## Global Water Intelligence

Market-Leading Analysis of the International Water Industry

Venture playground Water startups benefit as VC funding swings upward

A walk in the Barka Easy funding for Omani upgrade bodes well for IWPs

Owe dear! UK water utilities count the worrying cost of bad debt load

Tech's appeal Industrial capabilities salvage a poor six months for Veolia

Arcadis goes for a Brazilian Dutch firm waxes lyrical over ETEP buy

## Water investments surge on new VC wave

Venture capital investment in water is at its highest since the onset of the global recession. What are the trends driving this dynamic sector?

The announcement of fresh injections of growth capital into four water technology companies this month underlines the ongoing willingness of venture capital investors to support potentially game-changing technologies with vital development funding.

Among the beneficiaries of more than \$18 million of new financing raised over the past month were Dais Analytic (polymer-based desalination), CatalySystems (energy-efficient advanced oxidation), AqWise (moving bed bio-reactors) and Epuramat (containeraised wastewater treatment). The new funding rounds take

the total number of transactions involving growth capital in the water sector to more than 30 so far this year (see table below).

"There's very healthy growth in the amount of capital going into water, and the activity in 2012 is probably the most we've seen in the last three or four years," commented David Henderson, managing director of XPV Capital Partners, a Toronto-based venture capital vehicle focussed exclusively on the water market. "Our deal flow is definitely up, and there's no shortage of companies looking for capital," he told GWL

XPV has committed equity capital to

Natural Systems Utilities, newterra and FilterBoxx so far this year, and Henderson estimates that globally, there are between 50 and 100 water start-ups currently looking for funding, with a clear bias towards industrial applications and advanced desalination technologies.

"Our list today is predominantly weighted towards European and North American companies, but we are seeing quite a bit of growth on the Asian side," he told GWI. In March, the Aureos Malaysia Fund sank \$5 million into Malaysian water filtration company NEP Holdings, while the Pragati India Fund invested a simi-

## Venture capital/growth capital investment in water (Jan-Aug 2012)

Company name	Line of business	Investor/s	Amount
Bactest Ltd.	Wastewater bacteria monitoring	Low Carbon Accelerator/Minerva/LBA/Fin. East	£0.9m
Paques	Resource recovery from wastewater	SKion GmbH	-
HydroNovation, Inc.	Electro-deionisation	3M New Ventures/Clean Pacific Ventures	\$3.05m
ANDalyze, Inc.	Testing for heavy metals in water	Illinois Ventures/ Illinois Emerging Tech Fund II	\$1.577m
Omni Water Solutions, Inc.	Mobile frac water recycling	Austin Ventures	\$7.9m
Natural Systems Utilities	Design-build + plant operations	XPV Capital/American Refining & Biochemical	\$9.63m
Abtech Holdings, Inc.	Polymer-based water filtration	Undisclosed	\$2.6m
Saltworks Technologies	Desal using waste heat	Innovative Clean Energy Fund (Brit. Columbia)	\$1m
Bluewater Bio International	Activated sludge wastewater treatment	Ombu Group/Hermes GPE	£22.5m
NEP Holdings Berhad	Point-of-use water purification	Aureos Malaysia Fund	\$5m
Ecochlor, Inc.	Ballast water treatment	Sojitz Marine & Engineering Corporation	\$4.1m
Voltea	Capacitive deionization	Pentair/Rabo Ventures/Unilever Ventures	€4.5m
Jash Engineering Limited	Gates/screens/valves	Pragati India Fund	\$5m
Redox Maritime Technologies	Ballast water treatment	Blue Orange (Suez Environnement)	-
Arvia Technology Ltd.	Destruction of organic pollutants	MTI/Sustainable Tech. Inv./Park Walk Advisors	£3.8m
Water Standard	Water treatment for EOR	Mitsui & Co., Ltd.	-
TaKaDu	Network monitoring solutions	ABB/Emerald Tech/Gemini Israel/Giza Venture	\$6m
Ostara Nutrient Recovery	Nutrient recovery from wastewater	VantagePoint/Frog Capital/Waste Resources Fund	\$14.5m
Clean Runner, LLC	Produced water treatment	Undisclosed	\$19.6m
Cerahelix. Inc.	Nanofiltration membranes	Maine Tech Institute/Maine Small Enterprises	\$0.255m
NanoH2O	Nanocomposite membranes	BASF Venture Capital/Khosla Ventures/Others	\$60.5m
Desalitech	Closed-circuit desalination	Liberation Capital	\$6.25m
WaterSmart Software	Water efficiency software	Physic Ventures/Draper Fisher Jurvetson/Others	\$1m
MINT	Water quality monitoring	Nanostart Early Stage Venture Fund I	-
newterra	MBR/iron removal from groundwater	XPV Capital Corp.	-
United Water Corporation	Water treatment plant developer	International Finance Corporation	\$16m
Axine Water Technologies	Electrolytic oxidation for WW treatment	Chrysalix Energy Venture Capital	\$1.472m
FilterBoxx	Packaged treatment systems	XPV Water Fund/Enertech Capital/Walsingham	\$3m
Dais Analytic Corporation	Polymer-based desalination	Undisclosed	\$2m
CatalySystems Ltd.	AOP water decontamination	Finance for Business North East/Angel investors	£0.966m
Aqwise	Biological water/wastewater treatment	Triveni Engineering & Industries	\$4.5m
Epuramat	Containerised wastewater treatment	Bright Capital	€8.3m
Total			\$234.7m

 ${\it Source: Company \ releases, SEC \ fillings}$ 

lar amount in Indian water infrastructure products company Jash Engineering in April. Earlier this month, meanwhile, listed Indian industrial group Triveni Engineering led the \$4.5 million follow-on funding round on behalf of Israeli MBBR company Agwise.

The Aqwise deal is reflective of a growing trend for corporates to invest directly in water start-ups. "We have certainly seen an increase in inbound calls from corporate investors that are looking to engage in the sector," said Henderson, "Some will invest off their balance sheet, some will set up separate funds, and some actually invest in external funds, but I think there's probably a bigger trend to be direct investors in companies."

High-profile venture capital deals featuring a corporate element this year include a \$6 million round for smart networks specialist TaKaDu, led by the venture capital arm of ABB, and the \$60.5 million follow-on investment package in nanocomposite membrane specialist NanoH2O, which featured an equity injection from BASF Venture Capital.

These deals not only illustrate the fact

that corporate sponsorship of water startups is increasing – they also reflect the fact that international investors are increasingly happy to commit capital to later-stage funding rounds for non-domestic companies.

Typically the earlier stage you go, the closer the capital source," said Henderson. "The reason for that is the earlier the company is in its development, the more hands-on help it needs, so on the very earlystage stuff, you'll see a higher concentration of local investors. When you get into the later-stage, bigger companies, I think that becomes less important, because these companies have more infrastructure, and more of a foundation to work from."

Henderson believes that an increasing number of investors are looking at water as an investment theme, and that this is partly driven by macro factors such as the drought in the southern US raising awareness of water scarcity and the need for innovative solutions.

"We get calls every week from other VCs, private equity firms and corporate investors that have either made a strategic decision to invest in the sector and are looking for deals, or are doing their research on whether they think it's a good fit for them," he told GWI.

While a portion of the deals that close are publicly announced, there are always some that pass under the radar, which makes it harder to gauge the actual volumes of funding that are being committed to the sector. Commercial sensitivity issues surrounding a potentially disruptive technology can influence the decision to publicise an investment round, for example.

It is not just about investors making the right choice of company to invest in, - backers go bust, too. AbTech Industries, which offers polymer-based water filtration products, raised \$6.8 million in financing back in 2006 from investors including Bernard Madoff Investment Securities, while Bluewater Bio received funds from Lehman Brothers just weeks before the bank filed for bankruptcy in 2008. Earlier this year, L Capital Partners - which counts sludgefree wastewater treatment company Aquarius Technologies among its investments - was threatened with liquidation after its capital impairment percentage exceeded the threshold set by the US government's Small Business Administration.

