

# Clean Technologies & Renewable Energy

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## Exclusive Intelligence

### **pipeline™ exclusive – \$70 million sought for clean coal chemical project**

**Canada New Era Development Inc.**, is the 100% owner of a clean coal energy project located in Erdos City, situated in the Inner Mongolia Autonomous Region of China. The project aims to produce 1.6 billion cubic meters of coal synthesis gas for the production of 330,000 tons of dimethyl-ether (“DME”). DME can be used as an alternative fuel and also as a base material for the synthesis of various hydrocarbon and oxygenate products (e.g. dyes). Additionally the project will produce approximately 3 million tons of coal per annum. A 60 square kilometre coalfield with a 1 billion ton reserve of high grade coal is allocated to the project.

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The low-ash, low-sulphur, low gas and high quality non-caking nature of the coal means that it can be converted to coal synthesis gas using highly energy efficient and clean, low pressure carbonization technologies. The project will be designed and constructed by Hualu Engineering Corp. Ltd (The Sixth Design Institute of the Ministry of Chemical Industry) which demonstrates extensive experience in the coal-rich chemical production process.

During an interview with VB/Research, Phil Ming Xu, Chairman of World Capital Market, a private equitybacker of Canada New Era Development Inc., revealed that the company is currently in negotiations with a Canadian bank for a loan agreement with first drawdown occurring once the plant is built and in production. Therefore, \$70 million financing (debt and equity) is currently sought to undertake construction of the plant, scheduled to be completed in approximately three years. Once completed in three years, revenues of coal sales are expected to reach the company forecasts revenues of \$200 million per annum through sales of coal (assuming a current market price of CNY 300 per ton) once the plant is fully operational. Revenues of \$200 million are forecasted over 4 years from DME sales alone (assuming a current market price of CNY 4,300 per ton). Moreover, the coal reserve allocated to the project is currently worth \$1.5 billion.

Interested parties should contact Phil Ming Xu, Chairman of World Capital Market, at: [m@worldcapitalmarket.com](mailto:m@worldcapitalmarket.com) for further information on Canada New Era Development Inc.

### **pipeline™ exclusive – Solid Oxide fuel cell developer seeks \$30 million**

**Adaptive Materials, Inc.**, based in Ann Arbor, MI, is a developer and manufacturer of small, portable power systems based on solid oxide fuel cell technology. To date, the company has developed two solid oxide fuel cell systems: Amie25 (25w/12-15v) which can be used to recharge laptops, remote monitoring equipment and other portable electronic equipment devices; and Amie150 (150w/25v) which can be used to power unmanned vehicles and robots. According to the company, its multi-patented fuel cells are significantly lighter and demonstrate a battery life of up to ten times that of conventional battery technologies. The Amie line of fuel cells also demonstrates significant advantages in terms of power to weight ratio when compared with other fuel cell technologies. Indeed whilst solid oxide fuel cells have the potential to achieve a power to weight ratio of 1260 w-hour per kg, other technologies such as zinc acid, proton exchange membrane and direct methanol only have the potential to achieve power to weight ratios of 330 whr/kg, 500 whr/kg and 700 whr/kg respectively. The Amie line of fuel cells can run on a variety of globally readily available hydrocarbon fuels such as propane and butane.

Adaptive Materials was founded in 2000 and has been supported by approximately \$36 million from the US Department of Defense (“DoD”). The company has also worked extensively with the DoD during product development phase and to facilitate in-field military trials. During an interview with VB/Research Aaron Crumm, Co-founder at Adaptive Materials, revealed that up to \$30 million is currently being sought. The new money will be used to expand the current production capacity, gain certain certifications required to sell to particular markets and to enhance sales and marketing capabilities. Revenues of approximately \$7 million were generated in 2008 and similar revenues are forecast for 2009. The company is currently cash flow positive and forecasts revenues of \$10-\$15 million for 2010. Crumm explained that the company is keen to target markets outside of the military and is already in advanced discussions with two undisclosed OEMs that are considering integrating the fuel cell technology into some of their existing products.

Interested investors should contact Aaron Crumm, Co-founder, at: [aaron.crumm@adaptivematerials.com](mailto:aaron.crumm@adaptivematerials.com) for more information on Adaptive Materials, Inc.

### **pipeline™ exclusive – Solar roofing system developer seeks \$15 million**

**Redwood Renewables** (“Redwood”) based in Corte Madera, California and in Brussels, Belgium, is a developer and manufacturer of built-in photovoltaic (“BIPV”) systems for residential and commercial buildings. Redwood’s flagship product is a roofing tile made of recycled material with an integrated solar cell. This eliminates the need for installation of an expensive glass or metal frame that is conventionally needed for mounting purposes. Four patents have been filed, including a novel devulcanization process that converts waste rubber into a usable substrate. The technology enables the two major obstacles in the BIPV market, of affordability and aesthetics to be overcome.

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Indeed, using roofing companies as a sale channel, costs of installation are significantly reduced and can lower the cost of the product by 50%. Redwood's technology falls in the scope of the research initiative for the Zero Energy Homes concept, developed and promoted by the US Department of Energy in partnership with building professionals and organisations. This concept refers to a home that incurs a net zero energy consumption by producing energy, while being connected to the grid, allowing sell-back of produced energy.

Redwood was founded in 2002 and has since developed a number of partnerships with roofing companies in Europe and in the United States. During an interview with VB/Research, Tom Faust, CEO of Redwood Renewables, revealed that \$15 million is currently being sought. The money will be used to build four new plants in France, Italy, Germany and the United States. Current revenues are \$30+ million in purchase. Faust forecasts revenues of \$950 million and annual EBIT of \$420 million by 2012, assuming that the market for this type of tile (moulded dimensional roofing slate) grows by 35% per annum. According to Faust, the environmental building market has grown by 100% since 2001 and is predicted to demonstrate strong future growth.

Interested investors should contact Tom Faust, CEO, at: [tfaust@redwoodrenewables.com](mailto:tfaust@redwoodrenewables.com) for more information on Redwood Renewables.

### **pipeline™ exclusive – Indian solar thermal developer raising capital to ramp up production**

**Sharada Inventions Pvt. Ltd.**, based in Maharashtra, India, is a developer, manufacturer and distributor of a variety of solar and energy efficiency technologies. The company was founded in the mid-80's and began to focus exclusively on the development of renewable technologies in 1999. Since then a vast product portfolio of niche solar products has been built up, including solar powered LED displays and signboards, solar water heaters for residential and commercial use and a variety of distributed solar thermal systems. The company's core area of expertise lies in the development of concentrated solar power ("CSP") systems, and more specifically its parabolic concentrator unit. These concentrating units rather resemble satellite dishes that can turn throughout the day to optimally reflect the sun's rays onto a focal point receiver. The sun's rays that are concentrated onto this focal point then heat a liquid (water or oil) inside a steel pipe. The heated liquid can either be used directly to provide a building with hot water or can be converted to high pressure steam to power a conventional steam turbine to produce electricity.

In 2007, Sharada announced that it had secured \$0.5 million of seed investment from leading industrialist Sushil Jiwrajka's venture capital arm, Artheon Ventures. During an interview with VB/Research Anil Joshi, Assistant General Manager of Projects at Artheon, explained that the company forecasts revenues of \$1 million in 2009, rising to \$6 million in 2010. Joshi explained that, to date, approximately 200 parabolic concentrating units have been installed and that growth in 2009 and 2010 will primarily be driven through sales of these systems. At present capacity, the firm can produce two parabolic concentrator units per day and will shortly construct a 30,000 square foot manufacturing facility 130 kilometers north of Mumbai that will be capable of producing eight parabolic concentrator systems per day. To fund construction, Joshi revealed that \$5 million is currently being sought. In addition, Sharada is currently looking to raise \$35 million to fund construction of a 10MW solar thermal farm in the state of Gujarat, North West India. The farm will employ solar thermal systems manufactured entirely by Sharada (except for the steam turbine used to convert the steam into electricity). A memorandum of understanding has been signed with the state of Gujarat that it will sign a power purchase agreement ("PPA") to cover the full 10MW upon completion of construction, scheduled for December 2010. Details of the PPA are yet to be finalised although Joshi explained that the electricity will be sold to the grid at a price of \$0.2 per KWh for the first 10 years and then \$0.07 per KWh for the next 10 years.

Interested investors should contact Anil Joshi, Assistant General Manager of Projects at Artheon Ventures, at: [anil@artheonventures.com](mailto:anil@artheonventures.com) for more information on Sharada Inventions Pvt. Ltd.

### **pipeline™ exclusive – Rechargeable battery service start-up company seeks \$3 million**

**Rechargeable Battery Services LLC** ("RBS") based in Burlingame, CA, is planning to establish a rechargeable battery service for large businesses. The company intends to purchase rechargeable batteries and then lease them to customers. Once discharged, the batteries are collected and recharged in a repeated process. RBS estimates that companies signing up to the service should realise cost savings in the range of 30% to 50%, through purchasing the batteries in bulk and through the elimination of the costs associated with the purchase of new batteries.

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The company hopes to latch on to a wave of recent regulations that encourage companies to recycle batteries. For example, in California, all batteries must be recycled. Targeted battery types are AA and AAA, which are commonly used by companies in equipment such as wireless keyboards and mice and phone amplifiers. Disposable batteries used for this purpose have a lifespan of one to four months depending on usage, while Rechargeable batteries typically demonstrate a similar lifespan to conventional systems of one to four months and allow 500 to 1000 charges. RBS will only recharge NiMH (Nickel-Metal Hybrid) battery technologies which it claims are currently the best available technology for the targeted applications.

During an interview with VB/Research David Noel, Founder of RBS, revealed that \$3 million is currently sought to begin operations. This money will be used to build a sales force, purchase inventory, support the distribution process and develop the operational capacity to automate the charging process. Revenues will be generated from initial batteries orders and through subsequent charging services. Noel explained that after amortizing the initial battery cost over the number of subsequent charges, per charge costs will be substantially lower than brand name disposable batteries, which are currently priced between \$0.65 and \$1.03 per battery. Noel estimates that revenues of approximately \$80 million could be achieved in year 5 of sales.

Interested investors should contact David Noel, Founder, at: [David.Noel@RechargeableBatteryServices.com](mailto:David.Noel@RechargeableBatteryServices.com) for more information on Rechargeable Battery Services LLC.

### **pipeline™ exclusive – Breakthrough dual photovoltaic technology developer seeking \$10 million**

**Vulvox Nanotechnology Corporation** (“Vulvox”) based in Syosset, NY, is a research and development company focussed on nanotechnology, biotechnology and material sciences. Its research work includes: solar energy generation technologies; “super-materials” such as temperature conductors, adhesives and materials that are extremely tough, tensile and hard; and novel energy storage technologies. Projects the company is currently working on include, among others: lithium-ion batteries that can store approximately ten times more energy than the current lithium technologies; and solar collectors that will be able to generate electricity 50% more efficiency than conventional systems. These solar collectors work on a dual solar-thermal photovoltaic system that can produce twice as much power compared to a system using regular solar thermal technology or photovoltaic technology. Both infra red and visible rays can be converted to act as a source of energy, while the developed storage capabilities increase the efficiency of the system. The new technology can be used to either build new or retrofit current solar energy systems, as modifications required on current systems involve only moderate costs. Vulvox is confident other efficient modifications can be developed, particularly on increasing the flow rate of the thermal collectors.

During an interview with VB/Research Neil Farbstein, President of Vulvox, revealed that \$10 million is currently being sought. The money will be used to complete the solar collector prototype and to enter the commercialization phase. Commercialization would first focus on existing utility scale plants in south west California. This region currently represents the largest US market for solar power and an additional 8GW of capacity is due to be installed in the region this year. Farbstein said Vulvox will also explore markets including in North Africa and Spain, in which large scale solar projects are currently being developed.

Interested investors should contact Neil Farbstein, President, at: [protn7@att.net](mailto:protn7@att.net) for more information on Vulvox Nanotechnology Corporation.

### **pipeline™ exclusive – Carbon transportation and storage company seeks capital for first project**

**CO2 DeepStore Ltd.**, based in Aberdeen, UK is developing a portfolio of offshore, permanent anthropogenic carbon storage projects in Northwest Europe that will provide a means for power generators with installed carbon capturing capabilities to dispose of the captured carbon. The company plans to own and operate the necessary pipe and well infrastructure to transport carbon dioxide from the point of capture to the coast and then offshore to carbon dioxide storage reservoirs. CO2 DeepStore plans to act as license holder and operator of the deep geological carbon dioxide storage reservoirs located in depleted gas fields and large saline aquifers. Revenues will be generated through charging power generators, by the tonne, to transport and store their captured carbon. Details of the storage tariff are as of yet undetermined although the company predicts that the final transportation and storage costs will stand at Eur8-12 per tonne.

Additional revenues could be generated from sales to the oil and gas industry for enhanced oil recovery applications.

During an interview with VB/Research Steve Murphy, Commercial Director at CO2 DeepStore, explained that the company is currently in discussions with the Crown Estate to lease the land necessary to develop an underground off-shore reservoir off the coast of Northeast Scotland. The reservoir will be capable of storing approximately 100 million tonnes of captured carbon dioxide. To undertake the necessary project due-diligence and to complete the permitting and leasing phase, Murphy revealed that £4 million is currently sought. Once all permits have been secured, the company will look to raise £30 million, comprising a mixture of debt and equity, which will be used to modify the existing oil and gas pipeline structure to make them suitable for CO2 transportation. Murphy anticipates that the first project will begin to generate revenues in 2012.

Interested investors should contact Steve Murphy, Commercial Director, at: [steve.murphy@co2deepstore.com](mailto:steve.murphy@co2deepstore.com) for more information on CO2 Deepstore Ltd.

### **pipeline™ exclusive – Novel biotechnology developer seeks €7 million for biofuels cogeneration plant**

**Biofuel Turnkey Plants** (“BTP”), based in Aksaray, Turkey is developing biodiesels and biodiesels production and refinery plants. The company is involved in the research & development, engineering, marketing and sales of these biodiesels. BTP has developed and commissioned a 40 ton-per-day Second Generation Biodiesel pilot refinery (NexGEN) in Aksaray that produces EU Standard biodiesel from sustainable and renewable feedstocks. Feedstocks that can be used include non-food waste by-products of the vegetable oil production process animal fats (canola fatty acids, soybean fatty acids etc), waste-water effluent, waste by-product of the paper-industry (tall oil) and recycled grease/oil. Currently certain high-yield feedstocks that contain over 1% of Free Fatty Acids are not commercially viable, due to high pre-treatment costs. BTP's novel technology can however cut the pre-treatment cost by 60%, therefore making the production of biodiesel using these feedstocks economically viable. By using higher-yield non-food feedstocks, BTP's biodiesel is more environmentally friendly and sustainable than alternative fuels such as bioethanol and also benefits from wider feedstock availability.

So far, BTP has secured Eur2.2 million of funding from outside investors. Speaking to VB/Research, David Zeidman, Vice-President for Business Development at BTP, revealed that the company is currently seeking to raise Eur7 million, of which Eur5 million will be equity and Eur2 million will be debt. This new money will be used to build, operate and maintain a new cogeneration facility (CoGen); Eur3 million will be used as capital expenditure. The BTP NexGEN biodiesel biofuel will fuel to this new 12MW CoGen plant. BTP forecasts a return on investment after 17 months while providing an internal rate of return of 45% based on a 5-year investment period and an offtake supply agreement.

This new project falls into the scope of a new feed-in tariff being instated in Turkey (pending formal signature by ministers): 14 cents euro per kWh for production of electricity from waste/biomass over a term period of 10 years with digression after year 5.

Interested parties should contact David Zeidman on [david@btpbiodiesel.com](mailto:david@btpbiodiesel.com) for further information on BTP's Biodiesel COGEN Plant.

### **pipeline™ exclusive - US Wind Power Initiative seeks \$20 million for late-stage wind energy investments**

**The Hudson Valley Center for Innovation** is a not-for-profit New York, NY-based corporation, focussed on actively supporting the development of emerging businesses and technology development companies. Last April, on Earth Day, the organisation launched its new Wind Power Initiative (“WPI”), as part of its CleanTech Accelerator Program.

The aim of the initiative is to increase the efficiency of wind energy technologies in the Hudson Valley (comprising the State of New York, Ulster, Orange, Dutchess, Sullivan, Putnam, Rockland and Westchester counties). This will be undertaken by working on two main drivers: technological improvements and development of efficient commercialization strategies.

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Indeed, the development of wind energy use as an alternative energy source is generally considered to be facing two major obstacles: a lower-than-expected performance and an expensive manufacturing process, keeping costs high whilst creating a non-attractive payback period for investors. With community colleges as partners, including the Polytechnic Institute of New York, the WPI plans to work on late-stage technological developments and to provide a certification system for small (1kW-100kW) and medium wind energy technologies (100kW -2MW). Research, site identification, testing and commercialization strategies will result in measures that can be realistically implemented by wind energy companies to increase their profitability and energy supply.

To date, the Initiative has tested the suitability of five sites and has identified 45 suitable wind energy companies. In an interview with VB/Research Donald Perry, co-founder of the WPI, explained that up to \$20 million is currently sought. The new money will be used to implement the technological improvements on site and management efficiency and commercialization strategy measures with the selected companies. It is estimated that these implementations could decrease the cost per kW (for average for small and medium wind turbines) from \$5000 to \$2000.

Please contact Donald Perry, co-founder of the Wind Power Initiative, at: [dperry@shivas-karma.com](mailto:dperry@shivas-karma.com) for more information on the Wind Power Initiative.

### **pipeline™ exclusive - Roger Feldman of Andrews Kurth LLC presents the case for Cooperative Federalism**

In the absence of “Cooperative Federalism” the development of so-called “Green Infrastructure,” as contemplated both by the Stimulus Package and by the forthcoming initiatives from the President and Congress in the areas of energy, security, and climate change regulation, will be thwarted.

We are heading toward an impasse in practical legislation unless this fact is addressed directly in the formation of new laws and indeed, in the implementation of the Stimulus Package in an effective way as well.

The absence of Cooperative Federalism is the insistent legal theme embedded in the swirling policy and economic debate of how national policy objectives should be achieved. Issues of Federalism are often dismissed by proponents of policy change as vestigial legacies of constitutional tradeoffs made long ago, or as a smokescreen of arguments designed to conserve the political or economic status quo. Conversely, sometimes they are ennobled as the protectors of the intended liberty and rights of the individual and private enterprise. In the energy/environment area, though, I would suggest that there is one underlying pragmatic issue with which we all are wrestling: ***how can the profile and technical operations of the electrical utility industry be adapted to the energy challenges of the 21st Century within our Federal legal framework of governance?***

The legislative flashpoints are the debates over Renewable Portfolio Standards, carbon cap and trade legislation, and transmission reform. In each case, the question is framed as Federal vs. state governance. The issue ultimately is evolutionary: one of adaptation of the rules of governance so that our national engine of private enterprise (in this case utilities) can operate in a manner aligned with national needs.

Since the days of Thomas Edison and Samuel Insull, utilities have been regulated, and they’ve operated on the principle of minimized system cost (whether termed “locational,” “marginal pricing,” “economic dispatch,” or simply “free market economics”).

Much of this regulation has been done at the state level and, while transmission and some activities of some utilities have been Federalized over time, the basic governing principle of minimized system cost has been embodied there as well, save for a few special incentive-rate-type programs.

Certain interrelated developments now challenge the adaptability of the first principle of regulation: concern with greenhouse gases can only be dealt with at significant cost, which euphemistically we now call upon to be “internalized.” Similarly, “energy security” intrinsically has a cost, which will surely be increased if grid-based electricity becomes a significant basis for automobile power.

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At the present time (putting aside the nuclear debate, which itself has Federal-state ramifications), the means to reduce GHG and increase security appear to be (and the Stimulus Plan has thrust them forward through incentives and raw cash): (a) renewables, and (b) associated transmission requirements in the form of energy-efficient “smart grids,” notably though not exclusively, in their distributed generation form.

Unfortunately for utilities, these solutions have a drawback more or less in common and, unless something is changed, their marginal costs and state oversight impact on utilities are both negative. Neither electrons nor carbon molecules respect borders. Consequently, if external costs are to be internalized principally through targeted energy and emission legislation, as opposed to blanket taxation, electric utilities will likely bear a significant burden of these costs.

The matter is further complicated when new Federal rules are proposed to overlay state regulation, because of the rise of regionalism. As with most energy matters, effort to address cost internalization has taken on a regional character; the fuels, uses, and topography which utilities confront obviously vary. Moreover, as a result of the last wave of reform, this regional character is overlaid by the fact that, while some utilities operate on a fully-integrated basis, others have been subject to more-or-less deregulation. Since there has been an approximate vacuum in Federal regulation focused on the proposed energy/environmental fixes, we have seen the emergence of various types of regional responses, notably in the environmental field, but in the transmission field as well. In the absence of Federal regulation in some areas, states have taken action individually, *e.g.*, Resource Portfolio Standards. In some cases, through, regional organizations have propounded their own solutions, *e.g.*, carbon regulation and, in some cases, in a partial relationship with Federal regulators, *e.g.*, transmission. In still other cases, through, what has emerged are strategies for Federal delegation, *e.g.*, energy efficiency, with advisory Federal guidelines.

Consequently, the Federalism issue is not one of writing on a blank slate, either in practice or in legal theory. Consequently, the need for “Cooperative Federalism” is even greater than would naturally be assumed to be the case. That said, for the 21st Century utility and its state regulators, what will this “Cooperative Federalism” look like?

I would suggest that reference to the emerging “Smart Grid” case might be one starting point to illustrate creative new approaches. The potential of the Smart Grid is clear: It ranges from traditional possibilities such as monitor and control of intermittently-generated renewable resources, like wind and solar, to those notably associated with efficiency, *e.g.*, scheduling the charging and discharging of distributed storage. The theoretical means by which the Smart Grid could operate is clear, too: some kind of integration of one or more “platforms” through which signals or integration can allow the information received from individual control applications to run, charge, or discharge utility response.

However, there are not only technical but political constraints to be overcome. Above all, the utility must receive, from regulators, market signals which definitely reward it for its appropriate behavior.

As the Stimulus Package implicitly recognizes, investments must be made. Regulated utilities cannot themselves, within the parameters of their framework of operation and regulations, afford to make these investments.

The NARUC/FERC Smart Grid Collaborative Proposed Funding for the “Stimulus Package” Smart Grid Matching Grant and Demonstration Program general criteria, addresses the issues of how cooperative Federalism and utility contribution to national energy goals can be reconciled, including

- (a) Funding: how has the project minimized the possibility of stranded investment by designing for the ability to be upgraded?
- (b) Overarching criteria: including regional diversity and representation of urban, rural, and suburban settings
- (c) Technology criteria: including an open architecture that can become the basis for interoperability with multiple applications

- (d) Rate design: compatibility of existing or proposed rate designs with the purposes for which a project is designed
- (e) Regulatory: coordination of the project with the RTO and/or system operator
- (f) Information/data requirements designed to measure performance and also to measure receptivity of customer response

This type of guideline points the way to two basic conclusions:

- (1) The 21st Century utility must be one which delivers new “smart” technologies, which is to say, it is adaptive to Federal policies and regional requirements.
- (2) The Cooperative Federalism necessary to develop green infrastructure suitable to our changing society not only must be oriented toward ongoing receptivity to new technology, but also adaptive to regional differences without adopting a one size fits all model.

In sum, the answer to modern national energy infrastructure needs will not be found in the Supremacy or the Commerce Clause, or preservation of state regulators’ cost allocation and siting powers. The keys will be:

- Flexible technology criteria;
- Regional adaptivity; and
- Focus on on-going financial sustainability.

For more information please contact Roger Feldman at [RogerFeldman@andrewskurth.com](mailto:RogerFeldman@andrewskurth.com) or +1 202 662 3022. Roger Feldman, Co-Chair to Andrews Kurth, Clean & Renewable Energy Group, is also Chair of the American Bar Association’s Energy & Carbon Trading & Finance Committee.

## Weekly Fund News

**3i Group plc**, the international private equity firm focused on buyouts, growth capital and infrastructure investments, has launched a £732 million right issue. The firm will issue 542 million new shares at 135 pence each. JP Morgan Cazenove and Merrill Lynch were appointed joint coordinators, bookrunners and sponsors of the issue.

**The Carbon Trust**, a UK-government funded independent investment fund, recently announced that it is forming a joint venture with the China Energy Conservation Investment Corporation (“CECIC”) to develop and deploy low carbon technologies in China. The £10 million agreement will see a joint venture created to accelerate low carbon innovation and technology transfer in China, opening new markets for innovative, British clean technology companies and reducing global carbon emissions. As well as the initial £10 million investment funded by CECIC and the Carbon Trust, the joint venture aims to leverage significant third party funding from the public and private sectors.

The joint venture will have two core objectives: to incubate new and emerging low carbon technologies and introduce selected low carbon businesses from the UK to China; and to provide financial investment for UK and Chinese low carbon businesses in China. CECIC was founded by the Chinese State Council to promote and lead the advance of the energy efficiency and environmental protection industries in China.

**Curzon Park Capital**, based in London, UK has been formed to manage ‘Sustainable Technology Fund’, a \$20 million venture capital fund which spun out from E-Synergy early this year. The fund will invest in companies that have developed a technology or business model aimed at resource conservation, energy efficiency and waste reductions.

**Kreos Capital**, a London, UK-based provider of venture debt announced that five new limited partners have invested into its third fund, Kreos III. The LPs in Kreos III are Paul Capital, AIG PineStar Capital (the secondaries private equity team of AIG Investments), HarbourVest Partners, Access Capital Partners and SVB Financial Group. Their new investments follow a EUR 150m syndication via the secondary market by the principal founding investor, Merrill Lynch. The fund will invest in both early and late-stage venture backed companies based in Europe and Israel and with international business models. The fund can deploy Eur750,000 to more than Eur15 million of venture debt per company.

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