

Solar Crowdfunding



Key Messages

- **Crowdfunding is an innovative financing method that allows individuals to fund projects listed through online platforms.**
- **Almost anyone can participate in crowdfunding, and minimum investments/donations are typically low.**
- **Once regulations for Title III of the JOBS Act are finalized, crowdfunding will be able to expand into selling both debt- and equity-based securities.**
- **Crowdfunding has the potential to restructure financing for solar projects and to bring down costs.**
- **Mosaic, Inc. is an example of an intrastate offering for debt-based securities for solar startups.**

Solar Crowdfunding

I. Introduction – What is Crowdfunding?

Crowdfunding is an innovative financing model which has rapidly become one of the most popular methods used by startup organizations to raise capital. Initially, crowdfunding allowed individuals to make donations or zero-interest loans to creative and entrepreneurial organizations in return for rewards (e.g. free products) if the startup reached its funding target and was able to move into the production phase.¹ The passage of the 2012 Jumpstart Our Business Startups (JOBS) Act, however, creates the potential for more investor-friendly equity- and debt-based crowdfunding,² a development which has the potential to broaden the scope of organizations and projects that can be funded via “the crowd” and drastically reduce financing costs for solar PV projects in the U.S.

II. Background

1. **Types of Crowdfunding** – Crowdfunding differs from traditional investment banking in that it allows non-accredited investors³ to become financiers of any project offered through crowdfunding platforms. Most crowdfunding investments are small – the majority are no more than a few hundred dollars – and thus companies usually need many investors to reach their funding targets.⁴ Online platforms such as Kickstarter and Kiva have used the crowdfunding model to allow individuals to invest money, as either a donation or a zero-interest loan, in increments as small as \$25.⁵ There is no financial incentive for participating in this type of crowdfunding, although investors sometimes receive free copies of the finished product. This method typically draws financiers for a variety of qualitative reasons, often stemming from a desire to support the startup’s environmental or social cause.⁶
2. **Recent Growth** – Between 2009 and 2012, crowdfunding grew rapidly: the global year-over-year growth rate in 2010 was an impressive 61%, and by 2012 it had increased to 91%. North America, and predominately the United States, currently operates the largest crowdfunding market, followed by Western Europe.⁷ See **Figure I** for details on recent global growth in the crowdfunding market.

Figure I. Recent Global Crowdfunding Growth⁸

¹ Collins, Liam, and Yannis Pierrakis. *The Venture Crowd: Crowdfunding Equity Investment into Business*. London, UK: Nesta, July 2012. PDF

² Ibid.

³ A non-accredited investor is one who has a net worth of less than \$1 million (including spouse) and who earned less than \$200,000 annually (\$300,000 with spouse) in the last two years.

⁴ Bullard, Nathaniel. “All Renewable Energy – Research Note.” *Bloomberg New Energy Finance* (2012): 1-11. Print.

⁵ *Id.*

⁶ *Id.*

⁷ *Id.*

⁸ *Id.*

Solar Crowdfunding

Year	YOY Growth (%)	YOY Growth (US\$ in millions)	Industry Value (US\$ in millions)
2010	61%	530	854
2011	72%	616	1,470
2012	91%	1,336	2,806

- 3. Changes with the JOBS Act:** The 2012 JOBS Act opened the door to new possibilities for crowdfunding, most significantly the ability to engage in equity- and debt-based crowdfunding. Once Title III of the Jobs Act is fully in place, individuals will be able to purchase securities⁹ from companies posting offerings on crowdfunding portals, with the potential to receive a return on their investment(s) (ROI). The introduction of equity- and debt-based crowdfunding is especially important for the clean energy industry because often clean energy startups do not fit the high-risk, high-return profile that many venture capitalist (VC) firms seek.¹⁰ Instead, most involve moderate risk in exchange for moderate returns, leaving them unattractive to VC investment and without clear funding alternatives. This challenge makes access to debt- and equity-crowdfunding an even more compelling method for raising capital. In addition, crowdfunding does not rely on tax equity investors, a fact which has implications for solar markets going forward because the federal solar investment tax credit is set to decline to 10% (from 30%) in 2017.

III. Debt- and Equity-Based Crowdfunding

Equity-based crowdfunding works by allowing investors to either buy shares of or an ownership interest in a company, and in return receive a dividend and/or an option to sell shares once the company's value has grown.¹¹ Depending on company performance, this method could potentially lead to higher returns than a financier would receive from a debt-based investment; however, equity-based investments require a higher tolerance for risk, as returns and their timing are highly variable.¹² In contrast, debt-based crowdfunding represents a relatively safer form of investment because it allows financiers to loan money to a company, which then repays the investor with interest on a set schedule.¹³ Although these investments are not insured, in the event of default, the borrowers are not allowed to recognize profits until all of their debts have been repaid,¹⁴ making it an appealing option for more risk-averse investors.

⁹ Securities are typically divided into debt securities and equities. A debt security is a type of security that represents money which is borrowed and must be repaid, with terms that define the amount borrowed, interest rate and maturity/renewal date.

¹⁰ Collins, *Supra* note 1.

¹¹ "UK Crowdfunding." UKCFA. UKCFA, 2012. Web. 14 June 2013. <<http://www.ukcfa.org.uk/faqs>>.

¹² Equities represent ownership interest held by shareholders in a corporation, such as a stock. Unlike holders of debt securities who generally receive only interest and the repayment of the principal, holders of equity securities are able to profit from capital gains.

¹³ *Supra* note 11.

¹⁴ *Id.*

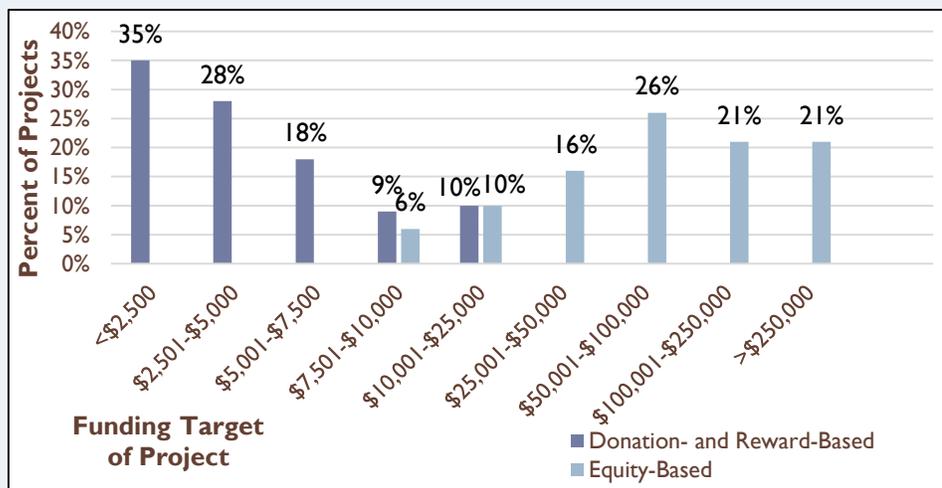
Solar Crowdfunding

Within the different categories of crowdfunding (debt, equity, donation and no-interest lending) equity- and debt-based crowdfunding grew most quickly globally between 2009 and 2012 (although much of this rate can be attributed to it being the youngest sector within crowdfunding). As shown in **Figure 2.1**, the compound annual growth rate (CAGR) from 2009 to 2012 for debt- and equity-based crowdfunding was 114%, significantly higher than the CAGR for lending- and donation-based crowdfunding (50% and 41%, respectively). **Figure 2.2** shows the spread of offerings in different crowdfunding categories distributed across a range of funding targets. The 42% of equity-based funding which is derived from projects that raised \$100,000 or more is significant because it suggests that crowdfunding is capable of raising large sums,¹⁵ and proves its viability as an alternative to VCs as a source of capital for startups.

Figure 2.1 Global Crowdfunding Growth Rates from 2009 to 2012¹⁶

2009-2012	Debt- and Equity-Crowdfunding	Lending-Based Crowdfunding	Donation-Based Crowdfunding
Compound Annual Growth Rate (CAGR)	114%	50%	41%

Figure 2.2 Distribution of Offerings across Different Funding Targets¹⁷



IV. Crowdfunding and the JOBS Act

¹⁵ *Id.*

¹⁶ "Crowdfunding Industry Report: Market Trends, Composition and Crowdfunding Platforms." *Massolution*. Massolution. May 2012. Web 21 June 2013. <www.massolution.com>.

¹⁷ *Id.*

Solar Crowdfunding

I. Summary – On April 5, 2012, President Obama signed the Jumpstart our Business Startups (JOBS) Act into law. The Act aims to minimize barriers for small businesses and startups to access capital and includes several clauses pertaining directly to crowdfunding. Under Title III, the Act creates an exemption to rules governing the sale of securities by allowing “US issuers to raise up to \$1 million per year from the general public, including non-accredited investors, through publicly accessible websites called funding portals.”¹⁸ Once this rule is in place, individuals with either a net worth or annual salary of \$100,000 or more will be able to invest up to either \$100,000 or 10% of their annual income per year, whichever is greater, into privately held businesses. Individuals earning less than \$100,000 per year on an annual basis may invest up to \$2,000 or 5% of their annual income each year. Businesses, in turn, will be permitted to raise up to \$1 million, provided that the transactions are conducted through a platform which is subject to the supervision of the Securities and Exchange Commission (SEC).¹⁹

Once the Title III exemption regulations are finalized, the statute will make loans to startups more attractive and easy to obtain because investors will have the potential to receive a ROI. Until the SEC and the Financial Industry Regulatory Authority (FINRA) adopt final rules, however, it is still illegal to issue or sell securities if relying on the Title III exemption.²⁰ Unfortunately, the deadline of establishing these rules by December 31, 2012 has already passed without the SEC or FINRA proposing any regulations, creating confusion for the crowdfunding industry.²¹

2. New rules on disclosures²² – Once the final rules are established, issuers will have to register with the SEC and comply with its policies regarding disclosure of:

- Description of the business and financial condition
- Description of the ownership and capital structure
- Financial statements
 - If intending to raise over \$100,000, the statements must be reviewed by an independent public accountant
 - If intending to raise over \$500,000, the statements must be audited
- Periodic release of additional documents and reports if the offering is successful²³

3. “All-or-nothing” aspect of Title III – Title III of the JOBS Act mandates that offerings must employ an “all-or-nothing” approach.²⁴ In essence, if a company fails to reach its funding target by the established deadline, the company cannot accept any of the capital that may have been raised during that period. The money is either returned to the lender or held in an account within the lending platform from which the lender can reinvest it into a different project offered through the same portal.

¹⁸ Hecht, Andrew A. “Current Crowdfunding Methods.” *Practical Law The Journal* June 2013: 16-18. Web.

¹⁹ Collins, *Supra* note 1.

²⁰ Hecht, *Supra* note 17.

²¹ Hecht, Andrew A. “Crowdfunding Right Now: Alternatives to Title III of the JOBS Act.” *Practical Law The Journal* 16 May 2013: n. pag. *Practical Law*. Web. 27 June 2013.

²² On July 10th, 2013, the SEC finalized rulings on Title II of the Act, a decision which created a new offering called 506(c) to allow companies to advertise to the public that they are fundraising. While this motion bodes well for the future of crowdfunding, as of August 1st, 2013, the SEC had yet to act on Title III. See:

<http://www.forbes.com/sites/chancebarnett/2013/07/19/sec-finally-moves-on-equity-crowdfunding-phase-1/> for more details

²³ *Id.*

²⁴ Hecht, *Supra* note 17.

Solar Crowdfunding

V. Possibilities for Crowdfunding within the Solar Industry: the case of Mosaic, Inc.

Despite the SEC's and FINRA's delay in establishing rules to officially enact the Title III exemption, the crowdfunding industry has not stood still. Indeed, over the last several years, entrepreneurs have developed several new innovative methods for crowdfunding, such as the accredited-investor, broker-dealer and peer-to-peer models. The most famous example relevant to solar PV, however, is the intrastate offerings²⁵ strategy utilized by Mosaic, Inc.

Mosaic is an online crowdfunding platform marketing intrastate offerings that are not held to the SEC registration requirements because of the Section 3(a)(11) Securities Act registration exemption. This exemption states that a funding portal may offer and sell securities to non-accredited investors only if they are residents of the state in which the offering is registered.²⁶ In addition, Mosaic has made use of the SEC's Rule 504 and Rule 506 of Regulation D²⁷ tenets which allow for the sale of securities to investors in a private placement transaction.²⁸ By employing these exemptions, Mosaic can legally market its offerings to non-accredited investors – although individual states' laws regarding the buying and selling of securities vary and therefore Mosaic can only post offerings in California and New York, and possibly Washington D.C. Currently no other state appears to offer the same regulatory framework as California and New York which would allow for a Mosaic-like debt-based crowdfunding offering without relying on the JOBS Act Title III exemption.

Mosaic's platform allows non-accredited investors to finance offerings by lending as little as \$25. ROI varies from project to project;²⁹ however, since the site's launch in January 2013, investors have received an average of 4.5-6.5% risk-adjusted annual returns.³⁰ Mosaic also promotes transparency by posting a prospectus of each offering on the site so that potential investors can research the companies and projects seeking funding. As with any crowdfunding investment, the notes Mosaic issues are not insured; however, to date all of Mosaic's offerings have met their capital targets with a default rate of zero. Although principal payments can vary from one month to the next, lenders will ultimately receive the same predetermined yield on their investments, assuming the company does not default.³¹

²⁵ An intrastate offering is the selling of a security that can only be purchased in the state in which it is being issued. Because the offering does not include more than one state, it does not fall under the jurisdiction of the Securities and Exchange Commission and therefore does not need to be registered with the SEC. The offering does, however, fall under the jurisdiction of state regulators.

²⁶ Hecht, *Supra* note 20

²⁷ *Id.*

²⁸ A private placement transaction is the sale of securities to a relatively small number of select investors as a way of raising capital. Investors involved in private placements are usually large banks, mutual funds, insurance companies and pension funds. The SEC's Regulation D pertains to private placement transactions by allowing smaller companies to raise capital through the sale of equity or debt securities without having to register their securities with the SEC.

²⁹ The details of each offering can be found in the prospectuses posted on the Mosaic website

³⁰ Morris, Jesse. "Other People's Money: How Crowdfunding Lowers the Cost of Solar Energy." Weblog post. *RMI Outlet*. Rocky Mountain Institute, 6 Mar. 2013. Web. 6 June 2013. <http://blog.rmi.org/blog_2013_03_6_Other_Peoples_Money>.

³¹ Karlin, Samuel. "Question Regarding Mosaic Investments." 6 June 2013. Email.

Solar Crowdfunding

VI. Pros and Cons of Solar Crowdfunding

I. Pros

- a. **Size of investor pool** – With a minimal barrier of entry (e.g. \$25 at Mosaic) nearly anyone in California and New York can become an investor. Once the SEC and FINRA establish the final regulations for Title III of the JOBS Act, funding platforms will be able to issue securities to non-accredited investors on a nation-wide basis, increasing not only the number of projects that can be offered, but also the pool of potential financiers.
- b. **“Market Stickiness”** – In addition, data from Kiva and Kickstarter show that individuals who participate in crowdfunded offerings demonstrate “market stickiness;”³² there is a high likelihood that individuals who invest in one project will participate in additional offerings because of the personal connection they feel to the projects.³³
- c. **Restructure solar financing** – Benefits extend beyond the projects receiving loans and the investors purchasing debt; indeed, crowdfunding has the potential to restructure solar financing. Currently, approximately 75% of residential and 40% of commercial solar photovoltaic systems use “third-party ownership” financing models, often with interest rates of 15% or greater.³⁴ These high interest rates then translate into more expensive electricity for the consumer. The lower interest rates (approximately 4.5-6.5%) generated through crowdfunding, however, can help drive down these rates of return, contributing to a system which not only provides a viable source of funding for the company and creates a profitable investment for the lender, but also lowers the ultimate cost of electricity for the consumer. While other methods of capital restructuring such as real estate investment trusts and master limited partnerships would require legislative action in order to be applicable to the solar industry,³⁵ crowdfunding legislation is already in place. Once Title III regulations are finalized, crowdfunding will be able to make an even greater impact.

2. Cons

- a. **Confined to intrastate transactions** – Until the SEC and FINRA adopt final regulations, debt-based crowdfunding is confined to intrastate transactions. This limitation severely restricts the number of potential investors platforms can market to, especially because only a few states allow offerings to non-accredited investors. Until regulations change, it remains debatable whether crowdfunding can be implemented on a large scale.
- b. **Risk** – Crowdfunding offerings also represent higher-risk investments than do insured investments such as certificates of deposit. Because the companies selling debt on

³² “Market Stickiness” refers to the ability of a market to retain consumers/participants. If a market is “sticky,” it means that it is able to convert a high percentage of one-time consumers into repeat customers (or in this case, repeat investors).

³³ Bullard, *Supra* note 4.

³⁴ Morris, *Supra* note 27.

³⁵ *Id.*

Solar Crowdfunding

crowdfunding platforms are not currently subject to SEC disclosure regulations, they have no obligation to make available the financial statements and/or other documents describing the company's leadership, ownership and history the way that publicly traded organizations do.

- c. **Possibility of fraudulent offerings** – Although companies will be required to provide some of this information once the SEC and FINRA finalize regulations for Title III, currently investors in crowdfunded projects must rely on the internal vetting methods the platform uses to eliminate fraudulent offerings. Beyond, the platforms' screening methods, investors must trust that "the crowd" will collectively recognize dishonest offerings and refrain from funding them fully³⁶ (thus preventing any notes from being issued due to the all-or-nothing approach). Other than these safeguards, however, there is virtually no investor protection. As more platforms enter the market, competition to offer securities for genuine projects could increase;³⁷ however, currently there are few mechanisms to protect financiers from fraud, especially given that the loans are uninsured and there is no penalty for companies that default.
- d. **Cost of disclosure** – In addition, there is a possibility that the SEC will implement extensive disclosure requirements once Title III is finalized, a ruling which could prove prohibitively time- and/or labor-intensive for many companies.³⁸ If this is the case, it is likely that solar crowdfunding will not see the growth that many are predicting.
- e. **Exit Strategy** – Finally, crowdfunding offers no clear exit strategy for companies. Once they have paid back the loans, companies have no further obligation to investors. In contrast, the traditional equity funding model gives shareholders certain ownership rights. In the case of crowdfunding, it remains unclear whether companies will be able to independently generate enough revenue to continue operations after they have paid off their debt, and if not, whether participating in a second round of crowdfunding could be a viable option. As for the investors, to date it appears that many choose to reinvest their yields into new offerings; however, it is possible that crowdfunding's market "stickiness" will decrease over time, raising the question of whether the pool of potential investors will be large enough to continue meeting companies' capital targets in the long-term.

³⁶ Collins, *Supra* note 1.

³⁷ *Id.*

³⁸ Hecht, Andrew A. "Crowdfunding Right Now: Alternatives to Title III of the JOBS Act." *Practical Law, The Journal* 16 May 2013: n. page. *Practical Law*. Web. 27 June 2013.

Solar Crowdfunding

VII. Conclusion

Crowdfunding presents an innovative alternative to traditional funding methods for solar. Although lack of final SEC and FINRA regulations currently make debt- and equity-based crowdfunding investments risky, the preliminary success of Mosaic's offerings indicate that crowdfunding has the potential to benefit both solar companies and investors. To date crowdfunding has been an effective tool for investors to develop personal connections to companies and receive a modest return on their investment. Crowdfunding for solar has the potential to provide additional financing support to allow a diverse set of companies to reach their funding targets without the higher capital costs associated with venture capital or tax equity financing.

VIII. Useful Links

- DOE SunShot Initiative <http://www1.eere.energy.gov/solar/sunshot/>
- Mosaic, Inc. <https://joinmosaic.com/>

Authors: Holly Wilson, Chad Laurent, and Jon Crowe, Meister Consultants Group, Inc.

Meister Consultants Group, Inc. | 98 N. Washington St., Suite 302, Boston, MA 02114 | www.mc-group.com

This fact sheet, produced by Meister Consultants Group, Inc., is supported by the following team of organizations: ICLEI-USA; International City/County Management Association (ICMA); Solar Electric Power Association (SEPA); Interstate Renewable Energy Council, Inc. (IREC); North Carolina Solar Center (NCSC); The Solar Foundation (TSF); American Planning Association (APA); and National Association of Regional Councils (NARC).

This material is based upon work supported by the U.S. Department of Energy under Award Number DE-EE0003525. This fact sheet was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe on privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.