

Energy Finance 101: The Types of Investors



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*This is the third paper in the Energy Finance 101 series. In the previous papers on Project Finance and Yield Cos, we laid out a scenario in which you, the reader, are the CEO of Big Energy Corp., making decisions on how to fund various **capital expenses**. In each of those scenarios, you found outside investors to help you build your business, spinning off Little Energy and Energy Yield. This paper explores those investors and other investors you might encounter in the future.*

Money. Most companies wouldn't mind a little more of it, but accepting outside investment can be a complicated prospect. At Big Energy, you'll want to take a number of factors into consideration:

- What style of investment will help you meet your goals?
- What type of investor is best for the kind of funding you need?
- What are you willing to give up in exchange for the funding? Ownership? Future **cash flows**? Something else entirely?

At Big Energy you've had a couple of projects that you used **project finance** and **yield cos** for, but who are these investors that are investing or lending you the **capital** to get these projects done? And what other types of investors are out there for other financing needs you may have in the future?

Investment style: smart money, mostly money, and the places in between

At Big Energy, you're already a pro at finding funding for your projects—Energy Yield and Little Energy are doing great—but who were those “investors” that gave you the money? There are several types, with several different motivations for

investing. But before you even get to the type of investor, it's worth giving some thought to what style of investing works best for you at Big Energy. Do you want "**smart money**" or "**mostly money**"? Would you prefer investors that specialize in energy or could you benefit from an investor with a broader **portfolio**? Do you get along better with a few larger investors or many smaller investors?

"Smart money" refers to investment from investors who can offer you more than just money. Usually a term thrown around with early stage investment, these are the kind of investors who are going to be very involved in your company and potentially have the connections to help you with things like partnerships, introductions to large customers, or smoothing over potential legal hurdles. On the flip side, these investors are likely to offer less money for a larger amount of **equity** or future earnings and require a lot of attention. The alternative is a more hands-off type of investor; "**mostly money**" are investors that are just in it for the return, or, very occasionally, may offer counterproductive advice. For a company like Big Energy that's fairly well established, "mostly money" may be a better choice, as you probably already have much of the expertise that would be offered by "smart money" and instead want to give the least in exchange for the investment.

Outside of "smart" or "mostly" money, the number of investors can also be an important factor. A larger number of smaller investors may signify a large base of support and limit the downside risk to any one investor. However, larger numbers of investors can also trigger potentially arduous **financial disclosure** requirements that can be more efficiently handled by a large company. After all, that's what **investor relations** departments are designed to do.

Finally, although it won't always be a choice, Big Energy should consider whether or not it would benefit from energy-specific investors. Energy-specific investors can give good business advice, but the advice usually isn't free and even worse, conflicts of interest can affect the way an energy

investor interacts with Big Energy. More generic, big-picture investors might have access to larger pool of capital, but this comes with risks as well. An investor's lack of familiarity with the energy sector can hamper good decision-making or lead to incorrect valuation of Big Energy's assets. There is no right answer; instead Big Energy is likely to take cues from where similar companies are finding successful investment.

Investor Types: VC, PE, Hedge Funds, Oh My!

While Big Energy has some decisions to make about investment style, you also need to research the different types of investors that may be available. . From venture capital to retail investors and everything in between, different types of investors have different requirements, different amounts of capital to invest, different timelines, and different appetites for risks. So, what kinds of investors are out there? Quite a few, it turns out. We will break it down for you.

Private Market Investors

Some investors focus on investment opportunities that aren't open to everyone. Relying on connections, word of mouth, and research, these investors seek ventures too risky or otherwise unfit for the public markets. Although many of these types of investors are using "other people's money", the "other people" are wealthy individuals, pension funds, and endowments with millions or billions, not average individuals with a few dollars to invest.

Angel Investors

Let's start with some of the earliest-stage funders: angel or seed investors. Considered for super-early stage companies, angel investors are looking to invest less than \$1MM, often as little as \$5-10k, in companies that are barely beyond the idea phase. Sometimes made up of friends and family, other times made up of high net worth individuals, a newly formed company will often combine several of these types of

investments to reach the amount of money it needs. As for the investors, they are taking on a lot of risk and should be able to afford a complete loss, but they are taking equity or **convertible debt** in exchange for their investment, hoping that the company will make them rich.

- **Stage of investment:** very early
- **Source of capital:** (usually) personal wealth
- **Size of individual investments:** \$5,000 to less than \$1,000,000
- **Purpose of investment:** to help companies reach major milestones that could attract professional investment or become self-sustaining
- **Company requirements:** (usually) non-capital-intensive industries, such as software
- **Geography:** generally local
- **Total annual investment:** roughly \$1B
- **Risk appetite:** very high

Venture Capital

Venture Capital (VC), like angel investing, is interested in early stage companies, but VC usually involves money invested by professional investors. Venture capitalists will usually raise a **fund** of many millions to a few billion dollars from a group of **Limited Partners** (LPs) to be invested in a portfolio of early-stage companies. The VCs will then strategically invest the money in exchange for equity and board seats in a young company, hoping the company will either go public or be bought within ten years, after which the fund is supposed to return the initial investment and any additional returns to the LPs. This is high-risk, but because they are investing in a number of companies, only a few of their investments need to be very profitable to generate overall profits for the fund.

- **Stage of investment:** very early stage to mid-stage, often investing in the same company at multiple stages
- **Source of capital:** Limited Partners – endowments, pension funds, very high net worth families
- **Size of Investments:** \$1MM to \$100MM (at one time)
- **Purpose of investment:** to help companies reach a liquidity event
- **Company Requirements:** willing to cede some board control, has the potential upside for a very large (\$100MM+) exit, can be capital intensive, generally technology focused
- **Geography:** Silicon Valley-centric, with additional hubs in Boston, Seattle, Austin, and Israel
- **Total annual investment:** roughly \$20B
- **Risk Appetite:** high

A Side Note on Risk

In investment, risk generally refers to the likelihood of a company returning the initial investment plus a return to the investor, but it can be broken down a little further into Technology Risk and Business Risk. Especially in clean energy, capital is often necessary before it can be determined whether a technology is even viable. While researchers in these fields generally depend upon grants and institutional research support, sometimes these technologies are spun out into companies before all the technology risk has been mitigated. Finding willing investors at this stage can be difficult and is usually left to Venture Capital or Strategic Investors. Companies that are past technology risk still face some amount of business risk, which usually relates to whether a company will

find a market for its product, come up with a business model that works, and be able to execute on what it set out to do. All companies have some degree of business risk, with various investors interested in companies with the various degrees.



Strategic Investment

Strategic investors are generally the investment arm of an established, operating company in the same space as, or complementary space to, the company looking for capital. These investment professionals are charged with investing their company's capital in businesses or technologies that could ultimately benefit their company. In exchange for their investment, strategic investors will often want the ability to form partnerships with the company or eventually acquire the company in the future. In the case of Big Energy, a strategic investor could be a major oil company looking at an electrified future or industrial supplier looking for potential new customers.

- **Stage of Investment:** all stages, but often on the earlier side in technology
- **Source of capital:** corporate funds
- **Size of Investment:** from seed stage in the thousands to buy outs in the billions
- **Purpose of the investment:** establish a relationship between the companies (while still generating returns)
- **Company Requirements:** often willing to grant the right of first refusal to the investor
- **Geography:** varies
- **Total annual investment:** ~\$3-4B
- **Risk Appetite:** varies, often medium/high

Private Equity

Private Equity (PE) is investment in a company's equity or **debt** that's not publicly available. Covering a large number of different types of investment, often including venture capital, PE investment can vary widely. Some PE firms focus on buying companies outright, (these are the investors that "take a public company private"), while other firms provide **growth capital**, focus on turning around **distressed** companies, or provide **subordinated**, risky loans to companies. (Colloquially, PE is often used to just refer to firms that buyout companies.) Private equity investors are professionals who raise a fund from high net worth individuals or endowments, then identify unique opportunities for investment they think will create a sizable return. These investors are most concerned with maximizing returns, but they tend to invest in companies with less technology risk than pure VCs.

- **Stage of Investment:** varies by fund and company
- **Source of capital:** Limited Partners – endowments, pension funds, very high net worth families
- **Size of Investment:** from the low millions to multiple billions
- **Purpose of the investment:** generate large returns within a typical 10 year fund timeline
- **Company Requirements:** possibility to generate sizeable investment returns
- **Geography:** New York-centric
- **Total annual investment:** ~\$200B
- **Risk Appetite:** varies, but generally medium-to-high

Tax Equity Investors

Tax equity investors can be any company, in any industry, that would like to minimize its tax liability. In energy, the government has various **tax incentives**, such as **tax credits**,

available for energy companies working in areas in which it wants to encourage development (think production tax credit), but these energy companies often don't owe enough in taxes to take advantage of them. Fortunately, an established, profitable company in an unrelated field (say, computers) can invest in the nascent energy company with the tax credits and use the tax credits to offset the established company's **tax liability**. With this arrangement, both sides win: the profitable company gets to lower its tax payments (and a return on its investment), while the energy company gets cheaper capital than it would have from an average investor. At Big Energy, these investors likely played a role financing Little Energy, taking the tax benefits and a lesser return in exchange for their investment.

- **Stage of Investment:** deployment or operating stage
- **Source of capital:** companies that owe taxes
- **Size of Investment:** tens to hundreds of millions
- **Purpose of the investment:** reduce tax liabilities
- **Company Requirements:** in a field that is eligible for tax incentives, but not able to take advantage of them due to low profitability
- **Geography:** varies
- **Total annual investment:** low billions
- **Risk Appetite:** low

Green/Infrastructure Banks

A Green Bank or Infrastructure Bank is a public or public-private partnership that is set up to provide stable, low-cost financing for projects that fit within its mission, such as developing infrastructure or development and deployment of environmentally friendly technologies. These types of banks are generally capitalized either through government funding or government-issued **bonds** and often try to make

investments that will encourage or require some matching investment from the private sector, such as private equity. Many states have infrastructure banks, while only a few have green banks. If Big Energy were operating in the right state, it might go to an infrastructure bank for debt financing for a new pipeline or a green bank for a loan guarantee on a wind farm. Although the banks expect a financial return for their investment, they also consider the public benefit it will provide and demand less of a return as a result. The combination of financial and public benefits is referred to as a **double bottom line**.

- **Stage of Investment:** deployment
- **Source of capital:** government or government mixed with private
- **Size of Investment:** tens of millions to low billions
- **Purpose of the investment:** provide low cost capital to projects that fulfill a mission
- **Company Requirements:** plan to pay back investment, intended to benefit the state
- **Geography:** 31 states with infrastructure banks, 3 with green banks
- **Total annual investment:** ~\$6B for infrastructure banks, ~\$1B for green banks
- **Risk Appetite:** low

Public Market Investors

The public markets, like the New York Stock Exchange, are what average, non-professional investors like you and I invest through. Open to all sizes of investors, public markets are places where any investor can buy or sell **securities**, often at a transparent price. Retail investors like us, along with other public market players, such as big banks, hedge funds, mutual funds, and even some of the private market investors,

provide a place for larger, stable companies to raise equity and issue debt. Big Energy, a public company, issued bonds when funding a pricey new project, and **spun off** its Energy Yield subsidiary in an **IPO** to free up capital for future projects.

Retail Investors

When you or I buy a stock or bond through E*trade, we're retail investors. Since we're not professional investors, we can generally only buy securities that are listed on public markets (this limitation is intended mostly to protect the average investor). Although many companies aim to have access to the capital provided by such markets by "going public", that requires a lot of disclosure, and public markets can be fickle. Stocks have a publicly listed price every day and can be bought and sold on short notice by anyone with the money, while many bonds can be bought easily through a broker. Stock investments often have some **volatility**, as investors in the space react to news and events.

- **Stage of Investment:** mature
- **Source of capital:** average, every day people
- **Size of Investment:** companies can raise billions through many small investors
- **Purpose of the investment:** expected return
- **Company Requirements:** generally stable or growing, past technology risk, has the internal structure to support the financial disclosure required
- **Geography:** worldwide, with centers in New York, London, Hong Kong, etc
- **Total annual investment:** more than \$200 trillion
- **Risk Appetite:** low-ish, depending on the individual investor


Hedge Funds

While hedge funds can invest in anything, many play in the stock and bond market alongside retail investors. Similar to private equity in structure, investment in a hedge fund is only open to select, high-value investors and funds, even when the hedge fund participates in the public markets. Unlike private equity, hedge funds have extra flexibility to move their funds quickly between investment options, and LPs can generally pull their money out of the hedge fund after one or two years, rather than after a ten-year term. Hedge funds often specialize in an industry, with many focusing on energy, and they make their investment decisions based on research. Thus, this isn't a type of funding that can be pursued easily.

- **Stage of Investment:** mature
- **Source of capital:** Limited Partners – endowments, pension funds, very high net worth families
- **Size of Investment:** millions to a few billion
- **Purpose of the investment:** maximize returns
- **Company Requirements:** none as a whole, depends on the fund
- **Geography:** New York and other financial centers
- **Total capital:** ~\$2.1 trillion, not all in public markets
- **Risk Appetite:** often medium to high risk, though can be low risk as well, depending on the fund strategy

Conclusion

Big Energy has lots of options when it comes to raising money. Whatever the project, assuming the fundamentals are sound, there's an investor that's likely a good fit, whether it be a Wall Street private equity titan or the retail investor next door. Now it's just up to you to decide what the next project for Big Energy is and what kind of investors match.



Appendix: What About Crowdfunding?

When we talk about crowdfunding in energy, we're usually talking about a large number of small, non-professional investors investing in the equity or debt of a small, startup energy company, rather than Kickstarter. Generally, it has been illegal to sell equity this way in the U.S. to protect lay investors from losing more than they can afford. Since these companies are not publicly listed, they are subject to less regulation and disclosure, which opens up the possibility of unscrupulous behavior. In 2012, this changed with the passage of the Jumpstart Our Business Startups Act (JOBS Act), which would allow companies to raise up to \$1MM of equity through crowdfunding, but the Securities and Exchange Commission has been slow to implement new rules. Although raising equity through crowdfunding isn't a viable possibility yet, some energy companies are using it to fund loans for equipment like solar panels. As new rules are released and implemented, early-stage startups may turn to crowdfunding over angel investors and venture capital.



Glossary

Asset – anything a company owns that will bring it future economic value; can include cash, intellectual property, or equipment, among other things

Balance Sheet – a snapshot of a company's assets, debts, and equity at a single point in time

Bond – what an investor buys when investing in a company's debt, it has a fixed payback term and rate of return

Capital – a fancy word for money, it can refer to both debt and equity investments

Capital Expense – an internal investment in a durable asset, such as equipment or real estate

Cash Flow – the amount of cash being generated by a company; it is often different than net income or profit, as there are non-cash expenses taken out before calculating net income

Convertible Debt – a loan that can be converted to a pre-set amount of equity if the investor chooses, which they generally would if the company is doing well; these protect the investor from a complete loss if the company does poorly

Cost of Capital – when taking on either a loan or equity investment, this is how much the company will pay for the privilege of taking the money; in the case of loans it would be the interest rate

Credit Rating – a rating provided by a third party that reflects the likelihood of a company paying its debt, it will determine the interest rate on loans made to that company

Debt – money lent to a company that will have a timeline for repayment and a guaranteed rate of return for the person loaning the money

Debt Capacity – a company can only take on so much debt before it affects their credit rating, raising their interest rates and making it harder to find investors

Depreciation – an accounting value for the amount a physical asset decreases in value from use; the IRS generally defines how much this is for various kinds of assets, like buildings, machinery, or vehicles

De-risk – the finance term for reducing the likelihood that something bad, like a financial loss, will happen

Distressed – when a company is having problems meeting its financial obligation, used as a descriptor before or during bankruptcy

Double Bottom Line – when company or investment performance is measured by more than just financial

measures, such as environmental factors or community benefit

Dumb Money – a derogatory nickname for investment that may come with questionable or counterproductive advice, also sometimes used for investment that is just investment

EBIT – Earnings Before Interest and Taxes or “operating profit”, a measure often used to compare companies, as it gets rid of differences due to capital or tax structure

EBITDA – Earnings Before Interest, Taxes, Depreciation and Amortization, this is an indicator of how good a company is at generating cash from its operating activities

Equity – shareholder’s equity or stock; money invested in a company on the belief—but not guarantee—that it will do well and pay returns

Exit – also called a liquidity event, this is an opportunity for investors in private investments to get their money back, usually through a buy out or IPO

Financial Disclosure – required by the SEC for public companies and companies with a large number of investors, this involves creating a thorough, standardized report on a company’s finances that is publicly available for all

Fund – money raised from several investors to purchase a number of investments, a given investment firm may have several funds at a time with different investors that have different focuses or timelines

Growth Capital – a type of private equity investment in more-established companies intended to help them grow or restructure

Income Statement – one of the 3 main accounting statements, this shows the inflows and expenses (including non-monetary expenses) for a company over a defined period, such as a quarter or year

Investing Style – the strategy of an investor that helps them choose investments to match their desired investment

outcome, this can include things like industry specialization, the timeline for investments, or the desire to influence the investment through joining the board

Investor Relations – the office at a company responsible for the legal, communications, and finance aspects of dealing with investors

IPO – Initial Public Offering; the first listing of a company's equity on a public market, it allows for earlier, private investors to get their cash out

Liability – something that a company is obliged to pay in the future, like loans, pensions, or money owed to suppliers

Limited Partner (LP) – a term for investors in funds like venture capital and private equity, who are generally uninvolved in the fund's operations and, as a result, are not legally liable for the fund

Liquidity – the ability to convert an investment into cash quickly

Liquidity Event – the sale or IPO of a company, which allows the investors to get their cash out

Mostly Money – investment that is just money, rather than money with advice or control

Net Income – aka “earnings” or “profits”, the amount a company made after accounting for all expenses and taxes

Non-monetary Expense – aka “non-cash expense”, something accounted for on the income statement at one time, but that was paid for at another time, such as depreciation

Portfolio – the whole array of different investments an investor has, a portfolio is intended to balance the risk while maximizing return

Power Purchase Agreement – a contractual agreement that many power generating stations have with a utility for the utility to buy the power produced

Project Finance – a financial and corporate structure that helps bring investment into specific projects (See our paper on [Project Finance](#) for more information)

Publicly Traded – a descriptor for equities or bonds that are available to buy or sell on public markets, like stock exchanges

Revenue – the amount of money a company is earning before taking into account expenses

Risk – the factors that determine how much investors expect to get paid

Securities – publicly-traded stocks, bonds or options

Smart Money – investment that comes with valuable advice, connections, or assistance

Spin-off – the severing of some operating activities from one company into a new company; the parent company often maintains some ownership of the new company's equity

Subordinated – refers to debt that won't get paid until after other debts have been paid, making it riskier (and generally requiring a higher cost of capital)

Taxable Income – the amount of earnings a company has after accounting for all expenses, including non-cash expenses, on which a government can collect tax

Tax Credit – an amount taken out of the total taxes owed, commonly used as a government incentive for businesses and individuals

Tax Incentive – A government-created carrot, such as tax credit, rebate, or accelerated depreciation, that is intended to encourage a certain behavior or activity

Tax Liability – the amount of taxes a company owes, generally based on taxable income; this amount can be negative, which would result in...

Tax Loss Carryforward – loss from one year used in a future year to reduce the tax liability in this future, profitable year

Volatility – colloquially, a measure of the ups and downs of an investment, a measure of risk

Working Capital – money needed for day-to-day expenses at a company, like paying salaries, keeping the lights on, or buying materials

Yield Co – a company made up of cash-producing projects that is spun off to free up capital for the parent company (See our paper on Yield Cos for more information)

Resources:

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