee to support investment platforms or as counter-guarantees to EIB guarantees.

Advisory Hub

A new European Investment Advisory Service will be created to strengthen and accelerate investment. This advisory 'hub' will provide guidance on delivering quality projects and investments, using EU funds more efficiently, in particular through reinforced use of financial instruments, and improving access to finance. The hub will assist project promoters, investors and public managing authorities. Under the EFSI Agreement, EIB has been appointed to manage the hub.

European Investment Project Portal

The lack of a transparent pipeline of viable projects that we highlight throughout this briefing is now recognised also by the European Parliament, evidenced by the EFSI Regulation prompting the European Commission and EIB to create a transparent portal of current and future projects, the European Investment Project Portal – EIPP. The intention is to make sure investors have access to transparent and reliable project information. The EIPP will include projects that are aimed at fully privately sourced finance but the inclusion in the EIPP should not exclude or imply any public support.

The plan is to create a list of vetted, available and potentially viable projects that are of European significance and to publish a regularly updated list of assessed and non-assessed projects. This is a key feature of EFSI and is important to get right and, whilst it is an admirable intention, it is an enormous task. The list of thousands of projects, colloquially referred to as the 'Juncker list', to which the Member States were asked to submit any project that they would like to promote for funding, has brought EFSI on the defensive if not in disrepute in certain circles.

Additionality means the support by EFSI of operations which address market failures or sub-optimal investment situations and which could not have been carried out in the period during which the EU Guarantee can be used, or not to the same extent, by EIB, EIF or under existing EU financial instruments without EFSI support. Projects supported by EFSI shall typically have a higher risk profile than projects supported by EIB normal operations and the EFSI portfolio shall have overall a higher risk profile than the portfolio of investments supported by EIB under its normal investment policies before the entry into force of the EFSI Regulation.[61]

61 Agreement on the management of the European Fund for Strategic Investments and on the granting of the EU Guarantee between the European Union and the European Investment Bank dated 22 July 2015

Synergies

EFSI cuts across most of not all existing EU initiatives intending to supplement and support where necessary, so that EFSI shall complement and be additional to existing regional, national and EU wide programmes and initiatives as well as existing EIB activities. Member States are encouraged to use all available EU funding, such as ESIFs, to contribute to the financing of EFSI eligible projects. As the purpose of EFSI is to help resolve difficulties in financing and implementing strategic, transformative and productive investments with high economic, environmental and social added value, EFSI is intended to operate in synergy with ESIFs and Horizon 2020, to support strategically important PCIs funded through the CEF and support the development and modernisation of the energy sector in line with the intentions of the Energy Union.

In contributing to EFSI from the EU budget, however, amounts available for Horizon 2020 and the CEF shall be reduced. It is not clear to which extent and how this is intended to be carried out; neither are the potential effects of such reductions clear.

Reporting

EIB shall submit its first evaluation to the European Parliament of the functioning of the EFSI and the European Commission shall evaluate the use of the EU guarantee in January 2017. On 30 June 2018 and every three years thereafter, EIB shall publish a comprehensive report on the functioning of EFSI and the European Commission on the use of the EU guarantee. This suggests that it is intended that EFSI will be in place well beyond 2020.

Energy Infrastructure Forum

It is noted in the EFSI Regulation that the treatment of infrastructure investments, as currently provided for in prudent EU legislation, should be re-examined, particularly in light of infrastructure assets having strong default and recovery record. This matches well with the European Commission's instruction to EIOPA to re-assess the treatment of infrastructure investments for insurance and pension funds.

It is envisaged that by late 2015, the European Commission will convene the first Energy Infrastructure Forum to discuss and find solutions to issues that are common to all regions across Europe and, where relevant, with neighbouring countries. We welcome such initiative and the European Commission reaching out to stakeholders.

Further reading: European infrastructure opportunities – An investment plan for Europe: http://www.nortonrosefulbright.com/knowledge/publications/124166/european-infrastructure-opportunities-an-investment-plan-for-europe

Summary of synergies

The table sets out the areas in which energy projects can get funding from different EU funds.

SOURCE	SOURCE OF FUNDING IN ENERGY SECTOR FOR:						OTHER CHARACTERISTICS:			
	Renewable energy	Energy efficiency	Smart energy/grids	Innovation in low-carbon technologies and strategies	Long-term investment in infrastructure	Limited geographical scope	Single authority in charge of investment	Requirement for multiple member states	Financial instruments	Combine with other EU funds
EFSI (funds Juncker plan)	✓	✓	✓*	✓	✓	✗	✗	✗	✓	✓
CEF (funds PCIs)	✗	✗	✗	✗	✓	✗	✓	✓	✓	✓
ERDF	✓	✓	✓	✓	✓	✗	✓	✗	✓	✓
Cohesion Fund	✓	✓	✓	✗	✓	✓	✓	✗	✓	✓
Horizon 2020	✓	✓	✓	✓	✗	✗	✗	✓**	✓	✓
NER 300/400***	✓	✗	✗	✓	✗	✗	✗	✗	✗	✓
EEE-F	✓	✓	✓	✓	✗	✗	✗	✗	✓	✗
ELTIF****	✗	✗	✗	✗	✓	✗	✓	n/a	n/a	n/a

* Smart grids: few projects are likely to have access to funding as few grids have the required cross-border element
** Horizon 2020 calls: possible to apply from a single Member State but majority require multiple Member States to be involved
*** NER 400: this is unlikely to be implemented until 2020 and so this is based on the European Commission's proposed plans
**** ELTIF: this is unlikely to be implemented until later 2015/ early 2016 and so this is based on the European Commission's proposed plans

Managing risk

Managing risk

Every investment and financing transaction has its own risk profile. In each case, market forces, environment, technical, regulatory, political and financial factors interrelate differently. In particular, the project finance market has found ways to deal with regularly occurring risks and has developed tools to mitigate them: hedging to manage interest rates, currency and commodity price risk; fixed-price contracts and performance guarantees to manage cost overruns and delays; take-or-pay agreements to mitigate long-term power supply risks and power purchase agreements to manage offtake risks.

The financing of energy infrastructure projects and transactions and the deployment of funds need to be approached on a regional, if not on an individual, country basis. As illustrated overleaf, there are differences between the Member States that will drive or indeed prohibit investments. The European Commission and the EIB are currently considering the ways in which the financial instruments can be best deployed so as to maximise utilisation and target those projects that are most in need of EU funding.

PCI specific risks

There are a number of risks that apply to energy infrastructure projects in general and PCIs in particular. The European Commission is concerned that some PCIs will not come to successful close due the risks that they face. The European Commission thus commissioned a report from AF-Mercados EMI and REF-E to look at the risk that are particular to PCIs[62]. Noting that the risk profile for PCIs would typically be higher than for other infrastructure projects, the report identifies over thirty risk factors to which a PCI may be exposed. According to the survey of stakeholders on which the report is based, the most significant regulatory risks specifically relating to PCIs are cross-border coordination issues, future adverse regulatory decisions and financing issues.

Country risk

The inherent risks of investing in a specific sovereign country require detailed analysis. *Euromoney Country Risk analysis*[63] is an example of how the Member States could be assessed broadly. *Euromoney Country Risk* evaluates the investment risk of a country, such as risk of default on a bond, risk of losing direct investment, risk to global business relations, by using a qualitative model, which seeks an expert opinion on risk variables within a country (70 per cent weighting), combining it with three basic quantitative values (30 per cent weighting). As illustrated overleaf, the *Euromoney Country Risk* analysis suggests that the country risks are higher in south and south-east Europe.

Companies and investors cannot control political and regulatory risks. Set out below are a few key risk indicators that can affect investment appetite into the EU. These risk indicators represent a selection of the results presented in the *Global Competitiveness Index Executive Opinion Survey*. Despite the mitigants and tools available, there are still some investment risks that are more difficult to mitigate and that, ultimately, will determine whether investments take place in a certain jurisdiction or not. Whilst on a global scale, the EU28 may appear similar from a risk perspective, they are not if the comparison is limited to the EU. No two investors or debt providers will assess risk in the same way or have the same level of risk aversity or appetite. The analysis and graphically presented key facts and indicators are intended to give an indicative overview for investors and debt providers, perhaps mostly so for those that are based outside the EU28 that are looking for opportunities in the EU. As the radial graphs illustrate, there are Member States that have significantly weaker investor protections than others.

62 Study on regulatory incentives for investments in electricity and gas infrastructure projects, Final Report, European Commission, AF, REF-E, 2014
63 Euromoney Institutional Investor PLC; Euromoney Country Risk index 2014, using their risk score as of 4 March 2014

The risk grid

The investment parameters are described through radial graphs, applying the World Economic Forum's scale (where small symbolises higher risk).

1. Property rights | respondents were asked to rank the protection of property rights, including financial assets
2. Intellectual property protection | respondents were asked to rank the strength of intellectual property rights, including anti-counterfeiting measures
3. Judicial independence | respondents were asked to rank to what extent the judiciary is independent from members of government, citizens or firms.
4. Efficiency of legal framework in settling disputes | respondents were asked to rank the efficiency of the legal framework (where private business is concerned) in settling disputes
5. Efficiency of legal framework in challenging regulations | respondents were asked to rank the ability for private business to challenge government actions and/or regulations through the legal system
6. Protection of minority shareholders' interests | respondents were asked to rank to what extent the interests of minority shareholders are protected by the legal system
7. Quality of overall infrastructure | respondents were asked to rank the state of the overall infrastructure, including transport, telephony and energy

The complete list of factors and indicators, the details of the methodology as well as the contextual comments on each country's performance in the rankings can be found in the current edition of *Global Competitiveness Report*[64].

In addition to country risk and investment parameter dimensions, the grid overleaf sets out statistical facts for each Member State[65].

Key investment indicators and risks

Global Competitiveness Report

For 35 years, the World Economic Forum has looked at factors that determine and drive economic growth and how they interact globally. Every year, they publish *Global Competitiveness Report*. Covering 144 countries, it uses key indicators across 12 pillars to rank the world's countries. A key feature of *Global Competitiveness Report* is the Executive Opinion Survey, which, in the 2014–2015 edition, captured the views of 14,000 business leaders across 148 countries between February and June 2014[66].

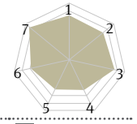
64 The Global Competiveness Report 2014-2015, World Economic Forum
65 Eurostat; Europa.eu; 'Corporate tax rates table', KPMG and 'Tax guides and highlights', Deloitte
66 The Global Competiveness Report 2014-2015, World Economic Forum

EU 28 key facts and risk indicators[67]

1 Austria

8.5	83,870
313.07	0.3%
2.1%	81.2%
25%	25%
Euro	1995

2 Belgium



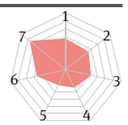
11.2	30,528
382.69	0.2%
1.2%	104.5%
33.99%	25%
Euro	1952

3 Bulgaria

7.2	111,910
39.94	0.9%
0.4%	18.3%
10%	5%
Lev	2007

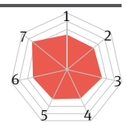
	Population (m)
	Area (km²)
	GDP (€bn 2013)
	GDP growth (2013)
	Inflation (2013)
	State debt % of GDP (2013)
	Corporate income tax
	Dividend tax
	Currency
EU	Member of EU since

4 Croatia



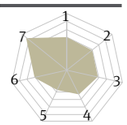
4.2	56,594
43.13	-0.9%
2.3%	75.7%
20%	12%
Kuna	2013

5 Cyprus



0.9	9,250
16.50	-5.4%
0.4%	102.2%
12.5%	0%
Euro	2004

6 Czech Republic

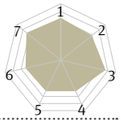


10.5	78,866
149.49	-0.9%
1.4%	45.7%
19%	15%
Koruna	2004

7 Denmark

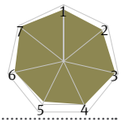
5.6	43,094
248.97	0.4%
0.5%	45%
24.5%	15%
Krone	1973

8 Estonia



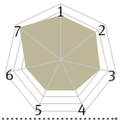
1.3	45,000
18.61	2.2%
3.2%	10.1%
21%	0%
Euro	2004

9 Finland



5.5	338,000
193.44	-1.4%
2.2%	56.6%
20%	20%
Euro	1995

10 France

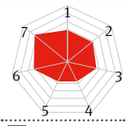


65.9	550,000
2059.90	0.2%
1.0%	92.2%
33.33%	30%
Euro	1952

11 Germany

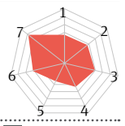
80.8	356,854
2737.60	0.4%
1.6%	76.9%
29.58%	25%
Euro	1952

12 Greece



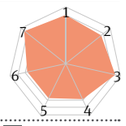
11.0	131,957
182.05	-3.9%
-0.9%	174.9%
26%	10%
Euro	1981

13 Hungary



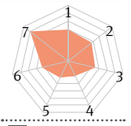
9.9	93,000
97.95	1.1%
1.7%	77.3%
19%	0%
Forint	2004

14 Ireland



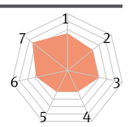
4.6	70,000
164.05	-0.3%
0.5%	123.3%
12.5%	20%
Euro	1973

15 Italy



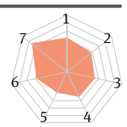
60.8	301,263
1560.02	-1.9%
1.3%	127.9%
31.4%	20%
Euro	1952

16 Latvia



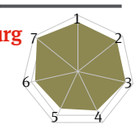
2.0	65,000
23.37	4.1%
0.0%	38.2%
15%	0%
Euro	2004

17 Lithuania



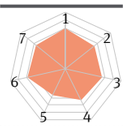
2.9	65,000
34.63	3.3%
1.2%	39%
15%	15%
Litas	2004

18 Luxembourg



0.5	2,586
45.48	2.1%
1.7%	23.6%
29.22%	15%
Euro	1952

19 Malta

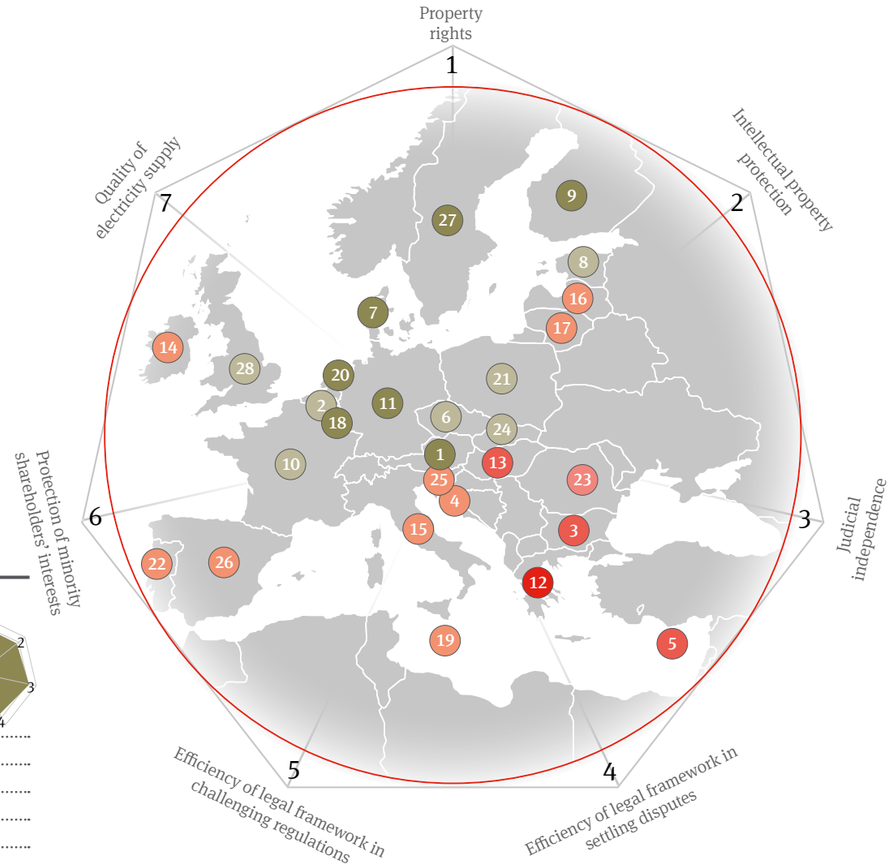


0.4	316
7.26	2.9%
1.0%	69.8%
35%	0%
Euro	2004

67 As determined by Euromoney Country Risk index 2014

Country risk analysis

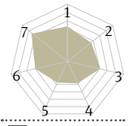
HIGH risk	
	< 40
	40 – 49.9
	50 – 64.9
	65 – 74.9
	> 75
LOW risk	



20 The Netherlands

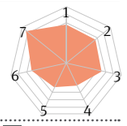
16.8	41,526
602.66	-0.8%
2.6%	68.6%
25%	15%
Euro	1952

21 Poland



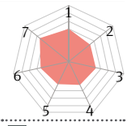
38.5	312,679
389.70	1.6%
0.8%	55.7%
19%	19%
Zloty	2004

22 Portugal



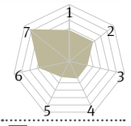
10.4	92,072
165.69	-1.4%
0.4%	128%
23%	25%
Euro	1986

23 Romania



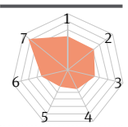
19.9	237,500
142.26	3.5%
3.2%	37.9%
16%	16%
New Leu	2007

24 Slovakia



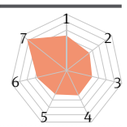
5.4	48,845
72.13	0.9%
1.5%	54.6%
22%	0%
Euro	2004

25 Slovenia



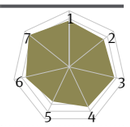
2.1	20,273
35.27	-1.1%
1.9%	70.4%
17%	15%
Euro	2004

26 Spain



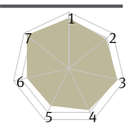
46.5	504,782
1023.00	-1.2%
1.5%	92.1%
30%	21%
Euro	1986

27 Sweden



9.6	449,964
420.85	1.6%
0.4%	38.6%
22%	30%
Krona	1995

28 United Kingdom



64.3	244,820
1899.01	1.7%
2.6%	87.2%
21%	20%
Pound	1973

Finding finance

It is important to understand the full spectrum of funds and initiatives available to projects so that the resources available can be used efficiently to the maximum benefit.

An important source of funds for projects also comes in the way of private investors. EU funds can be used to help leverage private funds and so increase a project's access to capital. However, private investors come in many different forms that all have different investment profiles so that, for example, venture capital and private equity may want high-risk and high reward investments whereas pension and insurance funds may be looking for safer, long-term investments.

EU funding

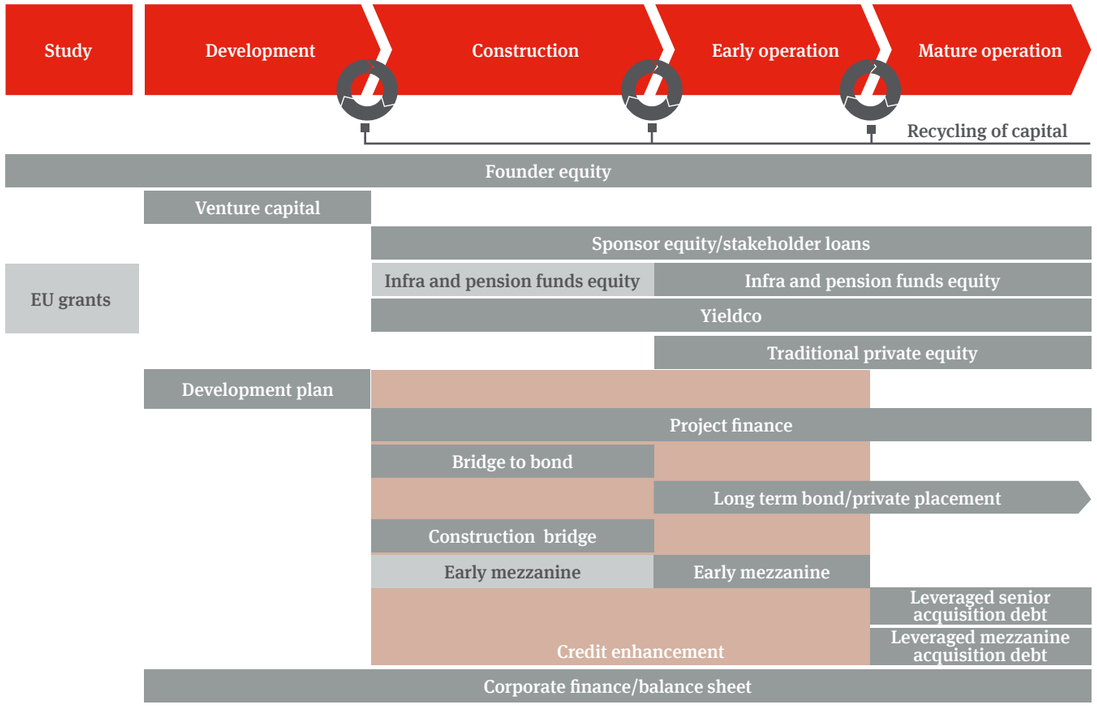
The European Commission has a dilemma – it wants to deploy the funding fairly across the projects and across the EU, but the differences between the different regions, the maturity of projects, regulatory regimes, project promoters and TSOs and the risk profiles should drive the European Commission to deploy the finite resources to where they are needed most.

EU funds should be deployed to assist the more financially challenged projects where these funds are needed rather than being applied to all – it can be queried whether any EU funding at all should be used to support the most viable projects.

As is briefly described above, most of the EU funding programmes and initiatives are available as grants and financial instruments, with grants being the predominant way of funding support so far. However, the operation of the EFSI is intended to be different in that it focusses on financial instruments and first loss pieces rather than grants that will never be paid back. The European Commission hopes that with a first loss piece, such as guarantees or subordinated debt, the funds can be recycled rather than paid out once. This approach appears more sensible.

Sources of funds

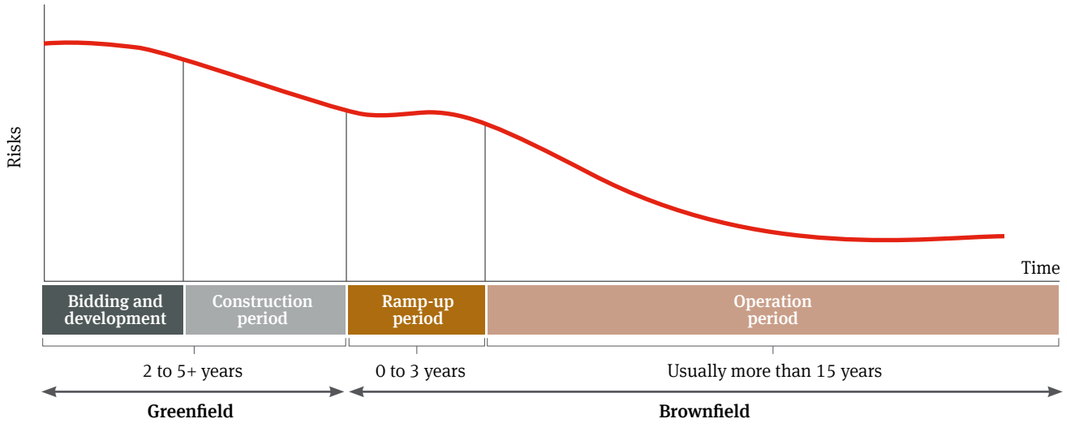
It is intended, and indeed necessary, that the EU programmes and initiatives shall complement and facilitate finance from the market, however, neither crowd out private funding nor make unfeasible projects feasible. The initiatives and programmes therefore must be analysed in light of the private finance market.



The figure on the previous page illustrates where different types of funding sources come in during the life of a project. It is key to finding finance that there is a robust pipeline of bankable projects. As it has become clear that banks' balance sheets will not be able to support the global need to finance infrastructure, attention has increasingly turned to institutional investors. The sums held by institutional investors – principally insurers, pensions funds and sovereign wealth funds – approach the funding gap in scale. The pricing, ticket sizes and tenors that institutional investors can offer borrowers, can also make them more attractive than traditional bank funders.[68]

Institutional investors are considered a huge potential source of investment and there are indications of current and potential increases in overall infrastructure investments. Entrusted with the money of others, they tend to look for long-term, low-risk, low-volatility investments that generate inflation-linked, predictable returns, so for example they are likely to invest in the 'Brownfield' stage of a project as illustrated by the graph below.[69] Risk averse pension funds would look at stable returns, but accept a lower yield, whereas venture capital would go in early (in the 'Greenfield' stage), but in return expect returns up to 50 per cent if not more.

Risk profile development of an infrastructure asset



Source: World Energy Council, World Energy Trilemma, 2014

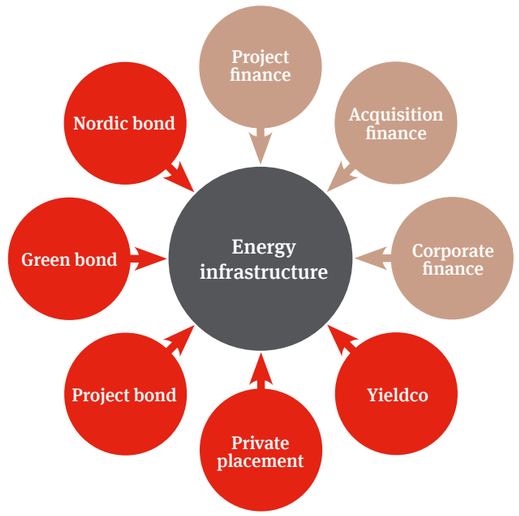
Seen from the institutional investors' perspective, there are several factors pushing them to take up project finance debt:

- the investment profiles of the institutional investors are, in some respects, particularly well-suited to project finance debt. They are usually seeking long term, low risk, fixed income products to match the nature of their insurance, pension and sovereign liabilities.[70] For insurers, this is complimented by incentives to match the tenor of funding sources and liabilities under Solvency II
- although the lack of a transparent index or public market makes direct comparison difficult, infrastructure is widely seen as a well performing asset class over the long term. Even for investors whose priorities lie elsewhere, the diversification benefits of unlisted infrastructure may prompt moves into an area which is currently underinvested by most institutional investors[71]
- historically low interest rates make the returns available to those prepared to take a short period of construction risk particularly attractive
- major institutional investors are facing political pressure to invest directly into infrastructure.

68 The pioneering bond deals which closed in Europe in 2014 were based on open competition, in which bond solutions were chosen on pricing grounds
69 Standard & Poor's, 2014: Global Infrastructure: How to fill a $500 billion hole; World Energy Council, World Energy Trilemma, 2014
70 Infrastructure bonds can also carry inflation protection, though this approach is exceptional

Different investors and debt providers assess and accept risk differently. The risk appetite differs during the life cycle of an infrastructure project. Institutional investors can be wary of taking long-term risks on energy projects, such as uncertainty around policy and regulatory changes; lack of historic data, especially for renewable energy projects; construction and completion risks; technical and design failures; poor operational performance; or commodity prices. However, risk management strategies exist and done right, investments in energy infrastructure are long-term stable cash-yielding assets, which are uncorrelated with the capital market and therefore fit incredibly well with pension funds investment appetite.[72] Whether capital will flow to energy infrastructure depends on a number of factors. It is important to understand that whilst there is an abundance of funds now available, monies are by no means earmarked for European energy infrastructure. Capital is highly liquid and can move to another sector and another continent very quickly. The policy framework, the regulatory environment and other risk factors will determine the levels of appetite. Energy and energy infrastructure are thus competing for capital that easily could be put to work elsewhere.

The combination of a contracting banking market where bank lending to corporates has decreased and insurance and pension funds appetite for yield in a low government bond yield environment, has led to new money coming to market being available for energy infrastructure investment and financing, on a projects basis or later stage at the early operational or mature operational stage.



71 Private Real Estate Markets and Investments edited by H. Kent Baker, Peter Chinloy
72 World Energy Council, World Energy Trilemma, 2014

Traditional funding

Project finance

Traditional project finance is still very much used in energy infrastructure finance. Very briefly, project finance typically involves a syndicate of lenders lending long-term funds to a special purpose vehicle to fund an infrastructure asset on a non-recourse basis.

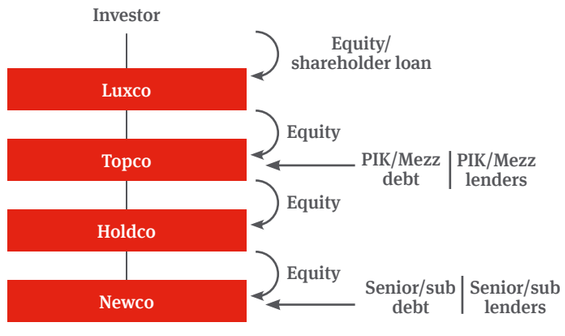
More recently, project finance structures have been extended on the debt side to now also include mezzanine loans, holdco debt and other contractually and structurally subordinated debt, which hitherto were typical for acquisition finance.

While project finance bank lenders retreated in the immediate wake of 2008, a number remain strongly committed to the market and are actively seeking investment opportunities. Basel III, however, is widely expected to make it increasingly difficult (or expensive) for them fund for the full tenor of project debt. This can sit well with the needs of institutional investors, who are often focused on finding long term returns to match their liabilities. An approach which has been used on a few deals is that banks and institutional investors co-invest as senior lenders, with the bank debt amortising ahead of the institutional debt. In the past the difficulties inherent in bond decision making and drawdown have made the mutual benefits of this approach hard to access. Innovations in this area mean these barriers can now be overcome. There remain certain areas where compromise is needed, for instance in matching drawdown profiles – even if these are phased for institutional investors as, unlike bank drawdowns, they usually need to be fixed. However, the progress in structuring around these obstacles means we expect banks and institutional investors to increasingly co-invest in future.

Acquisition finance

Acquisition finance would typically refer to leveraged debt used to acquire a private or listed company where private equity sponsors provide limited equity and a syndicate of banks provides layered debt in different forms, including term facilities, revolving credit facilities, acquisition facilities and ancillary facilities.

Whilst every transaction is unique, there are certain structural elements that have permeated the acquisition finance structures over the years. Typically, a syndicate of banks would lend the major portion of acquisition debt on a term loan basis together with, for example, a revolving credit facility and ancillary facilities such as letters of credit and guarantees to the acquiring entity, which would represent the senior debt; despite some of the term loans terminating at different times, all the senior debt would rank *pari passu*. More often than not, the senior debt piece is not enough and more debt is required. Over the years, variations of subordinated debt have developed and now include contractually subordinated second lien facilities, contractually and sometimes structurally subordinated mezzanine facilities and contractually and deeply structurally subordinated holdco or PIK facilities. Simplified, this could be illustrated as follows:



Acquisition finance structures or elements thereof are increasingly used in acquisitions of energy infrastructure assets that have reached a more mature operational stage.

Corporate finance

European corporates, and in particular SMEs, are too reliant on bank funding. Whereas in the United States the ratio of capital markets to bank debt is 30:70, the situation in Europe is the opposite, contributing to a lack of resilience against crisis.

A number of entities in the energy infrastructure space will be financed through traditional corporate finance, including term loans and revolving facilities provided by banks and debt and equity raised on the capital market through corporate bonds, medium term note programmes and equity or, in case of some state owned TSOs, by government budget.

New money

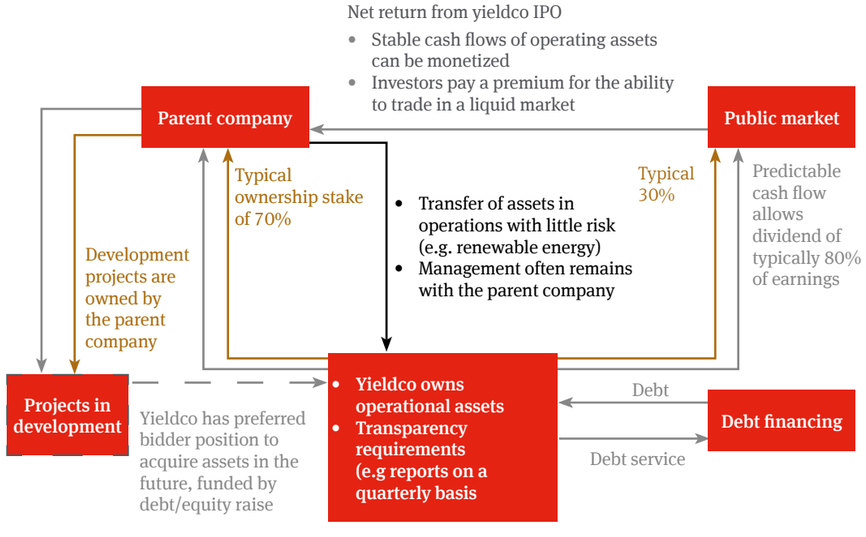
Bank disintermediation

Some banks, in particular Japanese banks, have been very active throughout the global financial crisis and others are now coming back. Bank debt for energy infrastructure transactions is competing with the institutional capital, making the space borrower friendly.

A common theme for the new money, however, is the *disintermediation* of banks as pension and insurance funds are increasingly funding projects, assets and acquisitions directly. Banks tend to remain in transactions structures, however, even where they are not the main debt providers, by contributing advisory expertise or specific services, for example where funds do not have the facilities to handle bank accounts, ancillary facilities, revolving facilities, agency roles or hold security. Some of these roles are also handled by independent non-bank entities or agency and security trustee functions linked to a fund and we are seeing differences in these roles between debt capital markets transactions and private placements, as loans or notes increasingly narrow.

Yieldco

Yieldcos as funding vehicles have become increasingly popular, in particular for the financing of portfolios of renewable generation assets. As the structure diagram below seeks to illustrate, a sponsor provides seed assets to the yieldco fund vehicle, which is the basis for its listing. The sponsor continues to develop assets that are fed into the listed yieldco.



Advantages for the sponsor include that this structure frees up capital to develop new projects by monetising the value of operating assets and through the cooperation with a yieldco the developer continuously has the opportunity to sell operating assets. The sponsor provides management services to the yieldco and receives management fees.

The sponsor needs to bear in mind that substance is required in that a yieldco typically requires an asset base with a minimum of €500 million and €150-200 million in IPO value and there needs to be a sufficient pipeline of projects in development to 'feed the beast'.

For an investor in a yieldco, it can be an attractive long term investment as an alternative to current low yields of bonds and provides geographical and technological diversification compared to a single project based on access to a steady inflow of additional assets. Conversely, risks include that the investor assumes exposure to the lifetime of the asset technologies and that the cashflows generated might not compensate for inflation; the differential between the yield of the yieldco and other investment classes may therefore diminish. It is also very important to avoid or at least control the inherent conflict of interest between yieldco and the sponsor.

Private placements
In light of the reliance bank debt being too high across the EU, governments and the European Commission are welcoming initiatives where securities are placed privately and loans are provided by non-bank financial institutions ("shadow banks"). Recent examples of government supported initiatives in Europe includes that France has taken the lead since 2012 in creating a pan-European private placement platform and recently, direct lending from one company to another has been made possible under *loi Macron*. The German *Schuldscheine* have been around for some time and in 2013, Italy created a mini-bond market. In addition, the Loan Market Association has recently produced a precedent agreement for private placement in a drive to standardise and simplify private placement products coming to market.

The long term and buy and hold value of investments mean that funds invest carefully, undertake due diligence commensurate with project finance lenders and require similar covenant, default and information packages. The tighter covenant packages of private placements can be contrasted with a listed deal with lighter covenants. As many of the private placements we see involve a single fund manager, decision making should be centralised and made more manageable for a borrower/issuer than a large club of banks.

Bank debt for energy infrastructure transactions is competing with the institutional capital, making the space borrower friendly. A common theme for this new money is the disintermediation of banks as pension and insurance funds are increasingly funding projects, assets and acquisitions directly. However, private placements are traditionally associated with the operating phase of a project or a portfolio. This is borne out in many investors as the structures of the funding vehicles do not necessarily lend themselves to taking construction risk but some funds will take construction risk on known technologies.

We are acting on both sides of these transactions and have noted a shift in focus, with detailed negotiations of intercreditor arrangements and the agency and security agency provisions, terms which were more or less seen as boiler plate in the past. Quite often, the intercreditor principles negotiations tend to require significantly more effort than would traditionally have been the case, particularly in transactions where the fund provides one or two layers of debt and a second fund provides a deeply subordinated junior piece.

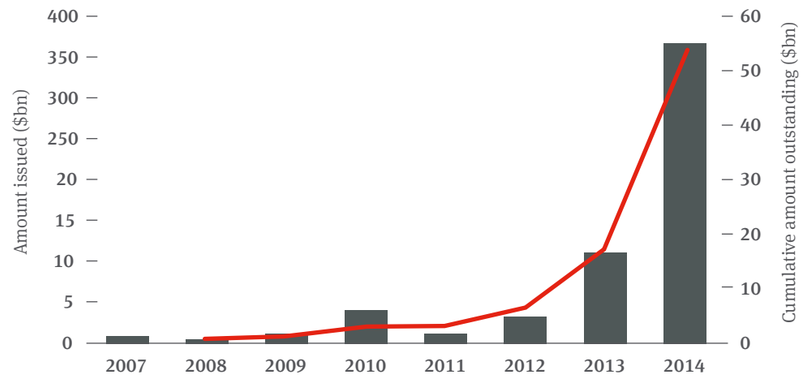
Project bonds
Pre-2008 bond transactions were almost invariably monoline wrapped. The monoline guarantor gave credit enhancement to the project company, and acted as a controlling creditor during the construction phase. This structure overcame the decision making issues inherent in bond structures and enabled the relatively passive approach usually taken by institutional investors. While the monoline market was not fatally flawed, the collapse of the product offering during the global financial crisis showed the model had limitations. In the gap the monolines left (and against a background of retrenching banks and public need for infrastructure) a number of state and quasi-state actors came forward to provide alternative credit enhancement structures.[73]

The most notable of these were the Project Bond Credit Enhancement (PBCE) product offered by the EIB. From the private sector, a number of structural and institutional changes were proposed, designed to overcome the bondholder decision making problem, as well as other structural issues, such as the negative carry on a complete 'day one' drawdown of bondholder funds. The European Commission and the EIB initiated the pilot scheme for the 2020 Project Bond initiative for the purpose of bringing more liquidity to the then illiquid and cash strapped infrastructure investment market. The Project Bond initiative is designed to enable eligible infrastructure projects promoters, usually public private partnerships (PPP), to attract additional private finance from institutional investors such as insurance companies and pension funds.

Since its inception in 2012, much has happened. Having said that, EIB structured project bonds are still a viable option for larger projects and it fits in with the other EU initiatives described in this briefing.[74]

Green bonds
Green bonds are generally forms of debt securities, the proceeds of which must be used for environmentally friendly projects that meet certain criteria and not for general corporate purposes. The number of 'green bonds' has increased dramatically the last couple of years, which is partially due to the increase in 'green' assets being available as well as a strong demand amongst investors to diversify the asset portfolio and to include 'green' or environmentally friendly assets.

Green bonds issuance by year



73 Institutional investors and project finance: emerging trends, David Carter and Bevan Peachey, Norton Rose Fulbright LLP, March 2015
74 Please find a more substantial analysis of the project bond initiative in our briefing http://www.nortonrosefulbright.com/knowledge/publications/124166/european-infrastructure-opportunities-an-investment-plan-for-europe

Climate Bonds Initiative (an international, investor-focused not-for-profit) estimates that the universe of climate-aligned bonds outstanding amount to almost US$600 billion, which include bonds that are labelled green bonds (with defined use of proceeds) and unlabelled bonds issued by climate-aligned entities across six climate themes including energy.[75]

Despite attempts to regulate or at least make green bonds uniform, there is no uniform definition of 'Green Bond' (sometimes called 'Climate Bonds'). However, the March 2015 update of the 'Green Bond Principles' focused on assurance and reporting. These principles, launched in 2014 by a number of financial institutions including Citi and JPMorgan, are voluntary best practice guidelines for labelled bonds. Their main focus is to provide a common platform for green bond issuers and investors.

Nordic bonds

Although an established form of financing domestically in Norway for some time, the Nordic bond has made headways into other parts of the world, particularly in the oil and gas space as these are the markets with which the Norwegian investors are familiar. However, there is no reason for this form of finance to be limited to oil and gas.

The main differentiating factors of a Nordic bond compared to a more standard high yield bond are light documentation, the speed with which a bond is brought to market and the relatively limited costs. A (typically) unsecured Nordic bond can be brought to market with limited or no prospectus in less than three weeks. The flexibility of the Nordic Bond offering, with the specific requirements of the project and issuer group assessed and taken into account is also of value to issuers. Projects are assessed on a case by case basis, with such aspects as the appetite and ability of the issuer group to provide guarantees and security being open to discussion. In contrast to other international financings that are typically governed by English or New York law, the Nordic bonds are governed by the laws of Norway.

Flexible bond structures

- Use of proceeds ranging from "general corporate purposes" to project financing
- Structures include both senior unsecured bonds and secured bonds (1st and 2nd lien)
- Covenant light structures
- Wide range of tenors available

Global investor universe

- Truly global investor universe
- Investor subscriptions normally ranging from USD 1 million to USD 75 million (and higher)
- Bond size USD 50 – 700 million
- Investor demand will depend on issuer jurisdiction, type and size of deal, yield on offer
- Active secondary trading market in most issues of certain size

Efficient documents and process

- Well tested and proven trustee function through the Nordic Trustee
- Standardised Norwegian law based bond agreement based on the LMA standard
- Legal cost at moderate levels
- Broad investor acceptance for the Norwegian bond documentation model

Speedy issuance process

- No public rating requirement
- No extensive offering memorandum required
- No formal due diligence requirement – limited disclosure requirements
- ~2-9 weeks from mandate awarded to settlement pending complexity of transaction

Challenges

Energy infrastructure investment is thus a very dynamic space. To pension funds, insurers and infrastructure funds, infrastructure investments can provide important low-risk and low-correlation as well as attractive long-term yield. Unlisted infrastructure assets are usually held by insurance companies on a buy-to hold basis and the key economic risk that investors face is not that of liquidating the investment at an undervalue but rather that of counterparty default or prepayment risk.[76]

In its comprehensive report on project finance default rates, Moody's finds that infrastructure investments in OECD countries are reasonably safe with a 4.5 per cent default rate overall for the period 1983-2013.[77]

What used to be a 'wall of debt'[78] is now a 'wall of funds'. Capital – both debt and equity – is ready to be deployed across Europe for the right energy infrastructure asset, on a traditional project finance basis as well and on an acquisition basis and any combination of the two. Many investors, however, find it difficult to find assets that meet their requirements and, conversely, project promoters, sponsors and initial investors find it difficult to find available capital. One reason is that this wall of funds is very diverse and needs to be assessed carefully.

75 Bonds and climate change, the state of the market in 2015, Climate Bond Initiative, 2015
76 Comments Template on EIOPA-CP-15-003 Discussion Paper on Infrastructure Investments by Insurers, Blackrock, 2015
77 Moody's Investor Service, Default and Recovery Rates for Project Finance bank Loans, 1983-2013, 3 March 2015
78 See for example 'What Europe's LBO debt wall means for the future of finance', International Financial Law Review, 25 September 2012

IRR	Different IRR expectations drive availability of capital. The internal rate of return or IRR is a typical way of describing an equity investor's expected return of capital. Whilst the IRR can be as low as 'high singles' (6-8 per cent), 'under 10' (9 per cent), '10', low teens etc, it is the assumptions underlying the IRR calculation and the weighted average cost of capital or WACC that really determines the IRR and in the end, an investor's readiness to accept or require a certain yield level.
Debt or equity	One of the more interesting features of the new players in the energy infrastructure space is their flexibility. Some provide debt, some provide equity, some provide both. Making a distinction between energy infrastructure equity and energy infrastructure debt is however fundamental, both from an investment and investor perspective and determines how the investor holds the investment on its balance sheet. Apart from the feasibility of the project or the value of the asset, a common query for the equity investor is the size of ticket it will invest. What are the minimum requirements? Is it intending to buy and sell or buy to hold? What is the acquisition strategy – 10 per cent, sub 50 per cent and avoid consolidation, over 50 per cent to gain control, clear majority or single owner. The size of a project or transaction is obviously an important factor as very few players can on their own take on a multi-billion project. And even if they could, they may not want to. The debt space used to be rigid in that acquisition finance was distinct from project finance, which was distinct from asset finance etc. This has changed dramatically and the debt space in energy infrastructure in particular is now an eclectic mix of senior, senior subordinated, mezzanine and holdco debt, on a bridge, short term, mini-perm or long term basis. As is the case with equity, debt providers have different requirements which makes it difficult to assess the amount of available capital.
Risk appetite	Different investors come in at different times over the life of a project or an asset. Whereas some are comfortable with construction risk, others can only invest in operational assets. Which currencies can the investor accept? Some pension funds find it difficult to take on currency risk in countries outside its own currency. This obviously helps many Eurozone based investors to find a broader European base, whereas investors in the EU that are not in the Eurozone may find it difficult to diversify to other currencies. Merchant or market risk versus tariff based. The regulatory risk and cash flow risks drive many investors' investment criteria as does the appetite for regulated assets.
Sector	The sector focus will drive the appetite for investment. Some may only invest in renewables, some only in sub-sectors such as solar, some may invest only in 'core infrastructure' whilst others may have a broader scope.
Geographies	Many investors are restricted geographically in that they can only invest in OECD or in the EU, or in northern Europe or EMEA.

Applying a level of granularity and looking at the requirements of the different investors, the many criteria and risk factors mean that a particular asset or project may either be in the sweet spot for many investors and therefore attract enormous interest and consequently a healthy price tag or attract only very few investors, if any.

Financial ratios

The choice of financial ratios or financial covenants in energy infrastructure very much depends on where in the life span of an asset the investment takes place. Is it a project finance based transaction or is it an operating asset, such as a regulated network, that is being acquired? The variations of what lies between is endless. The financial ratios and sensitivities for debt and equity investments in infrastructure projects and portfolios need to be considered on a case by case basis.

Inevitably, financial ratios analysed depend on the type of project or portfolio. Infrastructure debt in projects and portfolios funded on a project finance basis tend to include:

- historic and forecast debt service cover ratios
- loan life cover ratios and project life cover ratios
- operating cost cover ratios.

Using operating regulated energy infrastructure assets as an illustrative example, financing structures could be designed to be compatible with the requirements of the rating agencies for investment grade rated distributions businesses. It would make sense, therefore, to have at least one eye on the requirements of the rating agencies. Interestingly, the rating agencies are alive to the fact that a number of regulated assets that have been owned and controlled by domestic TSOs and DSOs in the past are now increasingly in the hands of international investors with different business models. This will most likely have an impact on the rating requirements going forward.

These financial covenants, as well as the methodology, would be useful as a benchmark and have some applicability also to unregulated operating assets and assets with a (theoretical) rating below investment grade.

Rating requirements

The key factors for determining the rating, and their relative weighting, would include:[79]

- an assessment of the regulatory environment and asset ownership model (40%)
- the business' efficiency and execution risk (10%)
- the stability of the business model and its financial structure (10%)
- the key credit metrics (40%)

Regulatory environment and asset ownership model
The predictability and supportiveness of the regulatory framework is a key consideration for a regulated business and one that differentiates the transmission sector from most other corporate sectors. Networks that monopolise the market for essential transmission and distribution services are regulated, i.e. their revenues are subject to price control limits reset at periodic reviews. These tariff-setting mechanisms are structured to limit the possible volatility in revenues and tend to be highly predictable and are particularly favourable to issuers. In particular, a regulator's ability to agree on a capital expenditure programme *ex ante*, set efficiency targets and/or recover prudently incurred costs in a timely manner will affect a network's business position. In addition, the general business model and type of asset ownership arrangement will drive the business flexibility of an issuer and can be significantly different from other networks serving similar regions (in terms of size or population) elsewhere in the world, varying from full ownership and control of all key assets to a short-term lease or licence arrangement.

79 Moody's Global Infrastructure Finance, Regulated Electric and Gas Networks, August 2009. Percentages refer to Moody's broad rating weighting factors

Efficiency and execution risk
In contrast to the measurement of the regulatory framework and the general business model, this measurement assesses a network's individual performance within its regulatory framework and the execution risk associated with its specific regulatory settlement. The shift from cost-plus (where the regulator automatically passes the operating and financial costs of an electricity network on to the consumers) towards incentive-based frameworks (where the regulator retains the volatility and uncertainty associated with such costs by subjecting them to analysis and benchmarking at price review) is likely to result in increasingly more challenging cost efficiency targets. The ability of a network to outperform its regulatory targets is thus a key driver of long-term value creation for its stakeholders.

Moody's measures this factor by examining the cost efficiency and scale and complexity of the capital programme in place. Moody's will score networks that have complete flexibility to set tariffs so that they can meet current and future operating and capital costs without impediment 'Aaa'.

Stability of the business model and its financial structure
The more stable and predictable the cash flows of a regulated network are the better the rating it will receive. The way in which a network owner chooses to use its debt capacity, and the limitations on leveraging and pursuit of other activities (whether statutory or contractual) are considered key credit issues. Moody's will consider the network's ability and willingness to pursue opportunistic corporate activity (through M&A, disposals and investments), its ability and willingness to increase leverage and the targeted proportion of operating profit outside core regulated activities in measuring this factor.

Key credit metrics
As most regulated distribution businesses are highly capital intensive, financial strength and liquidity are key credit factors for determining their long-term viability. A company's ultimate credit profile must incorporate its financial metrics, as a network with substantially more debt than its peers relative to the value of its asset base will generally have a higher probability of default. Not one single financial ratio can adequately convey the relative strength and health of a company. The rating agencies will look to the overall liquidity of the company. Typically, the rating agency will look to funds from operations (FFO) to net debt, FFO interest cover, regulated asset value (RAV) to net debt and regulated cash flow (RCF) to capex. These credit metrics incorporate all of the standard adjustments applied by Moody's when examining financial statements, including adjustments for certain types of off-balance sheet financings and certain other re-classifications in the income statement and cash flow statement.

Typical financial covenants for operating regulated assets

Typically, the main financial covenants would be tailored around the regulated asset value or RAV and funds from operations or FFO. Typically, FFO to net debt, FFO interest cover and RAV to net debt would be employed.

Adjusted ICR or FFO interest cover
The cash flow interest cover ratio (FFO interest cover) is the basic measure of the company's ability and the cost of its borrowed capital and is expressed as a multiple. The Adjusted ICR is a variation on the FFO Interest Cover ratio but with a meaning closer to EBIT coverage.

Net Debt to RAV
A traditional measure of leverage which is used to gauge the company's overall flexibility in light of its overall debt burden. High debt to capitalisation is not only a sign of higher debt service obligations, but also an indicator of the company's ability to raise additional finance if needed.

The regulated asset base is comprised of the physical assets that are used to provide regulated distribution businesses and the RAV represents the value on which the company is permitted to earn a return. RAV can be calculated in different ways, depending on the regulatory regime under which the company is operating.

FFO to Net Debt
FFO to net debt measures the cash generating ability to the aggregate level of net debt (i.e. reported debt plus Moody's adjustments) on the balance sheet. Net debt outside or above the consolidated group will therefore positively affect the rating of the consolidated group as the FFO to net debt is lower than would have been the case with net debt on that level. Therefore, deep structural subordination of a substantial portion of the net debt can lead to positive 'notching' in that an operating group is rated higher than a subordinated holdco borrower.

Regulated cash flow (RCF) to Capex
This ratio shows whether a network is able to fund capital expenditure internally. Financial flexibility from limited capex requirements easily funded by internally generated cash flows are viewed favourably. However, Moody's does not regard capital expenditure undertaken by an issuer to upgrade and/or expand its network as a negative rating factor in itself, as additional investments should be remunerated through increased revenues.

How financial ratios affect the rating

The table below sets out how Moody's would determine that financial ratios would align the rating of a regulated network. Although indicative at this stage, it gives a steer as to which financial ratio levels the rating agencies would expect to see.

	Aaa	Aa	A	Baa	Ba	B
FFO Interest Cover	>7.0x	>5.0 – 7.0x	>3.5 – 5.0x	>2.5 – 3.5x	>1.5 – 2.5x	<1.5x
Net Debt to RAV	<30%	>30 – 45%	>45 – 60%	>60 – 75%	>75 – 90%	>90%
FFO to Net Debt	>30%	>20 – 30%	>12 – 20%	>8 – 12%	>4 – 8%	<4%
RCF to Capex	>3.5x	>2.5 – 3.5x	>1.5 – 2.5x	>1.0 – 1.5x	>0.5 – 1.0x	<0.5x

The financing structures used by networks can vary. Moody's believes that in the infrastructure sector and, in particular, regulated networks, structural enhancements provided to financial creditors may provide worthwhile protection and be a source of rating uplift when contrasted to those issuers that do not grant such protections.

Moody's has classified the sources of rating uplift from creditor protection into three categories:

- event risk protection
- debt structure and liquidity protection
- control afforded to creditors

Event risk protection
If the restrictive covenants in a financial structure, ranging from restrictions on permitted business outside the core regulated business to restrictions on investments, are fully effective to remove event risk, all the sub-factors under the 'stability of the business model and its financial structure' factor discussed above will be scored 'Aaa', effectively providing a one-notch uplift to an issuer benefiting from such enhancements.

Debt structure and liquidity protection
Structural enhancements in this category address financial risks associated with liquidity, interest rate and refinancing risk, such as dedicated cash reserves to cover specific costs and timing reserves to cover future lump sum payments arrangements. To achieve a score of 'very high' in this category, the arrangement will need to be akin to a fully amortising debt structure, typical of project financings and normally associated with adequate reserving and hedging arrangements.

Control afforded to creditors
Moody's believes that structural enhancements, including financial covenants and security arrangements, that provide creditors with a degree of control over the company's financial and business decisions in downturns, which are not enjoyed under typical corporate funding arrangements, such as step-in rights and remedies to delay licence termination or insolvency, can deliver up to three notches of uplift from a fundamental rating if they are very comprehensive and effective. However, in practice, a maximum rating uplift of one or two rating notches may be considered a more likely result, as sources of creditor protection can be regarded as very restrictive by management and shareholders as they can significantly constrain management's ability to pursue strategies and policies that they perceive could enhance shareholder value, notwithstanding the potentially higher risks for the company.

EU regulatory

While EU funding can and should play a vital role in many European energy projects it is important to remember the overriding EU regulations that may have an impact, in particular the unbundling, state aid and public procurement regulations.

The EU 'ownership unbundling' regime for energy transmission systems

Investors must comply with the EU unbundling regime for electricity and gas transmission systems as set out in the European Commission's Third Energy Package, which came into force in March 2012.

The Third Energy Package aims to open up the EU's electricity and gas markets to greater competition by requiring the ownership and operation of electricity/gas transmission systems to be separated ('unbundled') to a much greater extent than before from electricity/gas generation/production and supply operations. The unbundling rules apply across both gas and electricity markets, so that – for instance – an interest in *electricity* production/supply operations can preclude the holding of an interest in a *gas* TSO, and take account of companies' (including their parent company/ies' and ultimate parents') interests across all EU Member States (and indeed worldwide).

The majority of EU Member States have adopted – and therefore most new transmission infrastructure must comply with – the full ownership unbundling model, which prevents a company from controlling a TSO or a transmission system and at the same time controlling (or even 'exercising rights' below the level of control in) any energy production or supply companies. Conversely, this means that a company can, for instance, control a TSO or transmission system and at the same time have (non-controlling) interests in a production or supply company, provided that such interests do not confer direct or indirect control by way of a majority shareholding or special rights attached to the minority shareholding; enable the investor to exercise any voting rights (i.e. provide a right to take part in the decision-making process of the company); or appoint members of the supervisory or management body (and *vice versa*).

New infrastructure, such as interconnectors, and LNG and gas storage facilities, may however in exceptional circumstances be exempted from the ownership unbundling requirements by the national regulator (subject to approval by the European Commission) provided that certain conditions have been satisfied.

Many infrastructure funds and financial investors have queried the strict application of the unbundling regime to pure financial investments, since it is clear that the rules are primarily intended to apply to the large vertically integrated energy companies in the EU. The message from the European Commission has however been unequivocal: there is no intention to relax the unbundling rules for any particular type of investor in this sector. The fact that purely financial investors are affected by the unbundling regulations is 'collateral damage', although the rules are being applied in practice with more flexibility than originally feared. In particular, the European Commission has confirmed that there is a form of proportionality test that should be applied to small scale generation, production or supply activities with no apparent connection or interdependency with the transmission assets in question (and hence no scope of discrimination at the expense of third parties looking to use the transmission system), so that such activities do no always present an obstacle to the TSO complying with the unbundling rules.

The ownership unbundling rules therefore have potentially significant implications for the investment strategies of investors looking at the European energy market and participating in energy infrastructure on the one hand and production/supply on the other. Investors in PCIs will therefore need to consider carefully a number of issues, including the following:

- the extent to which existing investments limit the investor's ability to invest in a PCI, e.g. whether current ownership of power generation assets will preclude desired future investment in a transmission grid or an interconnector, or *vice versa*
- with any potential new investment, whether proceeding with it will limit the ability to invest in other more attractive assets subsequently
- which structures are acceptable where the ownership unbundling restrictions apply, e.g. are investors prepared to limit their interest to economic rights and to forgo management influence
- the extent to which separate investment vehicles can in principle be used to avoid triggering the ownership unbundling restrictions
- in the context of investments through consortia, whether their proposed partners' investment portfolios will cause problems for the making of the new investment, and whether it is necessary to put in place mechanisms to deal with future acquisitions by their partners which give rise to ownership unbundling issues
- to the extent that it is feasible, whether to use warehousing or other solutions in order to divest existing assets interconditionally with acquisition of new assets, in order to avoid triggering the ownership unbundling restrictions.

The EU prohibition on State aid

The EU State aid rules may become relevant in cases where investors receive direct or indirect government support from EU Member States in the context of the investment in a PCI. Such support is different from any financial support received from the CEF – the CEF is a pan-EU fund administered by 'entrusted entities' to which the EU State aid rules do not apply.

The EU State aid rules[80] generally prohibit aid granted by Member States or through Member State resources for the benefit of certain undertakings, or for the production of certain goods, if there is a possibility that the aid may distort competition or have an adverse effect on trade within the EU (unless limited exceptions apply). Such aid can take a variety of forms ranging from direct funding/grants, interest/tax reliefs and guarantees to government holdings of all or part of an investor of a PCI.

Particular consideration must be given to any investment made jointly with a publicly controlled company, e.g. any company controlled by an EU Member State, a region or a municipality. In such circumstances, it is important to ensure that the same investment would have been made by a private investor in a similar situation under normal market conditions (the 'private investor test') so that such an investment does not amount to 'indirect' State aid.

The European Commission is currently in the process of reforming and modernising the EU State aid rules. As part of this modernisation, the European Commission has adopted a communication on how important projects of common European interest (IPCEIs) should be analysed for their compatibility with the State aid rules (the IPCEI Communication[81]). IPCEIs should not be confused with PCIs as, whilst a PCI is likely to qualify as an IPCEI, the latter encompasses a potentially open-ended number of projects that, in short, are considered by the European Commission to represent a very important contribution to economic growth, jobs and competitiveness for the European Union. In light of the importance of such projects, the IPCEI Communication sets out criteria under which Member States can, and are encouraged, to support IPCEIs in a way which is compatible with the EU State aid rules. As mentioned above, however, grants or financial instruments obtained through the CEF are not subject to State aid rules, since they are provided through the EU and not an individual Member State.

Rules governing public procurement

Finally, investors need to be aware of the rules governing public procurement[82], The primary objective of this set of rules is to facilitate the creation of an internal market in public contracts across the EU, and to avoid distortions of competition brought about by public purchasers (or major utilities) favouring national suppliers.

Public procurement obligations can arise where a central government authority, a local/municipal authority, a 'body governed by public law', or certain regulated utilities, award contracts which are valued above certain prescribed thresholds or where the thresholds are not met but the contracts in question generate a 'cross-border interest'. Procurement which is carried out directly by EU institutions or agencies is also subject to a similar, parallel procurement regime.

Funding which is provided directly or indirectly by the EU to the private sector may be tied to an obligation to comply with rules which are analogous to those which apply under public procurement legislation. Therefore, even if a project is carried out by the private sector, it is important to check the terms on which the funding was provided in order to determine if procurement obligations 'flow down' from the funding arrangements.

As a midway position between public and private initiatives, public-private partnerships (PPP) typically involve the award of a public contract (usually a works concession contract) to a project company jointly controlled by the awarding authority and a private sector company. The project company is normally responsible for the construction, operation and maintenance of the project and debt finance is typically arranged by the private sector partner. Public procurement rules apply to PPPs because the selection of the private partner, as well as that of the winning project, must be carried out by means of a competitive tender – in practice, the European Commission accepts that a single tender process can cover both the selection of the private partner and that of the winning project.

Generally, where public procurement rules apply, the awarding authority (whether a public sector entity or a utility) is required to hold a transparent and non-discriminatory competitive award process. . The procurement rules are complex, but a number of common features exist in relation to the award of a public works contract, such as: the advertisement of the contract opportunity in the Official Journal of the European Union; the adherence to a prescribed award procedure; a 10 day standstill period between the announcement of the winning bidder and entry into the contract; and the possibility for losing bidders (or, in some cases, interested third parties) to initiate a challenge to the contract award.

80 Article 107(1) of the Treaty on the Functioning of the European Union

81 OJ [2014] C188/4

82 The public procurement rules across the EU derive in large part from a number of EU Directives, which have been implemented in the national jurisdictions of the individual EU Member States. As a result, a number of variations exist between the procurement law regimes in the different EU Member States

Public works concession contracts are at present subject to a less onerous procurement regime. However, EU Member States are in the process of implementing a new set of public procurement rules, which will – among other things – make it easier for losing bidders to challenge the award of concession contracts.

It is often considered that there may be certain disadvantages in funding a project which may be subject to a competitive tendering requirement, such as delay, increased cost and risk of national preferences. However, in practice these concerns are not always confirmed.

Delay
Whilst public procurement procedures may be more time consuming than projects which are privately tendered (i.e. delays can arise from the prescribed minimum time limits for certain stages in public procurement processes – for example, between the prequalification of bidders and the beginning of negotiations, and in respect of the standstill period), in reality, however, the minimum time limits prescribed by legislation are not onerous for the most commonly used award procedures in respect of infrastructure projects and the awarding authority enjoys significant discretion to structure the process in a way which best aligns with its objectives.

Increased cost
Any procurement process – irrespective of whether it is a public or private tender process – can prove costly and a public procurement tender process does not necessarily involve significantly increased costs when compared with a privately run tender process. There is evidence to suggest that compliance with the public procurement rules can result in significant savings on total project cost. Whilst procurement costs as a proportion of total project spend tends to be high for relatively low-value contracts which are around the EU procurement thresholds, this ratio diminishes markedly in respect of higher-value contracts. Therefore, savings are magnified in respect of larger projects, including infrastructure procurement.

National preferences
A common criticism of contracts awarded by public authorities is that public authorities tend to favour companies of the same nationality. Whilst there might be anecdotal evidence of certain Member States' authorities unfairly preferring national suppliers, public procurement rules exist to remedy such behaviour, not to facilitate it. By creating and enforcing a regime which compels contracting authorities to publish contract opportunities and to be transparent and non-discriminatory in their award processes, the risk of authorities applying national preferences is reduced (or at least there is a significant disincentive to awarding contract based on national preferences).

Moreover, there are effective tools to challenge suspected cases of authorities' applying national preferences and not adhering to the public procurement rules.

This shows that investors should be aware of a number of regulatory challenges to getting these projects up and running. However, these challenges should not be regarded as obstacles, since above all, these projects present significant opportunities, which should not be missed.

Glossary

ABS	Asset-Backed Securities
ACER	European Agency for the Cooperation of Energy Regulators
AIF	Alternative Investment Fund
AIFMD	Alternative Investment Fund Managers Directive
CEF	Connecting Europe Facility
CMU	Capital Markets Union
CRR	Capital Requirements Regulation
EAFRD	European Agricultural Fund for Rural Development
EEE-F	European Energy Efficiency Fund
EEPR	European Energy Programme for Recovery
EFSI	European Fund for Strategic Investment
EIB	European Investment Bank
EIPP	European Investment Project Portal
EIF	European Investment Fund
ELTIF	European Long-Term Investment Fund
ENTSO-E	European Network of Transmission System Operators – Electricity
ENTSOG	European Network of Transmission System Operators for Gas
EIOPA	European Insurance and Occupational Pensions Authority
ERDF	European Regional Development Fund
ESA	European Supervisory Authorities
ESIF	European Structural and Investment Fund
ESMA	European Securities and Markets Authority
EU	European Union
EU28	The 28 EU Member States at the date of this briefing are: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden and United Kingdom.
FFO	Funds From Operations
GNI	Gross National Income
IEA	International Energy Agency
IPCEIs	Important Projects of Common European Interest
PBCE	Project Bond Credit Enhancement
PCI	Project of Common Interest
RAV	Regulated Asset Value
SME	Small and Medium sized Enterprises
TSO	Transmission System Operator
UCITS	Undertakings for Collective Investment in Transferable Securities

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