



Energy Efficiency Financing: Frequently Asked Questions



Joule Assets' Mike Gordon, CEO, and Dennis Quinn, COO, recently presented a webinar, "Energy Efficiency Financing...Failure or Opportunity?" At the end of the session, the pair invited questions from the audience. We've compiled the answers to these questions below.

If you have further questions about how Joule Assets' financing solutions are changing the energy efficiency landscape, register for our upcoming webinar: ["Energy Efficiency Financing: Debunking the Myths and Misconceptions"](#) at 2 PM EDT, Thursday, Apr 17, 2014.

Q: Can you give a real-world example of how you work with contractors?

Let's take a closer look at how Joule Assets partnered with Ener.co, a New York-based firm focused on developing nanotechnology products for existing facilities to improve the efficiency of their HVAC systems.

- By the end of 2012, Ener.co began the process of commercializing their flagship product, *NanoSure*.
- *NanoSure* is a spray-on coating applied directly to an air-conditioner's heating coils.
- The expected result ranges from 10% to 40% reduction in the A/C's energy consumption after the application of *Nanosure*.
- This is largely due to two compounding factors: Reduced corrosion, as well as increased thermal conductivity in air-cooled condenser coils.

Ener.co's Challenge

- Facilities managers were enthusiastic when they learned about the potential savings from electricity bills following the application of *NanoSure*.
- The main challenge for these decision makers was the timing, as the facility's budget was usually already in place when they found out about *NanoSure*. As a result, there would be no money set aside until the next budget cycle, leading to an extended sales cycle.
- Because of this, Ener.co built up a pipeline of nearly \$1 million in approved projects that would not be implemented until the next fiscal cycle.

Our Solution

- Joule Assets and Ener.co developed a financing structure in which Joule Assets would extend a fixed amount of capital for Ener.co to offer to their customers.
- Customers who opted for financing would pay **zero** money upfront for NanoSure.
- Instead, they would pay Ener.co a monthly fixed payment over the course of a few years.
- This payment was based on a percentage of the customer's deemed energy savings.
- Ener.co would pay back the capital over the course of the contract length.
- Additionally, Ener.co paid Joule Assets a small percentage of the deemed energy savings payments.

Additional Cashflows

- Joule would use its internal market expertise to assist in qualifying for rebates, incentives, and other market cash flows.
- These cash flows would be divided between Ener.co and Joule.

The result of this relationship: While Ener.co initially only focused on the New York City market, Joule's offering allowed for an immediate expansion into both Connecticut and New Jersey due to this additional revenue.

Q: How do you perform the verification of energy savings?

We use third-party engineering firms. To the extent that we have large exposure on a single project, we'll look to retain third party performance insurance as well.

Q: What is your minimum size of investment?

Projects can be as small as \$10,000; our sweet spot typically ranges from \$50,000- \$500,000.

Q: It sounds like you provide the financing to contractors. Does the facility owner have to sign off on the financing?

No. The contractor may have to change its existing Customer Agreement to ensure that they are able to deliver on their financing contract with Joule Assets, but the facility owner does not transact directly with Joule's ERA Fund.

Q: How do you determine the cost of the financing?

Financing rates depend on the geographic area, the contractor and the diversity of projects pursued. Financing rates range from 5-8%. The upside that we share with the contractor and the customer comes in the form of conditional cash flows (rebates, market revenues, rate optimization, etc.).

Q: What's the typical length of a financing contract?

Generally 3-5 years.

Q: What does a contractor need to think about to pursue this kind of financing?

Contractors suitable for Joule Assets financing:

- Seek long-term relationships with their customers—rather than just seeking up-front payment
- Stand by their performance, i.e. energy-saving performance
- Desire returns over the contract life
- Intend to seek customer renewals after the end of their existing contract
- Are confident in their project delivery, as they do have first loss exposure
- Have an established measurement and verification process

Q: Who gets the demand response (DR) revenue in these deals?

DR revenues are shared between the customer, contractor, and the Energy Reduction Assets Fund. Revenues are shared as equally as possible so that our incentives are aligned.

Q: What happens if the estimated savings aren't realized? Who covers the payments, the contractor or the customer?

The contractor is stepping up to that performance, if there is a shortfall, the ERA Fund has to get paid its capital and base return. If there are any shortfalls, the contractor needs to make that up. It really depends on a contractor's contract structure. It's rare to have a MESA-type contract in our portfolio.

Q: Is the financing made available to countries outside of the United States?

Absolutely.

Q: Could you please explain the loan loss reserve?

The size of the loan-loss reserve decreases over time based on good performance.

Q: How do you compete with a program offered by a large utility or retailer, such as an Efficiency Made EasySM, where they will finance energy efficiency and roll everything into the bill?

We do not compete with those programs but we can prospectively work with them. We are open to working with contractors who are participating in Efficiency Made EasySM to provide either alternative or integrated financing products.

Q: How much is the interest rate on a loan, for example of \$50,000?

The base interest rate is about 5-8%. We tend to be on the bottom end of that spectrum when there are diverse projects, the loan loss reserve is ample, the experience with the supplier is superb and customer engagement is a critical component of the offering. We tend to be on the top end of that structure when there is more disengagement, less diversity.

Q: Who are the current investors in the Energy Reduction Assets Fund? How much capital are you raising? Are there other similar VC funds focused in this space?

We will deploy a minimum of \$100 million over the next few years. We haven't seen similar funds, and one of the reasons we are so open about this structure is that we don't really see a lot of it as replicable.

Q: Do you include solar and storage?

Yes we do, but from our standpoint solar should come after energy efficiency.

Q: How can we qualify as a contractor?

We are in the process of engaging and talking to solution providers and contractors out there to help them understand more about the process. We are happy to talk about our process with anyone who is interested. We are actively seeking contractors from the major markets; PJM, Northeast, East Coast, New York area, West Coast, California.

Throughout Europe there are fantastic opportunities: the Nordic States, Benelux, Austria, Serbia, Croatia, Italy, France, United Kingdom and Ireland. The tenure for the loans is 3-5 years. Our first efforts are in the U.S. and Europe but we will evaluate other country's market size.

Q: We have an energy storage solution, where we sell demand response directly to PJM. Do you finance such deals?

Absolutely, those are classic conditional cash flows; there may even be other benefits.

Q: On a remodel, will you finance upgrades that don't produce energy savings?

As long as those are separated out from a performance standpoint we are open to it. But we are very focused on ensuring that the capital we deploy is for

energy reduction assets so we are less enthused about upgrades that don't go to creating energy reduction assets.

Q: Any interest in solar projects outside of the U.S.?

Potentially—not discounting it, but it's a matter of the markets we understand; it's a matter of what the solar projects are doing and the counter-parties end size.

Q: How are the loan loss reserve levels determined?

It's a measure of the contractor, the experience, the type of measure, the number of projects, exposure to a few large projects or many small ones, in short, how dispersed is the risk. If the two or three largest exposure pieces add up to a certain amount, you can probably determine your loan loss reserve based on the failure of those two or three projects.

Q: What are typical questions that Joule will ask to contractors in determining financing?

1. How many proposals are you making?
2. How many deals are you closing?
3. How many more might you close with constructed financing?
4. What are the resistance questions you are getting from your clients? How can we solve those resistance questions with both a financing product and our joint material?

Further information on Joule Assets' financing solutions

Do you want to know more? You can revisit our introductory [webinar “Energy Efficiency Financing...Failure or Opportunity?”](#) [here](#).

And remember to register for our upcoming webinar: “Energy Efficiency Financing: Debunking the Myths and Misconceptions” at 2 p.m. EDT, Thursday, Apr 17, 2014.

About Joule Assets

Joule Assets delivers financing solutions backed by performance insurance for energy efficiency (EE) and demand response (DR) initiatives and projects. We create Energy Reduction Assets (ERA) by integrating simple financing and insurance options with untapped revenue streams from our market analysis software tools like ERA-DR. Leveraging our proprietary database, software and extensive industry expertise, our mission is to expand commerce and reduce barriers in these complicated markets by creating transparency and providing financing solutions.