

ENERGY MONITORING CEO INTERVIEW

By Chris, on February 2nd, 2011



Peter Porteous and PowerCost Monitor

I was lucky enough to snag an email interview with the CEO of Blue Line Innovations, Peter Porteous. Blue Line manufactures the Power Cost Monitor, which we've written about several times on the Mapawatt Blog. They've come up lately because they are one of the only device manufacturers that I know of who have deals with both [Microsoft](#) AND [Google](#).

Peter answered all my questions in great detail, and I'm sure you'll find this intimate look into the home energy monitoring interesting!

The only changes I've made are adding some links to Mapawatt Blog posts. See my note at the very end!!!

1.) How did you get involved in the residential power monitoring device market?

Well it's a classic entrepreneurial story. The company was founded by 2 brothers in St John's Newfoundland, Canada. One brother was a recent Engineering grad from Memorial University and the other brother had a business background with a Government business accelerator program called ACOA. The family was chatting one day complaining about the high cost of electricity and wished they had a "speedometer" for electricity....and that was the beginning, an idea around the kitchen table. The company was formed in 2003 with the help of the Provincial Government in NL and also the accelerator program, ACOA.

Blue Line Innovations was fortunate to "catch the eye" of Hydro One in Ontario who was the first utility to pilot the PowerCost Monitor, first with a 500 unit program in 2005 and then a substantial program across 30,000 families. Since that time Blue Line has worked with +125 different utilities in the US and Canada both in research projects and customer facing programs.

While the PowerCost Monitor has evolved over time the core technology and the founding design principles have remained true to the original vision – user friendly, self-install, wide spread compatibility, universal design (analogue, digital, smart meters), accurate and wireless.

2.) How has the market changed over the last 5 years? 2 years?

Wow, great question and probably a terrific Harvard case down the road. Clearly Blue Line was in very early pioneering mode back in 2003 – a market simply didn't exist. I would characterize the past 5 years as moving from nascent to immature. The utilities

were really driving the ship – research, market awareness and testing consumer programs. While there were some niche on line opportunities to purchase energy monitoring equipment the utilities were also the route to market. While it was critical to have the utilities support the category and validate the energy conservation potential clearly the utilities aren't the best equipped to build consumer markets. This was a real challenge and balancing act.

The market in the past 2 years has really progressed especially over the past several months. Clearly consumers are more concerned about energy – both the costs and the impact so the fundamental groundwork was in place for a market to grow up. However I believe the catalyst for momentum really was the emergence of Google PowerMeter and Microsoft Hohm. To have two industry heavy weights enter the energy reporting space each with their own version of free applications has been terrific. Clearly they have provided much needed credibility/validation in addition to their immense marketing and awareness building muscle. Since that time the pace of new entrants with product innovation, consumer choice and energy savings potential has been huge. [When Microsoft, Google, GE, Intel, Apple, Cisco, Honeywell, Verizon, Motorola, Belkin, Whirlpool](#) and others weigh in and decide to enter this category.....momentum and real change is going to happen.

I believe the pace of change is going to increase over the next 12 months. We have already seen the early edge of acquisitions and collaboration – this trend will continue. I also think that we will see two equally strong routes to market emerge – through utilities and independent of utilities, that is direct to consumer via retail and other channels.

3.) How has your business model changed during this time?

The Blue Line business model has changed a lot. As with most startups there are always lots of learning's and you often wish for some "do overs". The terrific news is Blue Line was able to navigate what really has been a 7 year startup curve and is now proven, supported and poised to capitalize on this market that appears ready to bust out.

During the first 5 years of our business life we were exclusively focused on working with the utilities. This was especially critical to validate the technology, refine the product design and to gain broad utility certification. As mentioned to date we have worked with over 125 utilities and have over 130,000 North American families using the PowerCost Monitor. We continue to work with utilities to support their consumer demand reduction initiatives.

In early 2009 it became apparent that eventually this category would need to be broadly available to consumers through traditional retail channels. As the only universal, DIY (no professional installation required) technology we believed that the [PowerCost Monitor could be the foundation technology at retail. We embarked on this strategy under both the Black & Decker and Blue Line brands](#) and are very pleased with the progress to date. Building out broad availability at retail is a key part of our business model today.

In 2010 we really refined our product strategy. While there is significant innovation in the arena of energy monitoring and management the important hinge is access to accurate real time usage data. Parks Associates have released projections that confirm that while smart meters will continue to deploy a limited number of those meters will be in open broadcast mode, thus limiting the market potential for these robust products and solutions. The patented Blue Line sensor has the capability of turning any meter (legacy or new) into a full broadcast meter. Over the next decade Parks Associates projects a total of 6M broadcasting smart meters in the US whereas the Blue Line sensor has the

capability of reaching over 90% of the market today. We see ourselves in the access to real time electricity data business and have developed a series of OE solutions to leverage the Blue Line optical sensor to bridge that real time data to any [network or direct to a device – WiFi, ZigBee, Zwave, PLC](#) or proprietary. The introduction of our own WiFi Gateway in 2010 was really just a vehicle to enable this data to get to the cloud and enable web based applications such as Microsoft Hohm and Google PowerMeter. We hope to announce several new relationships over the coming months. This approach will also allow utilities who perhaps aren't yet ready to make a significant infrastructure upgrade investment to offer these new consumer facing solutions without changing their existing meter deployment.

4.) What do you think it's going to take for consumers to really care about home energy monitoring?

Well the single biggest issue at the moment is awareness. For all of the innovation over the past 2 years most the attention has been internal, within the industry, versus out helping consumers become aware and understand the power of some of these new solutions. ACEEE did a terrific job of synthesizing over 30 research studies into [one summary document](#). The conclusions are concise and clear – the better information made available to consumers the better quality and informed decisions can be made in the home – behavior change will follow. It really is a stepping stone the richer and more useful the information the more significant the energy consumption reduction. Better quality information on a monthly basis, as demonstrated by OPower will generate savings – in the area of 3%. Real time whole home data will generate savings in the area of 5-15%. The next layers of behavior change will be driven by a) increased device based real time reporting – really understanding the characteristics of the key energy consumers in the home, b) more intricate electricity pricing models – provide a significant benefit for homeowners to change their behavior and c) putting the data to work – device based management in the home leveraging real time usage with the specific pricing model.

5.) What regions of the U.S. and Canada do you have the most success in? (I'm guessing it's not the southeastern U.S.)

Interest is strong throughout the US and Canada and is heavily influenced by a local event or media coverage. As people become aware of the potential products and savings opportunities geographic interest "clicks on". That being said there are certainly areas with a consistent overdeveloped interest. In the US the top 10 overdeveloped states are: CA, NY, TX, FL, PA, WA, IL, OH, MA and VA. In Canada the top 5 cities are; Toronto, Ottawa, Calgary, Vancouver and Fredericton.