ASU Energy Policy Innovation Council

Crowdfunding and Renewable Energy: Could it Revolutionize Large-Scale Renewable Project Financing?

The essentials

- Crowdfunding presents a new model for public investment in large-scale renewable projects.
- Crowdfunding would allow businesses access to an estimated $2 trillion in capital from the general public. It has been successfully applied to financing utility- and commercial-scale solar projects by Mosaic, a California-based start-up company.
- Rewards-based crowdfunding (as opposed to "donation-based" crowdfunding) is the funding of a company or project by selling small amounts of equity to many investors with an expectation of return on investment.
- At this time, only residents of New York and California can participate in crowdfunding investments. However, the 2012 JOBS Act obligates the SEC to issue regulations allowing start-up companies to raise up to $1 million in capital via crowdfunding from the general public across the country.
- The new crowdfunding regulations will likely be issued in the third quarter of 2014.
- When crowdfunding regulations are issued, it will allow the general public to invest small amounts in renewable energy with a reasonable expectation of return on investment.

What is Crowdfunding?

Crowdfunding began as a way for the public to donate small amounts of money, often through social media websites, to help artists or non-profits fund projects. This is referred to as "donation-based" crowdfunding, because there is no expectation of return on investment. Because the "donation-based" crowdfunding model has been largely successful as a means of non-profit fundraising, now businesses want to apply the model in a capital investment context. This is "rewards-based" or "equity-based" crowdfunding. As opposed to donation-based crowdfunding, rewards- and equity-based crowdfunding come with an expectation of financial return on investment, usually in the form of interest payments.

According to Forbes.com, the estimated potential U.S. market for reward-based crowdfunding from non-accredited investors is $2 trillion, as compared to the $20 billion in capital currently available from accredited investors.[1] Increased access to capital means more business opportunities, especially for emerging players in new markets such as solar and wind power. The 2012 JOBS Act, which we discuss in detail later in

[1] Barnett, Chance. July 19, 2013. "SEC Finally Moves on Equity Crowdfunding, Phase I," Forbes.com. (Historical annualized returns from seed capital is 27%, compared with just 9% expected returns on stock prices).

the brief, aims to allow small businesses and start-ups to access capital from the general public by offering high-yielding returns on small-scale investments.

Can Crowdfunding Be Successfully Applied to Renewables Financing?

Equity-based crowdfunding has been successfully applied to utility-scale solar projects, but still on a relatively small scale. For one California company, Mosaic, the returns-based crowdfunding model has been largely successful in the renewable energy context, suggesting future success in all states once rewards-based crowdfunding is legalized in all 50 states.

Mosaic – A Model for Renewables Crowdfunding

Mosaic is a Silicon Valley start-up that applies the reward-based crowdfunding model to commercial and utility-scale solar projects throughout the United States. Mosaic's reward-based crowdfunding model offers yields (interest) rather than equity (shares) to its investors in return for their investments. Mosaic has allowed investors who cannot or will not install distributed solar systems on their homes to participate in the more cost-efficient utility-scale renewable investment game, which has lower costs and higher returns for individual investors.[2]

Mosaic serves as an intermediary between solar projects and investors; it pools investor money and loans it out to solar projects. As the projects generate electricity that in turn produces revenue, that revenue is repaid over time to Mosaic's investors. The company only makes loans to projects that already have deals to sell the electricity they will produce, ensuring a steady income for investors. Only then does it solicit money from investors to fund those projects. Mosaic makes its profits by charging a 1 percent fee on each investment and a small-percentage origination fee on each loan.

As of now, qualified investors (including the general public in California and New York) may invest a minimum of $25 in the increasingly large-scale solar projects financed by Mosaic. So far, as of February 2014, Mosaic as raised over $5.6 million and has, according to its website, made 100 percent of its payments to investors. Returns vary from project to project, but generally range from four to six percent. Each investment project is accompanied by a "prospectus" that indicates the risks incident to investing in a solar system, including the risk that investors will lose money.

Barriers to Crowdfunding Expansion

Crowdfunding ventures like Mosaic are only possible with state-specific approval. Although current investment regulations do not explicitly forbid "crowdfunding" per se, the Securities Act of 1933 makes it effectively impossible. The 1933 Act was passed in response to the stock market crash of 1929; the purpose of the act was to reduce risk in the financial system. To this end, the Act imposes strict, often costly registration requirements for equity offerings, including rewards-based crowdfunding. The Act also

[2] This trend will likely continue as the price of PV solar becomes increasingly competitive in the energy marketplace.

forbids general solicitation of investments from non-accredited investors unless the "public offering" is registered with the SEC.[3]

Through these provisions, the Act accomplishes its goal of investor protection, both by preventing the solicitation of funds from investors who may not understand the risks of investment, and by increasing the amount of information companies must provide about the financial viability of their projects. However, a side effect of this legislation was to price out small businesses from obtaining capital through public offerings. For example, start-up companies seeking to raise a small amount of capital are prohibited from solicitation to the general public, unless they meet prohibitively expensive registration requirements. Because nascent start-ups are small to begin with, these regulations make crowdfunding small ventures cost prohibitive.

Mosaic's services currently do not violate the Securities Act of 1933 because they can only solicit capital from "qualified" investors and/or citizens of New York and California under state-specific regulation. If investors are accredited under SEC regulations, they can invest as much as they want and from anywhere in the U.S. For non-accredited investors, however, access to Mosaic projects is limited to residents of California and New York, whose regulatory boards have approved such investments specifically for Mosaic.[4] Upon passage of Title III of the JOBS Act, Mosaic's return-based crowdfunding model should be possible in all fifty states.

The JOBS Act

In 2012, the U.S. Congress passed the Jumpstart Our Business Startups Act, or JOBS Act. The stated purpose of the Act is "[t]o increase American job creation and economic growth by improving access to the public capital markets for emerging growth companies."[5] The Act affects only "emerging growth companies," companies that do under a billion dollars per year in business.[6] This brief focuses on Title III of the JOBS Act, which will soon open up equity crowdfunding to non-accredited investors throughout the country by easing registration restrictions and allowing general solicitation.

Title III – Crowdfunding from Non-Accredited Investors

[3] Accredited investors include investment companies, certain organizations and corporate executives, individuals with a net worth over $1,000,000 excluding the primary residence, individuals with $200,000 in income each of the last two years, and trusts in excess of $5,000,000. 17 CFR § 230.501, *available at* http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&sid=441856d07884ed3f0111d84a92d9765f&rgn=div5&view=text&node=17:2.0.1.1.12&idno=17.

[4] The Securities Act of 1933 expressly allows states to supplant SEC regulations for *intrastate* public offerings.

[5] JOBS Act, p.1, (H. R. 3606-1).

[6] JOBS Act, P. 2 (H. R. 3606-2), see note 1, above.

Title III instructs the SEC to promulgate regulations allowing "emerging growth companies" to raise up to one million dollars in capital from non-accredited investors.[7] According to the California Dept. of Corporations, "[w]hen fully implemented, the 2012 JOBS Act will promote small business capital formation by enabling private companies to sell securities over a 12-month period to an unlimited number of investors through a portal registered with the SEC, and exempting those offerings from registration with state or federal authorities."

By removing some of the onerous disclosure requirements for small scale public offerings to non-accredited investors, Title III allows smaller net worth individuals to invest certain portions of their income or net worth in these emerging growth companies.[8] In return for their investment, these "crowdfunders" can now get a return in the form of interest or equity, and emerging growth companies can access a wider range of capital for their investment projects. While there are still limitations on the crowdfunding model, such as the amount a company can raise and the amount of capital investors can pledge, Title III could dramatically change the landscape of capital formation for start-up companies. As the ACA stated, "It's a whole new game that levels the playing field for small businesses and start-ups."

What are the Risks of Crowdfunding Investment?

Repealing some of the registration and disclosure requirements for crowdfunding offerings pose some risks for small investors. There is a potential for investors to unknowingly take on greater risk than they understand. Start-ups are inherently risky – they pose a prospect of high return for high risk, but in the case of solar crowdfunding, most of these risk-related concerns are moot. For example, Mosaic (a company discussed in greater detail below) virtually guarantees the return on investment by ensuring the contract for power purchasing is in place before they solicit funds from their investors. There will likely be higher-risk developments, but as of now, utility-scale renewables projects pose a uniquely low-risk application for crowdfunding.

When Will Title III Regulations Take Effect?

While the JOBS Act set the end of 2012 as the deadline for final rules on crowdfunding, the SEC is still deliberating on the final rule, but has closed public comment. Even though the Act mandates the adoption of final rules within nine months after the passing of the JOBS Act, the comment period for Title III could extend through the third quarter of 2014. As the American Crowdfunding Association (ACA) indicated in a comment to the SEC, these regulations are "long awaited and long overdue." Considering Title III's vast financial impact, however, a robust comment and drafting period could be necessary to get the regulations right.

Crowdfunding and renewable energy projects in Arizona

Capital formation is far from the only issue affecting utility-scale solar construction in Arizona; bottlenecks exist in transmission capacity, land-use decisions, and demand.

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[7] JOBS Act, p. 10 (H.R. 3606-10), Title III, see note 1 above.
[8] See JOBS Act, Section 302(a) (H.R. 3606-10)

However, there has been considerable discussion in Arizona about the prohibitively high cost of rooftop solar systems for less affluent customers. Crowdfunding offers a pathway toward participation in the solar market without a substantial investment. Instead of buying entire rooftop solar systems for an average of $20,000–$30,000, smaller scale investors with less capital (say, for example, $400 dollars) would potentially be able to invest their cash in support of renewable energy through equity-based crowdfunding of utility-scale solar or other renewable projects. In this way, the JOBS Act has the potential to open up the market to green investors who reside in Arizona but do not have substantial financial resources.

Crowdfunding offers an exciting opportunity for increased synergy between those who demand solar and those who wish to provide it. After the passage of the JOBS Act, residential/individual investors who can't afford their own solar arrays will soon be able to participate in the solar market, just in smaller increments. At the same time, solar companies seeking to expand and raise capital will have a much easier time doing so. Gone may be the days when nascent businesses must rely on a board room elevator pitch to raise one lump sum. Good ideas like crowdfunding renewables can spread on their own, increasing individual wealth in the process.

Read more

- Access the SEC Rulings, Public Comments, and the JOBS Act at: http://www.sec.gov/spotlight/jobs-act.shtml
- For a more detailed summary of Mosaic's activities, read: http://www.caeconomy.org/reporting/entry/crowdfunding-the-future-in-solar-and-the-local-economy or visit the company website at https://joinmosaic.com/
- For more information about what does and does not constitute Crowdfunding under Title III of the JOBS Act, see: http://www.corp.ca.gov/Consumer/Corner/pdf/Crowdfunding_0313_Update-FINAL.pdf