

CASE STUDY

POWERFUL OPPORTUNITY

Inventive brothers look to boost the power grid with new battery technology.
Report: Jeanne-Vida Douglas

● When brothers Chris and Alex Winter decided to return to Australia in 2001 and set up their own company based on emerging technology, their father's shed seemed like the most logical place to start. From a family of four boys, all of whom had gone into engineering, Chris and Alex had honed their inventiveness in that shed, coming up with all manner of bits and bobs, including a motorised hang glider they test flew as teens.

This time around they were determined to take an interesting technology around zinc bromide batteries and make it into something commercially viable. Zinc bromide batteries are enormous devices that utilities use to store power, which comes from disparate sources such as solar and wind energy.

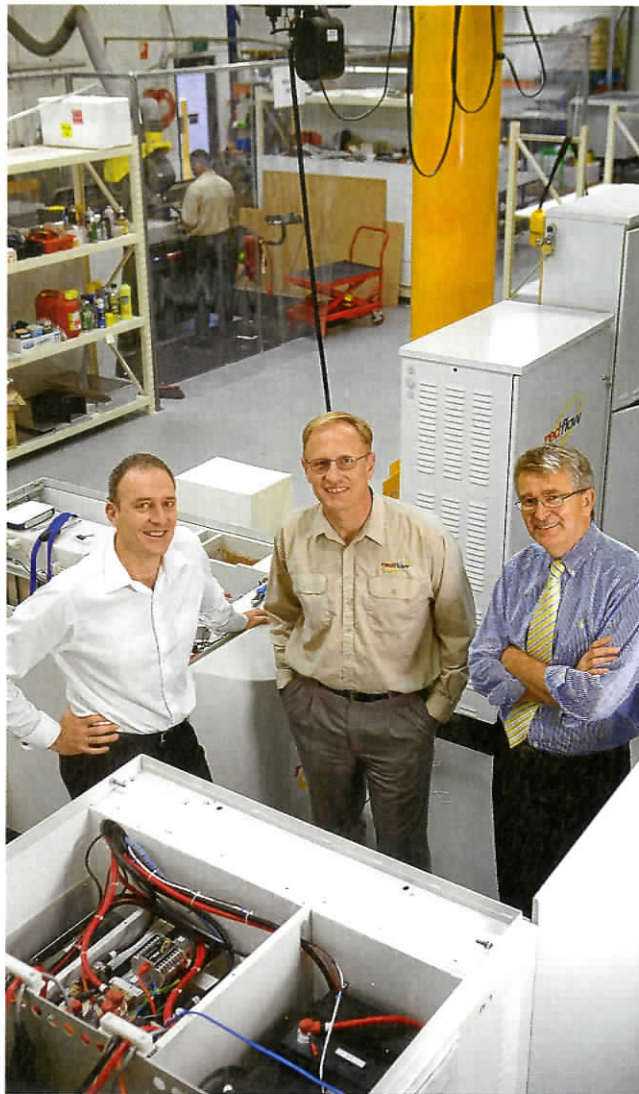
In an effort to increase their chances of success, they joined the Queensland-based technology incubator i.Lab, which quickly brought them back down to earth.

"As two engineers working on a project, one thing we were told early on was that we needed to focus on building a business and not on building a product," Chris Winter says, recalling some early and sage advice.

"We were lucky because Alex, as the inventor, could work on the technology while I could go out and meet people and a lot of the key breakthroughs we had came from people we were introduced to through i.Lab."

Having initially worked on zinc chloride technology, the pair switched their focus to zinc bromide technology, and transferred their efforts for a time to an Austrian facility they'd bought from a company working in a similar area.

"Fortunately we'd worked in the oil industry so we had a few funds to throw into the project," Chris says. "Still, we had no income for seven years and our focus certainly sharpened as the money ran out.



In synergy:
RedFlow's Chris and
Alex Winter, left with
new chief, Phil
Hutchings, right

"There's also been a bit of luck involved, because although I don't think we could have developed the technology any faster, as we were working on it huge changes were occurring in the global electricity utility sector, which meant we were there getting in front of customers just at the time when they faced significant changes in their sector."

Although they started developing a new battery in 2001, it wasn't until 2005 that the pair founded their company RedFlow, focused it on the zinc bromide product they had been working on since 2002 and set out to commercialise the new power technology in earnest.

"The reason we're generating so much traction in the market is that the business model of power utilities is changing fundamentally, from a generation distribution service, to a storage and distribution service, and these changes are going on all over the world," Chris says.

The Winter brothers, however, were aware that they were in danger of losing any markets they might have been able to develop if they lacked the skills and connections within the company's management.

So in 2009 they began looking for a new chief executive who would be capable of steering the company through a crucial stage in its development. Chris was well aware that it would be a challenge to find the right staff and attract them to work for a company during a very challenging phase of development.

"I could see a real value in us finding someone with a background in building companies who knew how to speak the right language and take advantage of the commercial opportunities that were coming in," Chris says. "Again it was through i.Lab that we were introduced to Phil Hutchings and he was ideal as he has a background working in the renewable energy space."

For his part, Hutchings was finishing a chief executive role in Europe when an old friend called from Australia. After speaking with the Winters, he began working with the company initially in an advisory capacity before coming on full time as chief executive in 2010 and he's under no illusions as to the challenges he and the fledgling business will face in coming years.

"None of this is an easy transition," Hutchings says. "We're going from a business run by the founder to one run by a new chief executive and we're nurturing a new technology in a market that is undergoing a massive upheaval. It's like a classic case study from an MBA textbook. Any one of these [scenarios] is a challenge on its own and we're facing all three at once, but I'm optimistic because we're coming into the market with enormous engineering strength and a clear path for a commercialisation strategy." **BRW**