

US Project Finance: Key Developments and Trends from 2013 and the Outlook for 2014

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A discussion of key developments and trends in the US project finance market from 2013, including trends in sources of financing and loan terms and notable legislative and regulatory developments. This Article also discusses the outlook in 2014 for project finance generally and in the natural gas, renewable energy and infrastructure sectors, in particular.

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Contents

2013 Overview

Financing Trends

- Commercial Banks Returned to the Market
- Term Loan B Market Continues to Grow
- Project Bonds Remained Active
- The Tax Equity Market Remained Active
- Emergence of Yieldcos
- Reduced Involvement of Bilateral Institutions and Export Credit Agencies

Energy and Power

- Notable Legislative and Regulatory Developments
- Notable Industry Developments

Natural Gas

- LNG Export Licenses
- Hydraulic Fracturing
- Relaunch of the Section 1703 Loan Guarantee Program

Infrastructure

- Industry Developments

Notable Legislative and Regulatory Developments

Equator Principles

Outlook for 2014

Financing Outlook

Legislative and Regulatory Outlook

Energy and Power Outlook

Natural Gas Outlook

Infrastructure Outlook

This Article discusses:

- Key financing, regulatory and legislative developments in the US project finance market from 2013.
- New sources of capital that are being used or considered to finance new construction or to refinance existing debt.
- Notable developments in the power, natural gas and infrastructure sectors.
- The outlook in 2014 for project finance generally and the power, natural gas and infrastructure sectors in particular.

2013 Overview

The US project finance market was robust in 2013 with about \$31.4 billion in total loans, up from \$18.4 billion in 2012. This growth is attributable in large part to liquidity in the **Term Loan B** market. About half of the loans that closed in 2013 were Term Loan B transactions. US total project bond volume was also up from \$7.1 billion in 2012 to \$13.5 billion, an increase of about 90%.

Although the market was up for the year, there were periods of volatility in the middle and later parts of the year that slowed down deal activity and affected pricing. While there was about \$18.7 billion in loan activity in the first half of the year (which incidentally was more than the entire total for 2012), loan volumes fell by about 32% to \$12.7 billion in the second half of the year.

This volatility was partly attributable to:

- Comments from the **Federal Reserve** about the pace of its bond purchases programs (also known as the tapering of its quantitative easing policies).
- Concerns about a potential government shutdown and the effects of the shutdown itself.

These events caused interest rate instability in the Term Loan B market, which contributed to some

sponsors delaying bringing deals to market until rates stabilized. Some project sponsors that did bring deals to market during these periods of market volatility downsized their offerings or offered higher yields to attract investor interest (for example, Northeast Wind Capital's \$320 million Term Loan B was repriced from **LIBOR** plus 350 **basis points** (bps) to LIBOR plus 400 bps and Sapphire Power Holdings's Term Loan B was reduced to \$250 million from \$350 million and repriced to LIBOR plus 500-525 bps from LIBOR plus 400 bps).

All deal data referenced in this Article was obtained from Thomson Reuters.

There was deal activity in all sectors, although not to the same degree:

- The power sector was very active with several large financings of renewable energy plants (especially wind and solar), as wind energy developers tried to take advantage of the **production tax credit** (PTC) before it expired on January 1, 2014. Building on the success of the Panda Temple and Sherman financings in 2012, there were also several financings of natural gas power plants, including the Moxie Patriot and Liberty projects.
- There was some activity in the **liquefied natural gas** (LNG) sector, but it was not as active as many observers had hoped. Although the Department of Energy (DOE) lifted its moratorium and began issuing licenses to export LNG to countries with which the US does not have a free trade agreement (FTA), the pace for issuing these licenses has been slow.
- There were several significant transactions in the infrastructure sector, including the Ohio Bridges East End Crossing financing and the Long Beach courthouse refinancing, but total deal volumes were relatively modest.

Financing Trends

In 2013, the US project finance market continued to exhibit the significant changes witnessed over the last few years. Many new players have entered the market from regional US and Canadian banks to investment banks, insurance companies and hedge funds. This change is being driven by:

- **Sponsors' need for new sources of capital.** Because of new liquidity and capital requirements under Basel III, the traditional project finance lenders (European commercial banks) have been making fewer loans and taking smaller positions in the deals they are funding, resulting in a funding gap that must be met from other sources.
- **Institutional investors' search for yield.** While project finance transactions are generally viewed as riskier than corporate or **balance sheet** loans because of their structural features (long term loans that are typically made to thinly capitalized **special purpose vehicles** (SPV) on a **limited recourse** basis), they are high yielding investments that generate stable and long term cash flows. In addition, according to a recent Moody's study, lenders ultimately suffer no economic loss almost two-thirds of the time when a project finance bank loan defaults (see *Moody's Default and Recovery Rates for Project Finance Bank Loans, 1983-2011*). These features are attractive to institutional investors who want to invest in high yielding and long term assets.

As a result, the Term Loan B and project bond markets have become critical sources of capital for projects. However, while there is a lot of liquidity in these markets, they have their limitations. Term B loans are generally more expensive and offer shorter tenors than commercial bank debt, although this is changing (see [Term Loan B Market Continues to Grow](#)).

In addition, while long term financing is available in the project bond market, it has less flexible drawdown and amendment mechanics which may be an issue for some [greenfield](#) projects (see [Practice Note, Sources of Available Project Financing: Project Bonds](#)). As a result, project sponsors and other market participants have been looking for other sources of capital (see, for example, [Emergence of Yieldcos](#)).

Sponsors are not the only market participants that have been affected by the changes in the US project finance market. The need to deploy capital has made some investors more flexible about the asset classes and projects in which they are willing to invest. In particular:

- Investment banks are becoming more active in the project finance market. For example, Barclays and Goldman Sachs, neither of which are traditional project finance lenders, jumped to the top of the US league tables in 2013. They were involved in some of the largest transactions that closed in 2013, including the \$1.2 billion CCFC Portfolio refinancing, the \$1.2 billion Sandy Creek power plant financing and the \$850 million Star West Generation transactions.
- Commercial banks have been willing to finance merchant projects provided the right risk mitigation mechanisms are in place (for example, the \$561 million CPV Shore Holding Holdings financing). These banks are also becoming more active in Term Loan B transactions, which have traditionally been dominated by institutional investors.
- With the successful financing of the Panda projects in 2012, Term Loan B lenders are becoming more willing (to a point) to assume construction risk and are financing greenfield projects. These lenders are also willing to finance merchant projects if the revenue and demand risks are properly managed.

The liquidity in the Term Loan B market has also affected the terms that project sponsors can negotiate. Some of the changes that have occurred include:

- **Looser structural features and fewer lender protections.** While more commonly found in corporate loan transactions, these features (for example, weak or no financial covenants, modified cash sweeps and broader permitted asset sales) have begun to appear in financings for power projects (including the \$455 million TPF Generation Holdings, \$1.15 billion La Frontera Generation project financing and the \$1.2 billion CCFC Portfolio refinancing transactions).
- **Tighter spreads in the Term Loan B market.** While still higher than commercial bank debt, the gap between these two sources of funding is narrowing.
- **Longer tenors in the Term Loan B market.** While these loans were mostly in the five to six year range in 2012, many of the deals that closed in 2013 had seven-year maturities.

Commercial Banks Returned to the Market

Many of the European commercial banks that have traditionally dominated the US project finance market have returned after a retrenchment in 2011 and 2012. They were mandated arrangers in many deals, including:

- Invenergy Wind's \$355 million financing for its Prairie Breeze wind project.
- Pattern Energy Group's \$310 million deal to finance the construction of its Pattern Panhandle Wind Farm.
- Sempra Energy's \$345 million financing for its Copper Mountain Solar 2 project.

Their return may be attributable in part to the postponement in the implementation of certain Basel III rules (see [Legal Update, Revised Basel III Liquidity Standards for Banks Agreed](#)).

But the composition of the commercial bank market is changing. The Japanese, Canadian and US regional banks that emerged following the retrenchment of the European banks have remained active in the US project finance market. These banks were mandated arrangers in several transactions, including the \$548 million financing of the Alta Wind X & XI projects and the \$665 million financing of Net Midstream's Agua Dulce pipeline project. In addition, northern European banks (for example, Nord/LB and Deutsche Bank) are also becoming more active in the market.

The following trends from 2012 also continued in 2013:

- Many commercial banks are taking smaller positions in the deals they finance, although they are willing to take larger tickets in the right deal. For example, in the \$5.9 billion Sabine Pass Liquefaction financing for its Trains 3 and 4 (of which \$4.4 billion was a Term loan facility), 13 banks had commitments of at least \$200 million.
- Debt for projects that have long term offtake agreements (for example, power purchase agreements (PPAs)) averaged around LIBOR plus 225-250 bps, which was about the same as in 2012. However, the pricing was higher for riskier projects.
- Some deals are being structured as club deals (for example, the \$290 million Harbor Hydro Holdings financing and the \$665 million Agua Dulce pipeline financing). Despite the liquidity in the credit markets, some commercial banks remain unwilling to underwrite transactions for fear being unable to syndicate them after closing.
- The maturities on commercial bank loans remained in the seven to ten year range, although some Japanese banks were willing to make loans with tenors of as long as 15 to 18 years (see, for example, the \$253 million North Sky River Wind Energy project, which matures in 2031).

Commercial banks are also expanding the asset classes in which they invest. They have been willing to:

- **Finance merchant projects.** For example, in September, Competitive Power Ventures closed financing on its \$842 million 700 MW CPV Woodbrige Energy Center Project in New Jersey. The

\$585 million financing package consists of a \$400 million term loan and a \$185 million working capital and letter of credit facility. As a result of its higher risk profile, the project has more expensive pricing. The term loan is initially priced at LIBOR plus 425 bps, but will step up to 475 bps.

- **Make more Term B Loans.** While these loans have traditionally been dominated by institutional investors, commercial banks were involved in some of the largest Term Loan B transactions that closed in 2013, including the \$1.2 billion Sandy Creek power plant financing.

Term Loan B Market Continues to Grow

The Term Loan B market remained strong in 2013, despite some volatility in the middle and later parts of the year. About half of the \$31.4 billion in US project finance loans that closed in 2013 were Term Loan B transactions. Sponsors went to this market to finance new construction in a variety of sectors and to refinance existing debt. While the spread on these loans depends on the credit quality of the project (for example, whether the project is operational or in the construction phase and whether its output is fully contracted for the entire term of the loan), they are tightening and these loans are becoming increasingly competitive with commercial bank debt.

In 2012, Term Loan B transactions were pricing above LIBOR plus 600 bps. For example, the Panda Temple and Panda Sherman transactions were priced at LIBOR plus 1000 bps and LIBOR plus 700 bps, respectively (see [Article, US Project Finance: Key Developments and Trends from 2012 and the Outlook for 2013](#)). By contrast, in 2013, no deals were priced that high. In fact, many Term Loan B deals were priced at or below LIBOR plus 400 bps, including:

- Carlyle Riverstone's \$225 million loan to finance its Vantage Pipeline which was priced at LIBOR plus 300 bps.
- Highstar Capital's \$850 million loan to refinance its Star West Generation project which was priced at LIBOR at 400 bps.
- GE Capital's \$825 million Linden Cogeneration financing which was priced at LIBOR plus 275 bps.

According to some market observers, this change in the Term Loan B market is also putting pressure on the [mezzanine debt](#) market. While spreads have tightened in the Term Loan B market, mezzanine debt rates have mostly remained unchanged. As more projects without long term PPAs seek financing there will be a place for mezzanine debt. However, it will be interesting to see whether the pricing on this debt comes down in the coming year to compete with the Term Loan B market if pricing on these loans stays around LIBOR plus 400 bps.

In addition to pricing, the tenors on Term B Loans are also getting longer. Several deals had tenors of seven years (for example, the \$561 Moxie Patriot financing, the \$350 million Raven Power financing and the \$320 million Northeast Wind Capital financing). While tenors are not expected to go beyond seven years, the willingness of Term B lenders to provide longer term financing may pressure the commercial bank loan market to extend the maturities to gain a competitive advantage.

As always in the Term Loan B market, timing was everything. Sponsors that brought their deals to market

in the earlier part of the year were able to receive financing relatively easily with many of these deals oversubscribed. As a result, many sponsors were able to **reverse flex** or upsize their deals. For example:

- The Topaz Power Holdings financing, which closed in March, was upsized from \$560 million to \$610 million and repriced from LIBOR plus 425 bps to LIBOR plus 400 bps.
- The TPF Generation Holding financing, which closed in May, was repriced from LIBOR plus 450 bps to LIBOR plus 375 bps.
- The La Frontera Generation project financing, which closed in May, was upsized from \$1 billion to \$1.15 billion and repriced from LIBOR plus 400 bps to LIBOR plus 350 bps.

However, during the periods of volatility in the market in the later part of the year, some sponsors that brought deals to market postponed these deals or offered better terms. For example:

- First Wind had sought financing for its Northeast Wind Capital project in the summer at LIBOR plus 350 bps but withdrew it following investor resistance. This deal, which closed in November, was priced at LIBOR plus 400 bps.
- Tenaska Capital Management's Term Loan B for its TPF II/Rolling Hills portfolio, which closed in August, was repriced at LIBOR plus 550 bps up from 500 bps and reduced from \$370 million to \$350 million.
- Sapphire Power Holdings's Term Loan B, which closed in July, was reduced to \$250 million from \$350 million and repriced to LIBOR plus 500-525 bps from LIBOR plus 400 bps.

Project Bonds Remained Active

US issuers closed on about \$13.5 billion in project bonds, up from \$7.1 billion in 2012. Although this increase is attributable in large part to two issuers, Cheniere Energy's Sabine Pass Liquefaction subsidiary and MidAmerican Energy Holdings's subsidiary Solar Star Funding, there were several smaller issuances signalling the continued viability and attractiveness of bonds (whether a **Rule 144A offering** or a **Section 4(a)(2)** private placement) to finance large scale projects.

- Sabine Pass Liquefaction went to the bond markets three times in 2013 for a total of \$4 billion:
 - in January, it issued \$1.5 billion (upsized from \$1 billion) in bonds due in 2021 to reduce the bank commitments on the term loans it secured in 2012 to finance construction of Trains 1 and 2 of the project;
 - in April, it issued \$1 billion in senior secured notes due 2023 to finance Trains 3 and 4, as well as an additional \$500 million of the 2022 bonds; and
 - in November, it issued another \$1 billion in senior secured notes due 2021.
- Solar Star Funding closed the largest single project renewable energy bond offering, the \$1 billion 144A offering due 2035, to finance its Antelope Valley solar facility.

Similar to the Term Loan B market, project bond activity slowed down toward the middle and later part of the year. But there were several project bonds later in the year, including:

- Tenaska Solar Ventures' \$319.4 million private placement to refinance the debt on its 130MW Tenaska Imperial Solar Energy Center South.
- Continental Wind's \$613 million 144A offering to refinance a portfolio of 13 operating wind projects.
- Long Beach Judicial Partners's \$518.5 million private placement to refinance bank debt on the Long Beach courts project in California.

The Tax Equity Market Remained Active

This market was stable in 2013 with about \$6.3 billion in total tax equity investment, up from about \$5.3 billion in 2012. There were about 20 to 25 active tax equity investors active in both wind and solar. While this is about the same as the number of investors that participated in the market pre-credit crisis, the mix of these investors has changed. Many of the banks that dominated this market have been replaced with new entrants such as Google, Microsoft and Liberty Ventures Group, a subsidiary of the media company Liberty Interactive Corp., that have significant tax appetite and that want to demonstrate their commitment to renewable energy. Many of these investors are taking equity in projects that are expected to provide energy to their facilities, either by delivering power to the grid or as part of a ***distributed generation*** project. The residential solar market also received a lot of tax equity investments in 2013, including SunRun, Sungevity and SunEdison.

Emergence of Yieldcos

The yield company (yieldco) structure, while not new, has emerged to hold renewable energy assets as developers seek new and lower cost sources of capital to:

- Finance the construction of wind and solar projects.
- Acquire new projects to build their portfolios.
- Monetize their interests in operating projects.

There are three categories of US yieldcos:

- Publicly Traded Master Limited Partnerships (see [Publicly Traded Master Limited Partnerships \(MLPs\)](#)).
- Real Estate Investment Trusts (see [Real Estate Investment Trusts \(REITs\)](#)).
- C Corporations (see [C Corporation](#)).

Publicly Traded Master Limited Partnerships (MLPs)

An MLP is a partnership that can qualify for partnership tax treatment in a taxable year if 90% or more of the partnership's gross income for that year consists of "qualifying income." Qualifying income currently

includes income from certain natural resources activities (for example, the extraction of crude oil, natural gas and coal). This structure has enabled oil and gas companies to raise billions in the public market. According to the National Association of Publicly Traded Partnerships, as of September 30, 2013, MLPs had a market capitalization of about \$490 billion.

However, the use of this structure to hold renewable energy assets would require a change in the Internal Revenue Code (Code) and a revision of the definition of "qualifying income." In April 2013, Senator Chris Coons introduced the Master Limited Partnership Parity Act, which would amend the Code to allow income generated from renewable energy to be qualifying income. While there is bipartisan support for this bill, it is still at the committee level. For more information on this bill, see [Legal Update, Master Limited Partnership Parity Act Reintroduced and Expanded](#). For more information on publicly traded partnerships, see [Practice Note, Taxation of Publicly Traded Partnerships](#).

Real Estate Investment Trusts (REITs)

A REIT is an entity that complies with US federal income tax requirements that are designed to ensure that the entity is a passive investor in real estate and related assets. If the REIT satisfies these requirements and distributes the majority of its earnings, it is exempt from paying certain federal income taxes. Similar to the MLP structure, the use of the REIT structure for renewable energy projects requires a change in IRS regulations. Under current IRS regulations, most renewable energy assets (for example, solar panels and mirrors in the case of solar projects, and turbines in the case of wind projects, and the revenues generated from these assets) are not real estate assets. While it is possible to structure a REIT to meet the required asset and income tests, until the regulations are modified, it would be difficult for most developers to meet these tests.

Many investors had hoped that an IRS private letter ruling released in July 2013 would allow developers to use REITs to finance these projects, but the ruling was much narrower. The ruling, which many believe was issued to Hannon Armstrong Sustainable Infrastructure Capital, Inc. (see [IRS Priv. Ltr. Rul. 201323016, 2013 WL 245732 \(June 7, 2013\)](#)), does not define renewable energy property (and the income generated from these properties) as real estate assets for purposes of [Section 856\(c\)](#) of the Code. However, the ruling confirms prior positions of the IRS that:

- Machinery or equipment can qualify as real estate assets if they are structurally and functionally integrated with a building.
- Loans secured by this machinery or equipment can qualify as real estate assets if the loan is also secured by a lien on the building where the machinery or equipment is installed.

For more information on REITs, see [Practice Note, REITs: A Viable Alternative for Renewable Energy Project Financing?](#)

C Corporation

In this structure, a sponsor contributes a portfolio of operating assets or assets that are near operation

to a subsidiary on a tax-free basis in exchange for stock and cash and sells part of the shares of the subsidiary in an **initial public offering** (IPO). The contributed assets generally have long term offtake agreements (for example, PPAs) that are capable of generating stable and predictable cash flows. Unlike the MLP or REIT, this entity is not created under the Code and does not need to comply with IRS regulations as to the assets it can own. Therefore, it can be used to hold renewable energy assets without requiring any changes in the Code or an expansion of IRS regulations. However, this entity is less tax efficient than the MLP and REIT structures since it is not exempt from paying federal income taxes, but tax structuring and use of available tax credits can reduce the taxes.

Two US energy companies (NRG Yield and Pattern Energy) did an IPO and several others are considering this structure. The NRG offering, which raised about \$430 million in July 2013, spun off a 1,324 MW portfolio consisting of 15 natural gas, solar and wind facilities. The Pattern Energy IPO raised about \$350 million in a spin-off of six operational and two development assets totaling 1,041 MW.

This structure raises several issues, including the value and quality of the assets that should be contributed to the subsidiary, that are beyond the scope of this Article. While other developers are considering this structure, it is too soon to tell whether these structures will become a mainstay in the market.

Reduced Involvement of Bilateral Institutions and Export Credit Agencies

Although not traditionally a source of financing for US projects, bilateral and **export credit agencies** (ECAs) have also become more active in the US market. Two large transactions, Sabine Pass Liquefaction and Pacific Sharav and Meltern, received significant portions of their loan financing from ECAs. However, the North American Development Bank, which was involved in many transactions in 2012 was not as active in 2013. The increased liquidity in the credit and capital markets may have made this financing source less popular as developers were able to obtain financing from other sources.

Energy and Power

This sector was active with more than half of the project finance loans that closed in 2013. In addition, there were several notable regulatory and legislative developments that had a material impact on this sector in 2013 and will continue to do so going forward.

Notable Legislative and Regulatory Developments

Extension of the PTC

In January 2013, Congress passed the American Taxpayer Relief Act of 2012, which extended and amended the PTC to make it available to wind projects that began construction before January 1, 2014 (see [Legal Update, Production Tax Credit Amended and Extended in Fiscal Cliff Deal](#)). Although this extension was only for one year, because of IRS guidelines that were issued later in the year, projects that did not begin construction by that date but that are placed in service before January 1, 2016 still

qualify for this credit (see [Wind Energy](#)).

New Federal Government Renewable Energy Mandate

President Obama issued a new executive order increasing the percentage of the federal government's energy needs that must be met from renewable energy sources from about 7% currently to 20% in fiscal year 2020 (see [Legal Update, Obama Administration Sets New Target for Renewable Energy Consumption by Federal Agencies](#)). This new target may provide more opportunities for distributed generation companies and generators looking to secure new PPAs.

New Hydropower Legislation

On August 9, 2013, President Obama signed the Hydropower Regulatory Efficiency Act of 2013 ([H.R. 267, 113th Cong. \(2013-2015\)](#)) and the Bureau of Reclamation Small Conduit Hydropower Development and Rural Jobs Act ([H.R. 678, 113th Cong. \(2013-2015\)](#)), which streamline the regulatory approval process for certain hydropower projects. Among other things, H.R. 267:

- Exempts certain conduit hydropower facilities from the licensing requirements of the [Federal Power Act](#) (FPA). In particular, it increases the size of private small conduit hydroelectric facilities eligible for the discretionary exemption under the FPA from 15 MW to 40 MW.
- Amends Section 405 of the [Public Utilities Regulatory Policies Act of 1978](#) to define "small hydroelectric power projects" as having an *installed capacity* that does not exceed 10 MW (up from 5 MW).
- Authorizes the [Federal Energy Regulatory Commission](#) (FERC) to extend the term of preliminary permits once for not more than two additional years beyond the three years previously allowed under Section 5 of the FPA.
- Directs FERC to investigate the feasibility of a two-year licensing process for hydropower development at non-powered dams and closed-loop pump storage projects.

H.R. 678 amends the Reclamation Project Act of 1939 to authorize the Secretary of the Interior (acting through the Bureau of Reclamation) to contract for the development of small conduit hydropower at Bureau of Reclamation facilities. It exempts from FERC jurisdiction hydropower projects with a capacity of 5 MW or less that are installed on man-made conduits on Bureau of Reclamation land.

By streamlining the permitting requirements for these projects, more hydroelectric projects may be built in the coming years. While conventional hydropower is the largest source of renewable energy in the US (through November 2013, it contributed about 7% of the electricity generated in the US compared to about 4% for wind and .2% for solar), this figure has remained largely stagnant (see [EIA: Electric Power Monthly, January 2014](#), [EIA: Electric Power Monthly, January 2013](#) and [EIA: Electric Power Monthly January 2012](#)).

New EPA Power Plant Emissions Regulations

On September 20, 2013, the EPA issued a new proposal to regulate carbon pollution from new power plants (see [79 Fed. Reg. 1429 \(2013\)](#)). The proposed rules, issued under Section 111 of the [Clean Air Act](#), limit carbon dioxide (CO₂) emissions from new:

- Coal-fired power plants, to either 1,100 pounds of CO₂ per [megawatt hour](#) (MWh), over a 12-month operating period or 1,000 to 1,050 pounds of CO₂ per MWh, over an 84-month operating period.
- Natural gas-fired power plants to either 1,000 pounds of CO₂ per MWh for larger units (more than 850 million British thermal unit per hour (mmBtu/hr) or 1,100 pounds of CO₂ per MWh for smaller units (less than 850 mmBtu/hr).

The proposed rule was published in the Federal Register on January 8, 2014 and stakeholders have 60 days to submit comments.

Natural gas-fired power plants currently being built should be able to meet the proposed standards. However, new coal-fired power plants may not be able to without the adoption of new carbon capture technology. If the rule is finalized as proposed, it could adversely affect new coal-fired power plant construction, which is already under pressure from natural gas and renewable energy power plants. In 2013, coal accounted for less than 11% (down from 16% in 2012) of new generation capacity in the US, compared to 37% for renewable energy sources and 51% for natural gas (see [FERC: Energy Infrastructure Update \(Dec. 2013\)](#)). While coal continues to lead in total electricity generated in the US (through November 2013, it accounted for about 39% of net electricity generated), this figure has been declining (see [EIA: Electric Power Monthly, January 2014](#)). For the same period in 2010 and 2011, coal generated about 43% of total electricity generated in the US (see [EIA: Electric Power Monthly, January 2013](#) and [EIA: Electric Power Monthly January 2012](#)).

Several Congressmen introduced legislation to revoke this rule, but it is unlikely to pass since the measure would need to be approved by the Senate and signed by President Obama. Moreover, the EPA is expected to propose new standards for existing plants by June 1, 2014.

Mandatory Reserve Margin Proposal in Texas

In the fall of 2013, the Public Utility Commission of Texas (which has regulatory authority in [Electric Reliability Council of Texas](#) (ERCOT)) voted to establish a mandatory reserve margin for electricity to encourage investment in new generation and avoid power shortages. ERCOT generally operates as an "energy only" wholesale electricity market in which generators are only paid for the electricity they deliver to the power grid. This is different from many other markets (for example, [Pennsylvania New Jersey Maryland Interconnection](#) (PJM) and Midcontinent Independent System Operator (formerly, Midwest ISO) (MISO)), where generators are paid not only for the electricity they deliver but for their capacity (their ability and availability to deliver electricity if and when called on).

The vote is non-binding and the decision about whether a mandatory capacity reserve margin should be adopted is under review. If implemented, it would require load serving entities (LSEs) to secure access to

a minimum amount of excess capacity for periods of peak demand, leading to the creation of a capacity market in Texas. There is significant opposition to the creation of a capacity market on the basis that it would make electricity service more expensive for customers.

For more information on capacity markets, see [Practice Note, Power Purchase Agreements: Key Issues and Provisions](#) and [Country Q&A, Electricity Regulation in the United States: Overview](#).

Notable Industry Developments

The renewable energy sector was active in 2013. According to FERC, renewable energy sources accounted for about 37% of all new electricity capacity installed in 2013. Natural gas was similarly active with about 51% of new electrical generation capacity. By comparison, coal accounted for less than 11% (see [FERC: Energy Infrastructure Update \(Dec. 2013\)](#)).

Solar Energy

There was significant activity in the solar energy market. According to FERC, the industry installed 2,936 MW in new capacity for a cumulative capacity of about 7,420 MW or .64% of total generation capacity in the US. A lot of this activity was driven by rooftop and residential solar installations (see [FERC: Energy Infrastructure Update \(Dec. 2013\)](#)).

The first [securitization](#) backed by solar assets closed in 2013. In November, SolarCity, a rooftop solar developer, closed a \$54.4 million securitization backed by about 5,000 photovoltaic systems and host customer payments. The notes, which mature in 2026, have a 4.80% coupon. While developers and their counsel have been considering securitizations for years as an alternative to the PTC or the [investment tax credit](#), the viability of this structure is uncertain. SolarCity's securitization may be a harbinger of things to come as renewable energy developers seek new, lower cost sources of capital to help reduce the cost of solar and wind projects.

For more information on securitizations, see [Practice Notes, Securitization: US Overview](#) and [Securitization: US Transaction Parties and Documents](#).

Wind Energy

When the PTC was extended in January 2013, its eligibility requirements were revised to provide that a wind energy project qualifies for this credit if it starts construction before January 1, 2014. As a result, many developers tried to start construction of wind energy projects to meet the deadline. The legislation did not specify, however, the amount of work developers needed to have completed to meet the start of construction requirement. In March 2013, the IRS issued guidelines clarifying that a project meets the start of construction requirement if either:

- Physical work of a significant nature has started on the project. What constitutes physical work of a significant nature depends on the project, but the IRS has provided some examples, including excavation work to lay foundation in the case of a wind project. Necessary, but preliminary work,

such as negotiating financing documents, conducting engineering studies and obtaining permits do not constitute work of a significant work. The project developer must also maintain a continuous program of construction to meet this test, subject to interruptions caused by events beyond its control.

- The project has paid or incurred at least 5% of the project's cost and makes continuous efforts to complete the facility after that date.

For more information on the tax credit, see [Legal Update, IRS Issues Guidelines Defining When Construction Begins for Purposes of Qualifying for the Production Tax Credit](#).

Although these guidelines were helpful, they raised additional questions about the meaning of "continuous efforts" and "continuous construction." Many project developers were concerned that uncertainty about the meaning of these terms would discourage tax equity investors and lenders from investing in wind projects. In response to these concerns, the IRS issued [IRS Notice 2013-60](#), which provides that a project will be deemed to satisfy the continuous construction test or the continuous efforts test if it is placed in service before January 1, 2016. These tests would still apply, however for projects that do not meet the placed in service deadline. For more information, see [Legal Update, IRS Further Clarifies Start of Construction Rules for Purposes of the PTC](#).

Because of the uncertainty surrounding whether this credit would be available in 2013, developers rushed to place their projects in service before January 1, 2013. As a result, new wind installations in 2013 fell dramatically. In the first half of the year, less than 100 MW of new wind energy capacity was installed in the US. Activity picked up in the second half of the year, but only about 1082 MW of new wind energy capacity was installed in 2013 (down 92% from 2012) for a cumulative capacity of 61,108 MW (see [AWEA: US Wind Industry Fourth Quarter 2013 Market Report](#)).

According to the American Wind Energy Association (AWEA), there are more than 12,000 MW in wind energy capacity under construction. Under the new PTC guidelines, these projects will qualify for the PTC if they are placed in service before January 1, 2016.

Natural Gas

According to the DOE's Energy Information Administration (EIA), natural gas prices at Henry Hub (the delivery point for natural gas futures contracts on the New York Mercantile Exchange), in 2013 averaged \$3.73 per MMBtu up from 2012 when the average price was \$3.24 per MMBtu (see [Henry Hub Natural Gas Spot Price](#)). However, according to the EIA, 2013 prices were, with the exception of 2012, at their lowest level since 2002. In addition, the EIA expects natural gas prices to average about \$4.17 per MMBtu in 2014 (see [EIA, Short-Term Energy Outlook](#)). While higher than in recent years (or even as projected by the EIA last month (\$3.89 per MMBtu)), these prices (in large part due to the growth in [hydraulic fracturing](#)) are still low enough such that:

- Long term PPAs for natural gas fired power plants remain scarce. Utilities and other LSEs are unwilling to lock in prices because they think they can purchase power at cheaper prices in the **spot**

market. Many of the greenfield natural gas projects that were financed in 2013 were merchant projects, with hedges in place.

- More companies are seeking to export LNG to markets where they can get better prices (see [LNG Export Licenses](#)). LNG prices are as high as \$19 per MMBtu in some Asian markets. These sales are more profitable than domestic sales even after factoring in transportation and other costs. In the past year, several companies have announced agreements with Japanese purchasers (including Tokyo Gas and Osaka Gas) and in the last few years.

Natural gas is also contributing an increasing percentage of the total electricity generated in the US. According to data obtained from the EIA, about 30% of the electricity generated through November 2013 is attributable to natural gas (see [EIA: Electric Power Monthly](#)).

LNG Export Licenses

The DOE approved three licenses allowing for the export of LNG to countries with which the US does not have an FTA (see [Legal Update, DOE Issues Fourth License to Export LNG to Non-FTA Countries](#)). It also issued a license increasing the amount of LNG that Freeport LNG, one of the recipients, could export to non-FTA countries, for a total of 6.77 cubic feet of LNG per day (Bcf/d). Under the Natural Gas Act of 1938 as amended (NGA), exports of LNG to countries with which the US has an FTA are deemed to be in the public interest and must be approved by the DOE without modification or delay. However, exports to non-FTA countries are subject to a more rigorous level of review. Although more licenses are being issued, as of December 31, 2013, there were about 25 applications pending (see [Pending Non-FTA Applications](#)).

Several bills were introduced in Congress to speed up the DOE approval process:

- The Expedited LNG for American Allies Act of 2013 which would amend the NGA to expedite approval of the export of LNG to NATO members, Japan and any other country to which the Secretaries of State and Defense determine export would promote US national security interests. Expedited approval is currently only available for exports to countries with which the US has an FTA ([S. 192, 113th Cong. \(2013\)](#)). There are currently 20 countries that meet this standard for expedited approval (see [USTR: List of US Free Trade Agreements](#)).
- The Expedite our Economy Act of 2013 which would amend the Department of Energy Organization Act to transfer regulatory authority over the export of natural gas from the Secretary of Energy to FERC ([H.R. 2471, 113th Cong. \(2013\)](#)).

However, Congress did not take any action on any of these bills in 2013.

Hydraulic Fracturing

In October 2013, the EIA estimated that the US would be the world's top producer of petroleum and natural gas hydrocarbons in 2013, surpassing Russia and Saudi Arabia (see [EIA: U.S. Expected to be Largest Producer of Petroleum and Natural Gas Hydrocarbons in 2013](#)). While the final numbers are

unavailable, according to the EIA:

- Domestic crude oil production increased one million barrels per day (bbl/d) in 2013, reaching its highest level in 24 years. This increase marked the largest observed annual increase in US history.
- Natural gas production increased from 65.7 Bcf/d in 2012 to 66.5 Bcf/d in 2013, an increase of about 1% (see [EIA, Natural Gas Year-in-Review](#)).

These increases are largely the result of the growth in hydraulic fracturing and horizontal drilling. Increased production, while welcome, has raised issues about how federal and state governments are regulating fracking activities to safeguard the environment. To that end, federal and state governments and regulatory agencies continue to propose new laws and rules to regulate fracking, with varying degrees of success.

Notable Federal Developments

On May 16, 2013, the Bureau of Land Management (BLM) issued a revised draft proposal (Revised Rule) for regulating fracking activities on federal and Indian lands it manages (see [Legal Update, Interior Department Issues Revised Proposed Rules on Fracking](#)). The Revised Rule includes many changes to the original rule that was first proposed in May 2012 (see [Legal Update, Interior Department Issues Proposed Rules on Fracking](#)). The BLM withdrew the original rule after significant criticism from the industry, including that the rule was unnecessarily onerous and duplicative of state fracking regulations. The period for providing comments has expired, but it is unclear when the BLM will issue a revised rule reflecting those comments.

In addition, members of Congress introduced legislation to regulate fracking, including:

- The Fracturing Regulations are Effective in State Hands Act, which would give states the exclusive authority to regulate hydraulic fracturing entirely within the state ([S. 1234, 113th Cong. \(2013\)](#)).
- The Fracturing Responsibility and Awareness of Chemicals Act of 2013 ([S. 1135, 113th Cong. \(2013\)](#)). First introduced in 2008, this Act would, among other things:
 - amend the Safe Drinking Water Act (SDWA) to repeal the exemption from restrictions on underground injection of fluids or propping agents granted to fracking operations; and
 - require the disclosure of the chemical composition of fracking fluids.
- The Bringing Reductions to Energy's Airborne Toxic Health Effects Act or BREATHE Act ([H.R. 1154, 113th Cong. \(2013\)](#)). First introduced in 2011, this bill would repeal the exemptions from complying with the Clean Air Act to require oil and gas companies to cumulatively account for air pollution from all of their wells in one area by requiring aggregate permits, rather than individual permits for each well.

Congress did not take meaningful action on any of these bills in 2013. For more information on the SDWA exemption, often referred as the Halliburton loophole, and fracking disclosure regulations, see

Practice Note, Understanding Hydraulic Fracturing: Issues, Challenges and Regulatory Regime.

Notable State Developments

Several states adopted rules and laws to regulate fracking, including:

- California, which passed Senate Bill 4 (*2013-2014 Reg. Sess. (Ca. 2013)*). This Act, among other things, requires well operators to:
 - disclose the chemical composition of their fracking fluids within 60 days after well stimulation; and
 - provide information on the amount of water they are using and the source of that water.
- Illinois, which passed the Illinois Hydraulic Fracturing Regulatory Act (*30 Ill. Comp. Stat. 105/5.826 (2013)*). This Act is considered to be one of the most stringent laws on fracking. It was adopted following extensive negotiations with industry groups, environmental groups and state legislators and agencies and contains extensive provisions to protect water quality, assure transparency and promote public involvement.

Relaunch of the Section 1703 Loan Guarantee Program

In December 2013, the DOE *published a solicitation* making up to \$8 billion in loan guarantee authority available to support innovative and advanced fossil energy projects that avoid, reduce or sequester greenhouse gases. The guarantees are intended to provide financing for qualifying fossil fuel projects that have difficulty obtaining financing because of their technology risk. Guarantees under this program, which was established under Section 1703 of the *Energy Policy Act of 2005*, were suspended in 2010. Initial applications under this program are expected by the end of February 2014.

Infrastructure

Industry Developments

There was significant activity in this sector as several isignificant transactions closed in 2013, including:

- **The Ohio Bridges Project East End Crossing.** This \$1.2 billion financing was one of the largest P3 deals done in the US. The debt portion of the financing consists of \$676.8 million in private activity bonds (PABs).
- **Segment 3A of the North Tarrant Express (NTE) project in Texas.** This approximately \$1.4 billion project was financed through a combination of public and private funds, including a \$531 million *Transportation Infrastructure Finance and Innovation Act* (TIFIA) loan, a \$430 million in private equity, \$274 million in PABs and \$127 million in public funds.
- **The Goethals Bridge project.** In November, NYNJ Link Partnership closed on the financing to replace the Goethals Bridge. The financing consists of \$935 million in fixed-rate debt, which was

split between \$462 million in PABs and a \$471 million TIFIA loan. About one-fourth of this transaction (101.4 million) was insured by Assured Guaranty, which was the first *wrapped* infrastructure bond in the US.

In addition, the Long Beach courthouse was the first greenfield P3 project to be refinanced in the US in the capital markets.

However, the news was not all good in 2013. Several projects were cancelled in 2013, including the Chicago Midway Airport, the Travis County Courthouse in Texas and Indiana University's privatization of some of its parking operations. In addition, the Governor of Alaska is considering cancelling the Knik Arm project. While noteworthy, many practitioners and market observers are optimistic about this sector in 2014.

Notable Legislative and Regulatory Developments

Federal Developments

There were several notable infrastructure developments:

- On May 17, 2013, President Obama signed a memorandum authorizing a fast-track approval process for construction of infrastructure projects, including roadways, bridges, railroads and transit, ports and related infrastructure (see *Presidential Memorandum: Modernizing Federal Infrastructure Review and Permitting Regulations, Policies, and Procedures (May 17, 2013)*).
- In November 2013, several senators introduced the Building and Renewing Infrastructure for Development and Growth in Employment Act (S. 1716, 113th Cong. (2013)) which would create an independent Infrastructure Financing Authority (IFA) to issue long term loans and loan guarantees for transportation, water and energy transmission, storage and distribution infrastructure. The IFA would focus on large projects (greater than \$50 million in anticipated costs and of national or regional significance). The IFA would finance no more than 49% of the total cost of the project.
- On December 3, 2013, Rep. Earl Blumenauer (D-Oregon) introduced the Update, Promote, and Develop America's Transportation Essentials Act of 2013 (H.R. 3636, 113th Cong. (2013)), (UPDATE) which would increase the gasoline tax by 15 cents to 33.4 cents per gallon to help fund the financing shortfall for surface transportation through the Highway Trust Fund (HTF).

Although the HTF will be insolvent by the end of the year and there is state support, there is general resistance to increasing this tax. Therefore, the likelihood that the UPDATE bill will pass is low. In addition, a federal infrastructure bank has been introduced in some form for years without much action being taken.

State Developments

Several states took steps to make financing infrastructure projects easier in their jurisdiction, including:

- Maryland, which amended its P3 legislation to allow for more projects to be procured using the P3 structure (see [State Q&A, Public Private Partnership Legislation: Maryland](#)).
- Pennsylvania, which approved the Implementation Manual and Guidelines that provides specific guidance on its P3 legislation (see [State Q&A, Public Private Partnership Legislation: Pennsylvania](#)).
- Ohio, which adopted standard operating procedures with respect to bidding and availability payments (see [State Q&A, Public Private Partnership Legislation: Ohio](#)).
- Florida, which revised its P3 legislation to allow the P3 structure to be used for any project that serves a public purpose, including mass transit, parking, airport, seaport, rail, medical, nursing care, sporting, public education, cultural, recreational, wastewater, surface water management and water management facilities.

In addition, the Virginia Supreme Court unanimously reversed a lower court's decision that had held that tolls on the Elizabeth River Crossings project, which reached financial close in 2012, were unconstitutional (see [Elizabeth River Crossings Opco, LLC, v. Meeks, 749 S.E.2d 176 \(Oct. 2013\)](#)). The court determined that the tolls were not a tax, but a user fee, because they provide a benefit in exchange for payment. The court also found that the Virginia General Assembly had the legislative authority to delegate the power to set user fee rates to Virginia's Department of Transportation. This decision paves the way for the project to proceed and possibly for other projects to be structured the same way. For more information about this project, see [Article, US PPPs: Trends and Developments from the Second Quarter of 2012 and Beyond: Midtown Tunnel Project](#).

Equator Principles

Version III of the Equator Principles (EP3) became effective on June 4, 2013, and apply to all new projects mandated by participating financial institutions as of January 2014 (see [Legal Update, Third Version of Equator Principles Released](#)). The EP3 does not apply to existing projects, but it applies to future expansions or retrofits of these projects (see [Practice Note, The Equator Principles](#)).

Outlook for 2014

Financing Outlook

Looking ahead in 2014, the US project finance market looks to remain active as capital continues to be available. In particular:

- The Term Loan B market is expected to remain active as institutional investors become more familiar with the project finance structure and look to this market to invest their capital. Pricing on these deals is expected to continue to challenge the commercial bank market and average around LIBOR plus 400 bps. However, cheaper pricing will be possible for the most attractive deals. By the same token, the riskier projects may be priced around LIBOR plus 500-600 bps.
- The project bond market will also be active as sponsors look to this market to refinance on a long

term basis commercial bank debt and Term B Loans, especially if interest rates increase.

However, there may be periods of volatility in the coming year including in connection with the upcoming negotiations on tax reform or a tax extenders package. In addition, efforts to reduce the Treasury's stimulus programs may also cause some market jitters. Sponsors coming to market with deals will need to take advantage of financing windows to get the best terms. However, despite any volatility that may exist, the right projects will continue to obtain financing. These include projects that:

- Are backed by creditworthy sponsors, especially if they are willing or able to commit significant equity to the project.
- Have sponsors that have long standing relationships with commercial banks.
- Have stable and reliable revenues or effective hedges and other mitigants in place (for example, engineering, procurement and construction contracts and operations and maintenance agreements with reputable and creditworthy contractors and operators).

Legislative and Regulatory Outlook

As previously noted, there are several bills currently pending affecting the renewable energy and oil and gas sectors. Some of these bills could change the project finance market significantly (for example, the MLP Act). However, the outlook for meaningful action to be taken on any of these bills is uncertain given the general gridlock in Congress and the upcoming midterm elections.

LNG Export Licenses

Developers and investors are hopeful that the DOE will approve more non-FTA export licenses, at least the same number as was approved in 2013. While there is legislation pending in Congress to increase the pace of these approvals, there may not be enough bipartisan support for these bills. An alternative to these bills may be the treaties that the US is currently negotiating:

- The Transatlantic Trade and Investment Partnership (TTIP) between the US and the European Union which seeks to eliminate remaining tariffs and harmonize regulations to lower the costs of business and pave the way for investment.
- The Trans-Pacific Partnership Agreement (TPA) among Australia, Brunei Darussalam, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, the US and Vietnam to enhance trade and investment among the TPP partner countries, promote innovation, economic growth and development and support the creation and retention of jobs. Companies from Japan are major purchasers of LNG and have already entered in LNG tolling agreements or purchase agreements with several applicants on the list.

The White House has sought fast-track authority to speed up the negotiation of these treaties, especially the TPA, but there is significant opposition to granting this authority on both sides of the aisle.

PTC and Other Renewable Energy Credits

While industry groups and other interested stakeholders have been lobbying for an extension of the PTC, it is unclear when and whether this will be done. In December 2013, Senator Max Baucus released a proposal to reform all 42 energy tax incentives, including the PTC. Under the terms of this proposal, all energy incentives would be replaced with two long term and new nonrefundable tax credits. With Senator Baucus expected to be confirmed as Ambassador to China, the future of this proposal is uncertain. In any event, Congress will address the PTC, the 50% bonus depreciation and other energy credits that have expired, whether as part of broad tax reforms or tax extenders package. Because of the upcoming mid-term elections, many observers think that a tax extenders package is more likely.

Mandatory Reserve Margin in Texas

While some generators are pushing for the adoption of a mandatory reserve margin and the creation of a capacity market in Texas, it is unclear whether that will occur or whether regulators will instead elect to increase the current target reserve margin above 13.75% or to implement another mechanism to address power shortages. Texas is expected to make a decision on this issue in 2014. Until this decision is made, there may be a slowdown in new build generation in ERCOT.

Infrastructure Legislation

In July 2012, President Obama signed the Moving Ahead for Progress in the 21st Century Act (MAP-21), which provides funding for infrastructure projects through September 30, 2014 (see [Legal Update, President Obama Signs Comprehensive Infrastructure Bill](#)). While meetings have already been scheduled at the Congressional committee level to discuss an extension of this legislation, the likelihood that a long-term bill will be passed seems low given:

- The general inability of Congress and the White House to agree on many issues.
- The upcoming midterm elections.
- General discussions on tax reforms.

In addition, passing long-term legislation would require agreement on funding of the HTF. Although the HTF is insufficient to finance US infrastructure projects, there is little appetite in Congress to raise the gasoline tax that funds the HTF from 18.4 cents per gallon, a figure that has not changed since 1993. It seems more likely that this funding will be provided in a series of stopgap measures, similar to what occurred after the expiration of the previous surface transportation legislation (see, for example, [Legal Update, Obama Signs Stop-gap Infrastructure Bill](#)).

EX-IM Bank Reauthorization

On May 30, 2012, President Obama signed the Export-Import Bank Reauthorization bill, which extended the charter of the Export-Import Bank (Ex-Im Bank) through September 2014 and raised its loan exposure cap from \$100 billion to \$140 billion (see [Legal Update, Obama Signs Export-Import Bank](#)

Reauthorization Bill). The increased authority of the bank has enabled it to provide financing to several projects. EX-IM's charter expires in September 2014 and action will be needed if EX-IM is to continue to support US exports. Meetings have already been held to discuss the bank's reauthorization, but Congress has not taken action.

Energy and Power Outlook

It is unclear whether the PTC will be renewed and for how long. In addition, discussions about overhauling federal energy credits as part of comprehensive tax reforms may change the way it operates. Until this issue is resolved, developers will try to place projects in service by January 1, 2016. According to the AWEA, there are more than 12,000 MW of wind capacity under construction. This may result in more deal activity as developers seek capital (whether debt or equity) to finance construction. In addition, under the latest IRS PTC guidelines, an entity can claim the tax credit for a project that is placed in service before January 1, 2016, even if that entity was not the owner of the project when construction began. This may result in more M&A activity as larger developers acquire projects from smaller developers that are unable to bring these projects to completion on their own. This activity may be further driven by developers who may have acquired turbines and other equipment for projects that were later abandoned or that cannot be completed by the required deadlines.

While some activity is expected in the power sector, a lot of this activity is expected to be refinancings as sponsors look:

- For permanent financing in the capital markets.
- To replace more expensive debt.
- To obtain more flexible terms in the Term Loan B market.

More M&A activity is also expected in the power sector in 2014 as:

- More developers establish yieldcos and existing yieldcos acquire more assets to generate growth and increase their distributions to their equityholders.
- Developers look to build their portfolios to get better financing terms.
- Investors seek to exit their investments.

The solar distributed generation sector is also expected to be active.

Natural Gas Outlook

This sector is expected to be active in 2014 as companies that have received authorization from the DOE to export LNG to both FTA and non-FTA seek financing to construct the liquefaction terminals. Freeport LNG, Magnolia LNG and Cameron LNG are already in discussions with lenders to finance their projects. Freeport is seeking about \$4 billion in project financing from a syndicate of commercial banks and Cameron LNG is seeking about \$7.1 billion (of which \$1.6 billion will be commercial bank debt and \$1

billion will be in senior notes).

Industry and market observers are hopeful that more export licenses will be approved in 2014 but the pace of this approval is uncertain. Even if the pace increases, it is unclear whether the volume for which approval is being sought can be accommodated. Including the non-FTA applications that have been approved, as of December 31, 2013, developers have requested approval to export about 35 Bcf/d of LNG. Given that other countries are also exploiting their shale gas reserves and expect to export their capacity, some developers will necessarily be disappointed. In addition, in granting each additional license, the DOE will assess the cumulative impact of each license on US natural gas prices and the economy, more generally. As a result, an applicant's place in the DOE's [review line](#) is significant.

In addition to legislative impediments, under Section 3 of the Natural Gas Act, FERC is responsible for authorizing the siting and construction of onshore and near-shore LNG import or export facilities. As of December 31, 2013, only Sabine Pass Liquefaction has received the necessary authorization for its export terminal (see [North American LNG Import /Export Terminals Approved](#)).

Because of the colder weather in early 2014, natural gas prices are expected to be higher in 2014 with an average of \$4.17/MMBtu, up from \$3.73 in 2013 (see [EIA, Short-Term Energy Outlook](#)). While higher than in the last few years, this price is still lower than prices in other markets, especially Asia.

Infrastructure Outlook

Market observers have been projecting significant activity in the infrastructure sector for the last few years. But many practitioners are optimistic that 2014 may be the year that it actually happens because of:

- The increasing use of the [availability payment](#) structure. This pricing structure eliminates demand risk, which is a major issue for many infrastructure projects. It was used in East End Crossing, the Goethals Bridge replacement and the Long Beach Courthouse projects. While these projects may be subject to appropriation risk, this is less of an issue (see [Practice Note, Public Private Partnerships: Issues and Considerations: Availability Based PPPs](#)).
- The closing of several significant transactions in 2013 and the number of significant projects that are currently in the pipeline, including:
 - Maryland's \$2.2 billion Purple Line project; and
 - the \$1.6 billion Illiana Expressway project, a joint project with Illinois and Indiana.

With the success of the Long Beach Courthouse and the closing of the Allentown water lease project in Pennsylvania, many practitioners and market observers are hopeful that there will be more social infrastructure projects in 2014. In addition, the American Society of Civil Engineers's 2013 Report Card for America's Infrastructure highlights the importance of investing in water and wastewater infrastructure (see [Legal Update, The American Society of Civil Engineers Releases 2013 Report Card on US Infrastructure](#)).

To facilitate the development of social infrastructure projects, some industry groups are proposing a new category of tax exempt bonds that could be used to finance these projects. Although tax-exempt financing is a major source of funding for infrastructure projects, it is unavailable for public buildings and similar projects. The outlook for this legislation is not positive. Because these bonds would be used to finance projects that are mostly local, there may not be enough political support for this type of bond.

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