

Point of View

ClimateSpark: How Toronto Atmospheric Fund Used Web 2.0 Crowdsourcing and Ideation Methods to Find Innovative Investment Opportunities and Advance Urban Greenhouse Gas Reductions

When you are a small and somewhat picky investor, it can be difficult to find the perfect investee. That is why the Toronto Atmospheric Fund (TAF) is using online dating to meet potential financial partners.

We aren't actually posting our profile on Lavalife. But we are turning to web 2.0 tools and online crowdsourcing to try to find innovative investment opportunities that meet our double bottom line: decent investment returns coupled with quantifiable greenhouse gas (GHG) emissions. By using the web and social media tools, we greatly expand our net for capturing potential new partners; we raise awareness of all that TAF brings to the table from an investment perspective—including sectoral expertise, knowledge networks, and scale-up partners; and we get help from lots of people in identifying, improving, and filtering opportunities.

TAF's preference for investing in more established enterprises rather than high-risk start ups presents a conundrum: how to attract established businesses with relatively small investment dollars (our deals are usually in the \$100-\$500K range). The answer lies in helping such businesses launch new endeavors or new initiatives.

Property developer Tridel, for example, didn't need TAF's help to finance its condo construction. But it did benefit from TAF's expertise in piloting a new financing approach that led to more energy-efficient construction. TAF understood the problem Tridel faced in wanting to keep unit costs competitive while introducing more advanced energy-efficient construction. The Green Condo Loan addressed this by financing energy-efficiency upgrades while making the condo corporation, rather than Tridel, responsible for actually servicing the loan based on the utility cost-savings unit owners would realize.

Similarly, Glenbarra Energy Systems has lots of experience in installing solar energy systems. But the high capital cost of such systems presented an opportunity for TAF and Glenbarra to work together to develop a "solar utility" approach. Using TAF financing, Glenbarra has now created a subsidiary (GEMCO) that owns and operates solar water heating systems on three (soon to be five) city facilities. The city is guaranteed hot water at the same cost it would be paying if it used natural gas without putting up anything more than roof space.

From these examples, you can see that TAF is a somewhat unconventional financier, at least in terms of deal structure. We're pretty conventional when it comes to expecting our money back with interest! That's what drew us to the "long tail" potential of crowdsourcing new ventures. We knew enterprises that could benefit from our approach were out there, but finding them was a bit like searching for the proverbial needle in the haystack.

Thus was born ClimateSpark, our online business challenge. Launched in the fall of 2010, ClimateSpark offered a relatively modest cash prize (\$10,000) for the best business venture that could profitably reduce greenhouse gas emissions. Teaming up with two other cleantech investors—Investeco and Best Funds—we created a potential \$15 million capital investment pool, which was key to attracting contestants. And we lined up a bunch of very savvy sectoral experts to weigh in on the proposals.

A chance to raise your public profile; a chance to strut your stuff in front of three serious clean tech investors (as well as contest sponsor TD Bank); and a chance to get feedback from some of the sharpest minds in the climate and clean tech area—those opportunities were enough to attract close to 40 companies to enter the ClimateSpark Business Challenge, which also built an online reviewer community of 800 individuals over five months. Those 800 entrepreneurs, inventors, business people, and students poked and prodded the various proposals for a couple of months, gave them a thumbs up or thumbs down rating or a more detailed review, and posed tough questions. This dynamic interaction identified the nine best proposals to go forward to a second round.

Round 2 gave the contestants one more chance to impress the community with their idea, technology, and business plan before we opened the "Spark Market," where the community members laid the points they had accumulated through their online activity on the line to buy virtual shares in what they thought were the strongest proposals.

The Spark Market was conceived as a "prediction market": Back the right venture and you would be points wealthy as the value of your shares rose. Back the wrong venture and you could be wiped out. (Community members could later use their points to participate in an online auction for everything from an iPad to lunch with world-renowned author Don Tapscott.) The underlying theory of the prediction market is fairly mercenary: the strongest will rise to the top because folks are inclined to back what they see as the strongest proposal, rather than simply their sentimental favorite, in order to increase their wealth.

In the end, we declared three winners. Zerofootprint had the best combined-score and took the \$10,000 prize for its Talking Plug device to help homeowners better manage their energy use. Morgan Solar won the Expert's Choice for its groundbreaking concentrated

solar technology. Earthwall, a developer of a “rammed earth” building system that puts a new twist on an ancient building technique, was the people’s choice.

There was no shortage of other fascinating ideas: intelligent glass; underwater energy storage; industrial fans that look like whale fins; smart traffic signal controls; and gearless wind turbines; along with some new approaches to established businesses, including renewable energy franchising and turnkey mini power plants for buildings and homes. We brought it all together at the ClimateSpark IGNITE event that celebrated the winners and this new investing approach with a crowd of more than 200 green business types.

ClimateSpark was itself a prototype and we hit our share of bumps along the road. There were the inevitable technical glitches (it took a couple of tries to get the prediction market feature of the website running correctly, uploading videos proved challenging, etc.). It was a challenge to keep the community engaged and contestants responding. And there was a hard-to-resolve tension between contestants not wanting to reveal too much about their new technologies or approaches and the community’s need to better understand the potential of their proposed new approach; this goes to the heart of ‘open source’ innovation or ‘ideation’ which only works when there is openness and willingness to engage. It takes a lot of hands-on management to keep the momentum building and things running smoothly, even if the contest is virtual.

Live and learn and live some more. We are now deep into planning a second ClimateSpark focused on social ventures—ventures that combine a social purpose with financial sustainability. Of course, as before, one of the social purposes we will be looking for is GHG emissions reduction. We are adding a couple of offline elements to address some of the limitations of the online approach. The online challenge will select 10 ventures, which will then get an opportunity to participate in an in-person business development boot camp, and successful projects will get pitched to a group of grant makers and investors interested in backing these sorts of transformative new approaches.

For TAF, this crowdsourcing approach isn’t the only solution to finding good deals, but it is an important new door we can open to stimulate and invite new opportunities. Just as with conventional deal making, it requires lots of elbow grease. The payoff, however, can be on a whole different scale because of the potential to instantly transform your playing field from your local network to the world.

Julia Langer
CEO, Toronto Atmospheric Fund
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Biography

Julia is a lifelong environmentalist, now focused on addressing climate change from a municipal angle. She is Chief Executive Director of the Toronto Atmospheric Fund (TAF), an arm's length agency of the City created in 1991 to advance solutions to climate change and air pollution (For more information, please go to www.toronto.ca/taf). Previously, during nearly 17 years at World Wildlife Fund (WWF), she led various campaigns including those to address climate change, protect marine turtles, ban toxic pesticides and hormone-disrupting chemicals, and advance organic agriculture. She can be reached at jlanger@tafund.org