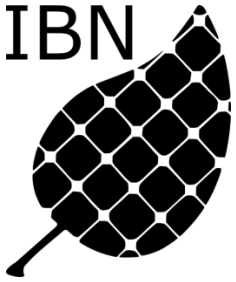

Inspired by Nature.
Solar for Everyone.

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What we do…

At Inspired by Nature (IBN) we pay people to go solar. Through hardware development and a new third party solar structure we believe we have produced a solar program that is accessible to anyone. We've focused our development on urban and low income communities because this is currently an overlooked market for solar and we believe this is the market where solar can have the most positive effect.

How we do it…

In order to move into the urban solar market, we recognized two major barriers that needed to be addressed: limited roof space and the financial lifestyle of the urban community. Due to architecture and ordinances, *e.g.* fire codes, roof space or many urban homes can be extremely limited. This is problematic since it is almost always more profitable to mount more solar panels in each installation; if space is too limited it is not economically viable to install solar at all. To address this issue we designed a tiered mounting system that is able to place multiple solar panels in the footprint of a single panel mounted conventionally. By mounting vertically, we are able to capture the solar resource from spaces where hardware cannot be placed. We currently have a working prototype of this design and are analyzing data from it to better evaluate efficiency and economic gains. Please feel free to contact us for any updates on the prototype, contact information is provided at the top of this document.

Since the urban market tends to have higher rates or middle and lower income households, we immediately recognized the value solar could bring to this community. It wasn't until our primary market research though that we recognized the design considerations that had to be addressed for a solar program to succeed in this demographic. On interviewee, Michelle, told us that she was interested in solar but as hesitant about the unpredictable nature of her savings. She explained that her budget was extremely tight, and if she budgeted for savings she didn't receive one month it could be the difference between making it and having to go to the food bank. Another interviewee had an electricity bill less than $10 a month, so the savings from conventional solar PPA would not be worth her time. We also had a few people show interest in getting savings in a lump sum that they could immediately invest to help them

save more or increase their quality of life. In general, we recognized three major goals for our program: predictability, independence from the electricity bill, and money on demand.

To create the IBN solar rental program, we took inspiration from cell tower leases. We decided to simply pay the homeowner a monthly rent per square foot of solar installed on their roof. To recoup our investment, we will use a PPA with the homeowner where our energy is sold at the market rate; any excess will be sold wholesale to the utility company. This way the homeowner receives a predictable payment that is unrelated to their electricity usage and has no notable change to their bill or lifestyle. In the event that the homeowner stops paying their bill we can withhold rental payments and eventually recover our hardware if it continues.

Our team has even discussed a novel cash in advance system, where the homeowner could receive a lump sum upon signing the contract in lieu of rental payments. We believe this program is viable because it would be comparable to a bank loan but with lower risk; the rate of default on utility payments is lower than the rate of default for loan debt. This seems intuitive too, people will almost always prioritize keeping their lights on over paying off their loans. We would like to investigate this payment method further during our pilot program.

Why we do it…

The IBN team is a group of social entrepreneurs, when we see a problem or opportunity we want to make something positive of it. That's why it all came together when we started the team in late 2015. Each member had an interest in solar energy and a desire to make a change. Solar's potential impact in the energy field is clear but it wasn't until we started working on the project and doing market research that we began to understand the great potential social impact. Solar has the ability to decentralize energy production and put money back in homeowners' pockets. If this money goes back to the people who truly need it, we think it can have sweeping consequences for their lives and the communities they live in. Much like Y Combinator's recently launched Basic Income Project, we believe our solar rental program can help people better themselves by decreasing their financial stressors. From our market research there is clearly the desire and need for a program like this.

Also of course our team is a group of scientists, hackers, makers, and activists; we couldn't pass up the opportunity to try to bring an idea like this to fruition.

Who we are…

As eluded to above, our team has a strong technical and social background. CEO Eric Seabron is a PhD candidate in Material Science with a BS in Electrical Engineering. Raised in Baltimore, MD, he has always had an interest in urban revitalization work. COO Keegan Lane has a BS in Chemical Engineering. During his time in undergrad he took part in a clean cookstove project for Haiti that had a strong focus on design and cultural considerations for product implementation. CTO Brayden Turner has a BS in Physics with a concentration in Technology Entrepreneurship and a minor in Computer Science. He has always been interested in the startup and hacker culture and took part in the UIUC Entrecorps program during his time

in undergrad. CMO Joseph Davis has a BS in Broadcast Journalism. He has experience in the Chicago startup community from a past internship which inspired him to work on a project that could improve people's lives. The team came together in late 2015 at the University of Illinois at Urbana-Champaign.

Our team also has an advisor Johnathan Coates. Johnathan has over 20 years' experience in construction management and operations, including solar projects. He is extremely interested in our project and met with us extensively in person during our time in San Francisco for our Y Combinator interview. A letter of intent is available upon request.

How we will implement…

We are currently in the prototyping and seed funding stage. We have built a full scale model of our tiered solar panel mounting system and we are testing it to validate energy gains and economic feasibility. We are currently working to create an updated tech video for this structure, feel free to contact our team if you would like more information about the hardware.

Our next step, once we receive seed funding, is to begin a pilot program in Philadelphia, PA. We are looking for at least $100,000 to fund this program. We hope to begin by September 2016; we need to move fast so we can best exploit favorable solar policy to help accelerate us. Philly was chosen because it has favorable solar policy, a large number of flat roof homes, good geographic location, and manageable size. The pilot program will be 6 – 12 months long depending on results. We plan to included 5 households in the pilot program but we would like to expand this number if we are able to raise enough in our seed round. These household contracts will be procured through direct interaction with the homeowners, we do not plan on spending on advertising until we have validated our minimum viable service. Location and size of the pilot program are variable depending on our seed funding opportunities.

From the pilot program we will expand to a greater presence in Philly. Once established in Philly, we will use the city as a proof of concept to expand to other cities. Our team has discussed using a franchising model to assist the rapid expansion of IBN. By moving much of the capital responsibility to the franchisee, IBN is able to expand immediately, instead of waiting for the long return on investment from each installation or relying too heavily on venture capital funding. We plan to discuss this option further once the seed program is established.

Our expected profitability…

We expect each household installation to have approximately a 10-year payback period. This is expected due to the long term nature of solar investments, but may shorten in response to increasing energy prices and decreasing solar cost. Over the lifetime of the panel, at least 25 years, we expect to triple the capital investment.

It should be noted that all installed panels remain company owned. This means the majority of invested capital will be moved into a reasonably liquid asset owned by IBN. Although tough to talk about at this stage, if anything was to fail, much of the value of IBN could be recouped by liquidating these panel.

Capital gains must be paid on sale value above the depreciation value; solar panels have a 6-year depreciation.

Currently we are seeking at least $100,000 in seed funding for our pilot program to begin immediately, as mentioned above. Beyond this program we will be looking to raise a few million dollars in later rounds to fund full scale implementation, preferable starting in early 2017. The following financial predications are based on $10M capital beginning in 2017, but most results scale rather linearly with the initial capital; ROI is the exception to this, it remains relatively constant. By the end of 2018 we expect nearly 700 program members producing 3,000 MWh/yr and a revenue of over $1M per year. The ROI by the end of year 2 is 0.157. By the end of 2021, year 5, we expect to have over 1,800 members producing 8,100 MWh/yr and a revenue of $2.3M per year. The expected ROI at this time is 1.242. Even if we were to stop expansion completely at this point, we expect this revenue to continue for at least the next 20 years until the end of the panel lifetime. Market saturation is not a concern. Our entire program up to year 5, even assuming we have not yet expanded to other cities, represents less than 1% penetration into the initial target market of owner occupied homes in the Philadelphia metropolitan area. Current solar installations represent a negligible fraction of the market in East Coast metropolitan areas.

We truly believe this program will have a great financial and social impact, we just need the right team to invest in us.