

research efforts of their own. Patent lawyers trawled to see if these companies were onto the phosphates breakthrough. But they weren't.

Mann told Vieau that, if they could succeed in making the powder in bulk, there was potential for a deal. By early 2004, A123Systems could make 1 kg of the compound a month — with a manufacturer in Taiwan that promptly went bust. The company raised a further \$20 million to keep itself going, made its first battery prototypes, and in May 2005 signed an agreement with Black & Decker.

This agreement precludes A123Systems from selling the technology to Black & Decker's rivals while assuring volume sales for its batteries. It's a type of arrangement that is increasingly fundamental to the prospects of nanotechnology start-ups. Black & Decker raised the idea of taking an equity stake, but the small company demurred (Motorola, the electronics company, already has a shareholding). A public share offering is being considered, Vieau says, but is at least 12 months away.

This runaway success is, to put it mildly, atypical of a nanotech start-up. Lux Research, the New York consultancy that organized the Cambridge meeting, has just tried to grade the attractiveness as corporate partners of 136 companies that have venture-capital backing. A123Systems tied second with Aspen Aerogels, an insulation company based in Northborough, Massachusetts. NanoOpto, an optical-equipment supplier in Somerset, New Jersey, came out top.

The fashionable nanotech label doesn't always help in impressing investors. The phrase "is a fantastic indicator of where innovation is coming from," says Greg Schmergel, president of memory-chip firm Nantero in Woburn, Massachusetts. But when it gets down to nitty-gritty, he quips, "I've always found that being a nanotechnology company is a great help — for about the first minute of a meeting with investors."

But supporters maintain that nanotech is coming of age. "Nanotechnology's time is now," claims Lux Research president Matthew Nordan, who says the field is at "an inflexion point", after which "discovery continues, but it gets eclipsed by commercialization".

The chemistry of a deal with a larger partner matters just as much as the chemistry in the lab. As Mann and Vieau run through their partnership's short but lively history, the mutual respect and understanding between the two is palpable.

But the real key to success is to provide a solution to a real need, whether it's for health-care or for electric drills. The best-equipped outfits, according to Ken Morse, director of the MIT Entrepreneurship Center, "are not in the nanotech business — they are in the solutions business." ■

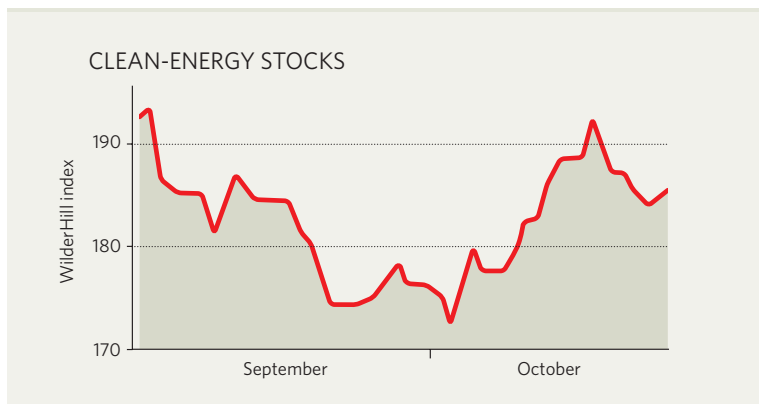
IN BRIEF

BATTERY BREAKDOWN Sony announced operating losses for the second quarter as the consumer electronics giant began to absorb the cost of recalling several million of its lithium-ion batteries. The company announced an operating loss of ¥21 billion (US\$178 million) for the quarter ending 30 September, after taking a ¥51.2-billion charge for the recall, which has been undertaken because of a small risk that the batteries will catch fire. Analysts expressed concern that the recall is taking some of the shine off Sony's sharp image as a premium brand.

ACTIVIST REIGNS A frustrated investor has taken over as chairman of ImClone Systems, the one-time biotech star that has enjoyed a rocky ride since its founder, Samuel Waksal, was ousted for insider-trading in 2002. Carl Ichan, a billionaire with no biotechnology experience, took over on 24 October, and three board directors and the interim chief executive, Joseph Fischer, departed. The New York company's main product is the cancer drug Erbitux, which is facing competition from Vectibix, a rival compound made by Amgen. Ichan says he'll concentrate on getting ImClone's marketing partner, Bristol-Myers Squibb, to sell the drug more effectively.

NUCLEAR FALLOUT The UK government said it is abandoning plans to privatize the British Nuclear Group, its nuclear clean-up operation, as a going concern. The group is now likely to be broken up and sold in small parts, trade and industry secretary Alistair Darling said. The change of plan came when it emerged that likely bidders for the group were likely to break it up and sell off its components, according to government officials. These operations should flourish: the projected cost of cleaning up Britain's nuclear complex is now £65 billion (\$122 billion).

MARKET WATCH



Stocks in clean-energy companies held steady over the past two months — despite a backdrop of falling oil prices that, sceptics fear, could deflate the enthusiasm that investors felt for the sector earlier in the year.

The WilderHill Clean Energy index (symbol ECO on the American Stock Exchange) dipped in September but recovered last month. "It's become fairly non-correlated to the oil price — which I like," says Robert Wilder, founder of WilderShares, the California consultancy that compiles the index on the basis of the stock prices of suppliers of non-fossil, non-nuclear energy sources.

These suppliers are now hopeful that the drop in the price of a barrel of crude oil — from more than \$70 in August to \$55 last month — won't deflate the boom in demand for their products. "I see no major risks unless the oil price

goes below around \$45," says Michael Liebreich, chief executive of London-based New Energy Finance. "At that point some investors might lose their nerve and pull out of some projects. If that happens, stock prices will wobble."

After a summer in which several ambitious plans for stockmarket offerings were abandoned, German biofuels suppliers CropEnergies and Verbio managed to raise some €400 million (\$500 million) between them on the Frankfurt stock exchange in October.

Liebreich draws encouragement from the relative stability of the market. "There was an anomalous period, from President George Bush's State of the Union speech on oil addiction until the market correction in May," he says, "but the market has reacted well and rationality has returned."

Colin Macilwain