

Powering ahead: 2010

An outlook for renewable energy M&A

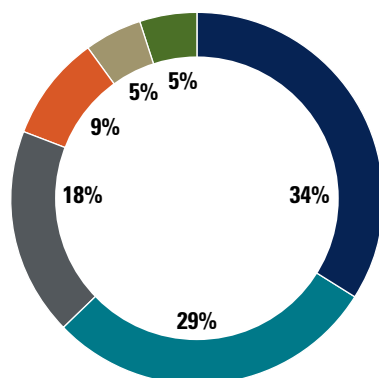
ADVISORY



About the research

This report provides an insight into the global M&A activity in renewable energy. The findings are based on a survey of over 250 senior executives active in the renewable energy industry worldwide. The survey and report were written in collaboration with VB/Research, a specialist renewable energy research and data provider. Transaction data and statistics included in the report have been extracted directly from VB/Research's databases.

Geographical breakdown of respondents



- Western Europe
- North America
- Asia-Pacific
- Eastern Europe
- Middle East and Africa
- South America

The survey was conducted between January and March 2010 and was completed by five different types of respondents – corporates, financial investors, debt providers, government bodies and service providers. Among the respondents, 75 percent were top-level executives such as chairpersons, senior executives or divisional heads. Surveyed respondents were split among Western Europe (33 percent), North America (29 percent) and Asia-Pacific (18 percent), with Eastern Europe, Middle East and Africa, and South America accounting for the remaining.

To supplement the survey results, interviews were also conducted with the following senior executives:

Areva SA

Anil Srivastava, Senior Executive Vice President and Chief Executive Officer, Areva Renewables

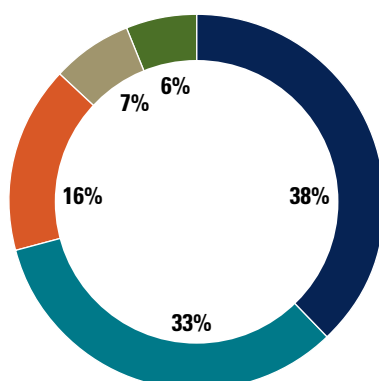
A leading company in the nuclear power industry, which is also active in offshore wind energy, bio-energy, solar power, and hydrogen carrier and energy storage solutions

Rabobank International

Marcel Gerritsen, Global Head of Renewable Energy & Infrastructure Finance

A provider of diverse financing solutions for renewable energy projects in Europe, Asia and the Americas

Breakdown by type of respondent



- **Corporates:** Companies operating within the energy sector, or owning a company (e.g., energy utility firm, oil & gas major, energy producer, energy distributor)
- **Service providers** (e.g., investment bank, financial advisory firm, law firm)
- **Investors:** Companies investing in the energy sector (e.g., private equity fund, infrastructure fund, hedge fund, asset manager)
- **Government bodies** (e.g., internal/external investment agency, cluster, trade organisation)
- **Debt providers:** Companies providing debt finance to companies investing or operating in the energy sector (e.g., overdraft/term loans, project finance, revolving credit)

Centrosolar Group AG

Thomas Kneip, Vice President, Business Development

A vertically integrated solar photovoltaic (PV) company based in Germany

United Nations Framework Convention on Climate Change (UNFCCC)

Yvo de Boer, Executive Secretary
Head of the UNFCCC since 2006 and Chairman of the Copenhagen Climate Change Conference in December 2009; Yvo de Boer will join KPMG on July 1, 2010 as Global Advisor on Climate and Sustainable Development.

Covanta Energy Corporation

Allard Nooy, President Asia Pacific
A global owner and operator of energy-from-waste and power generation projects

Definition:

Mergers & Acquisitions ("M&A")

All corporate M&A transactions (mergers, acquisitions and minority investments) as well as private equity transactions such as buyouts, public-to-private deals and secondary buyouts.

E.ON Climate and Renewables GmbH

Cord Landsmann, Chief Financial Officer

The renewable energy and carbon sourcing division of E.ON Group, one of the world's largest owners of renewable power projects

For the purpose of the report, M&A transactions until April 14, 2010 have been tracked.

Hudson Clean Energy Partners

John Cavalier, Managing Partner

A global private equity firm, focused on renewable power, alternative fuels, energy efficiency and storage

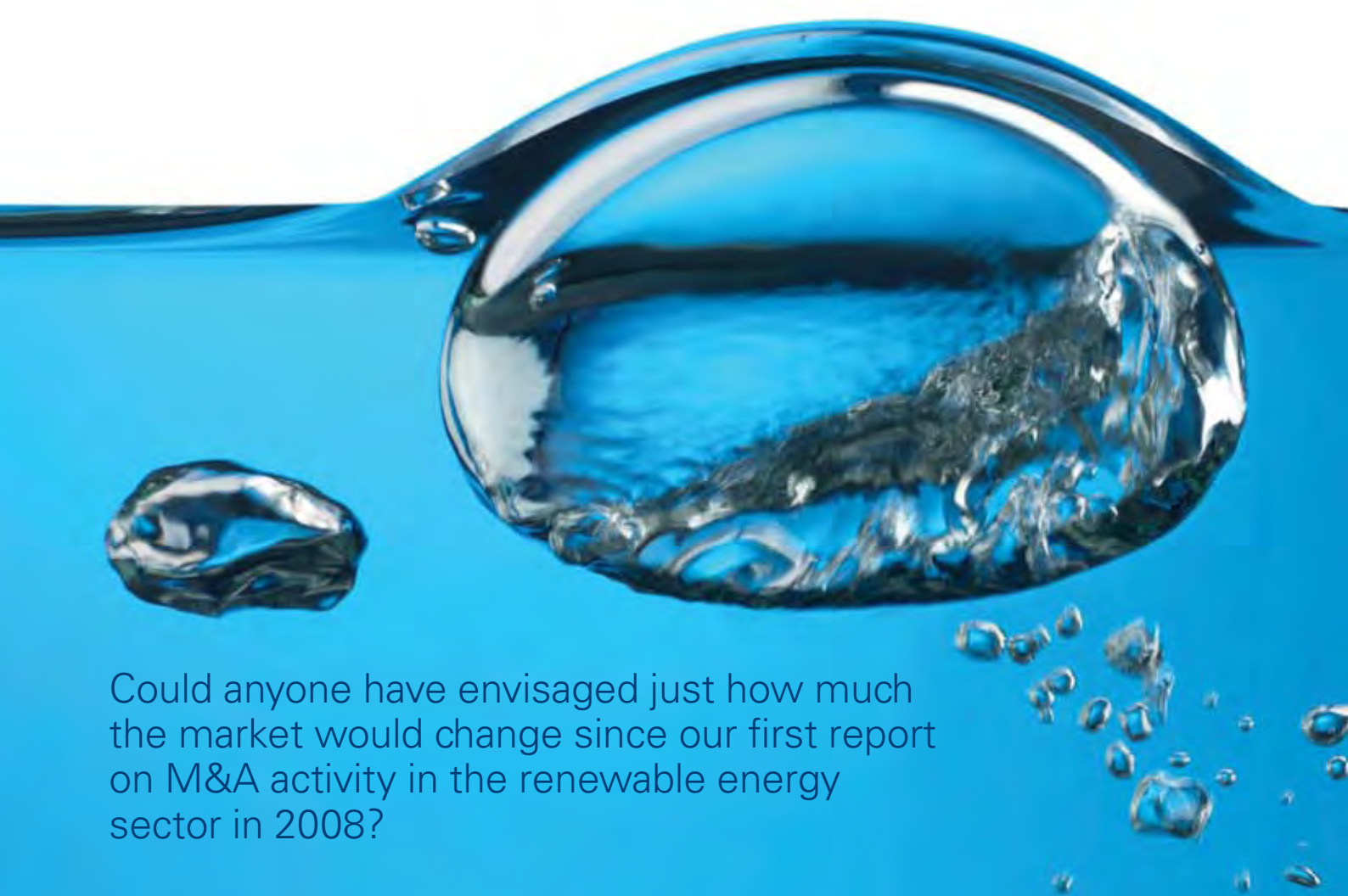


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Cover image: Courtesy of BARD Group
Description: Erection of the BARD nearshore wind turbine

Foreword



Could anyone have envisaged just how much the market would change since our first report on M&A activity in the renewable energy sector in 2008?



Andy Cox

Partner, KPMG in the UK

Global Head of Energy and
Utilities for Transaction Services

Two years ago, the temperature was at boiling point with significant premiums paid on deals, as major developers sought to establish a position in the renewables sector. Investors were prepared to pay substantial sums for portfolios that contained long development pipelines but few operating assets. Issues around the availability of turbines and silicon, combined with grid connection and planning delays in some markets, were converging to create an investment bubble.

When the financial crisis took hold, lenders stepped back from the risky end of the market. With financing drying up for early-stage development assets and lenders working hard to reduce their exposure to the sector, many projects are being stalled or even shelved in the face of the capital drought. Deal multiples fell as acquirers were no longer willing to pay for development pipelines that only offered the potential for hard returns at some point in the distant future. 2009 saw governments around the world promise major capital injections and a wealth of incentives. As a result, over the period of this year's survey, we have started to see the impact of these stimulus measures on M&A activity.

On a positive note, we have seen a dramatic increase of 145 percent in global deal volume in Q1 2010 compared with Q1 2009; despite over half of the respondents finding financing harder. In part, this may suggest that investors are being forced to increase the proportion of equity in a deal to fund a successful transaction.

This is surprising, as the macro-economic view seems to suggest that lending is becoming easier. While recent headlines suggest that there are positive signs that the financial services industry is recovering, this response shows that it remains fragile. We believe capital funding will be the single biggest challenge for the next decade, with renewable energy projects competing for capital alongside a whole range of other important infrastructure projects, including energy, transport and healthcare projects.

Perhaps the most surprising finding is that survey respondents are now seeing biomass as a serious contender for investment alongside solar and wind. While biomass lags behind wind and solar in terms of maturity, there are

certainly attractive factors in its favour – not least its potential to generate greater returns than wind. Although there is no doubt solar and wind will continue to drive deal activity, our research suggests that from a global perspective, biomass too, will play a significant role in investment growth.

Of course, the growth in renewables will not happen, if there is no money to support its development. With fierce competition to gain access to bank capital and some government programs tailing off, everyone is asking the same question – where will the capital come from? Recent conversations I've had with Asian players in countries such as Japan and Korea suggest that they may be ready to invest heavily around the world in renewables. The potential

firepower of sovereign wealth funds could also hold the key to financing the sector but perhaps we might also see new interest in renewables from major corporates, and not just from the utilities sector. Could the May 2010 announced participation of internet giant Google in onshore wind in the US be the beginning of a new trend? Whether it is or not, renewable energy remains a rapidly changing sector and I believe the results of our survey will continue to provide an interesting perspective to those who participate and invest in it.



Executive Summary

Not sprinting but definitely jogging

The new decade has started on a more positive note, when compared to how the last one ended. In the first few months of 2010, the number of completed deals in the renewable energy sector more than doubled in comparison to the corresponding period last year.

Surveyed respondents agree that M&A activity is picking up, with over 90 percent intending to undertake a transaction in the next 18 months.

In terms of completed M&A deals the solar sub-sector continues to lead in 2010, with wind following closely behind. Last year, the solar and wind sub-sectors together accounted for approximately 50 percent of the 300 completed M&A deals.

Equity capital market activity has also started to recover, with optimism most evident in China (since it lifted its IPO freeze in June 2009) and North America (where the surveyed respondents are showing the greatest confidence in securing public equity funding).

Thank government incentives

The disappointing outcome of the Copenhagen Climate Change Conference in December 2009 (COP15) is not expected to have any impact on global M&A activity. As Yvo de Boer, Executive Secretary of the United Nations Framework Convention on Climate Change, commented “Despite the absence of a legally binding agreement, countries will go ahead and implement plans of their own.” This view is supported by an overwhelming 88 percent of the surveyed respondents who believe that the result of the summit will not affect M&A activity worldwide.

Many countries have now approved and are distributing significant incentives and stimuli in the form of direct grants, feed-in-tariffs (FiTs) and/or loan guarantees. According to Yvo De Boer, “Since the summit, 43 industrialized countries as well as 41 developing nations have submitted national targets and action plans to reduce carbon emissions on a national level. These countries represent 80 percent of the

global energy related CO₂ emissions.”

Over half of the surveyed respondents believe that these initiatives will act as the principal driver for M&A activity in the next 18 months. North America, particularly the US, tops the list of targeted countries for M&A transactions, supported by the American Recovery and Reinvestment Act (ARRA). China and India have moved much higher up the target list when compared with last year’s survey, bolstered by stronger incentive programs, along with a reduction in stimulus by some major European countries such as Germany and Spain.

Other factors that continue to fuel M&A activity in the sector include energy security concerns, fluctuating oil prices, and the availability of renewable “feedstock”. In the background, government-financed clusters are nurturing the development of early stage technology companies and innovators.



“The companies that are able to partner or be acquired will stay, the others will struggle to survive.”

Anil Srivastava, Areva SA

There’s still a valuation “gap”

There remains consistent with last year a significant gap between the valuation expectations of sellers and acquirers.

Looking forward many industry players and investors expect valuations and deal sizes to increase this year, although pricing is expected to remain problematic. Transactions are currently closing at around 9x historic EBITDA, equating to an average discount of about 30 percent to 2006 - 2008 valuation multiples. However, over two-thirds of the surveyed corporates do not expect to pay more than 5x EBITDA for renewable energy companies or projects.

Funding demand outstrips supply

Although banks are keen on the renewable energy sector, securing finance has become harder over the past year for over 50 percent of the surveyed respondents. Two of the main reasons are: a substantial increase in margins (approximately three times the average margin offered three years ago) and a debt market that is growing less rapidly than the sector’s ever growing financing requirements.

Biomass shining through

Looking at which renewable sub sectors are most attractive, the survey has found a change in appetite from last year’s findings with biomass (37 percent) increasing to the same level of appeal as solar (36 percent) and onshore wind (35 percent) for corporates and investors.

While wind is still recording significant deal activity, our research has shown that dealmakers, particularly large companies such as the utilities, are looking for the next global trend and biomass looks like it is positioned to be one of the most active sub-sectors for M&A in the next 18 months.

Biomass plants are capable of yielding higher returns than other renewable energy sources and operate more effectively as a base load power source in comparison to intermittent technologies such as wind and solar.

However, the biomass sub-sector still faces difficult challenges such as securing finance for construction, identifying long term sources of fuel, and the visibility of fuel prices.

Yet despite these challenges, it is interesting to see that the companies with the money to support their convictions are driving biomass forward alongside their wind and solar portfolios, which are arguably easier to deliver in the short to medium term.

“Despite the absence of a legally binding agreement, countries will go ahead and implement plans of their own.”

Yvo de Boer, United Nations Framework Convention on Climate Change (UNFCCC)

The second half of 2008 and the first few months of 2009 were challenging for many players in the renewable energy sector as uncertainty in the financial markets and the slow pace of economic recovery made raising capital difficult.

Transaction activity picked up the pace in late 2009

However, as 2009 wore on, activity in the M&A arena and public markets picked up pace. On the M&A front, more and more companies with strong balance sheets tried to capitalize on attractive valuations and smaller companies' desperate need for capital. The year finished with over 300 acquisitions worldwide, totaling over US\$53bn in value.

Over the first three months of 2010, M&A deal values declined slightly from late 2009 levels; however, deal volume remained strong. As shown in Figure 1, the number of deals completed in the first quarter of 2010 (150) is more than double that in the corresponding period in 2009 (61). In terms of regions, North America maintained its allure – 46 percent of the announced M&A deals (69) involved target companies based in North America in Q1 2010, compared to 41 percent for the whole of 2009 (46). Barring any new significant negative development in the financial markets, all signs point to 2010 being a stronger year for M&A activity.

Solar remains the most popular sub-sector and leads in terms of the number of deals in 2010, with 31 deals recorded up to mid-April. However, in terms of aggregated transaction value, the wind sub-sector was actually larger during the same period – US\$1.8bn compared to US\$1.5bn in the solar sub-sector. This is largely due to two big Iberian deals, with Enel and Iberdrola recently announcing investments of €860m and €320m respectively, in wind assets in Spain.

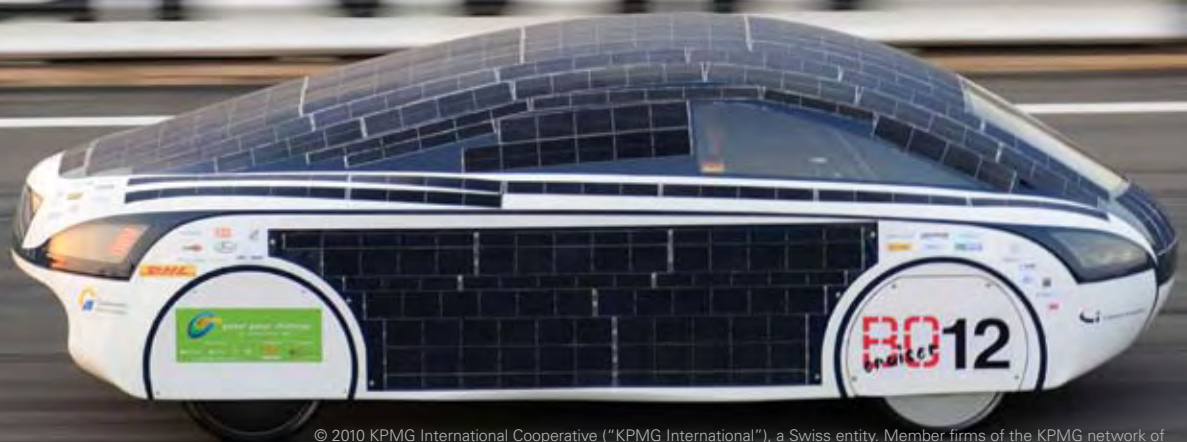
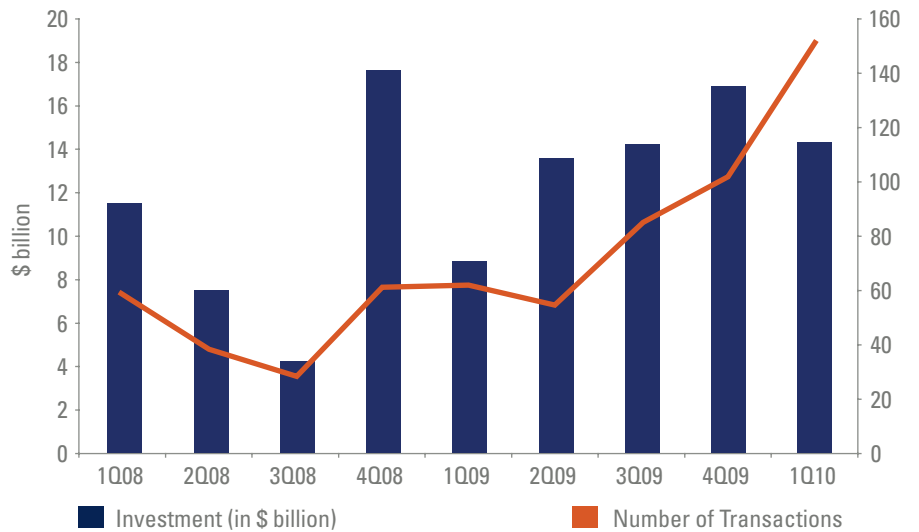


Figure 1: Global M&A activity



Source: VB/Research

In terms of valuation, average multiples have fallen by around 30 percent between 2009 and 2010. Between 2006 and 2008, some highly priced deals dragged the average up, close to 3x historic revenue and 13x historic EBITDA. Transactions are now priced closer to 2x historic revenue and 9x historic EBITDA as investors continue to show greater caution about overpaying.

In public markets, green indices were hit hard during 2008 and the first quarter of 2009, with some of them losing as much as 75 percent of their pre-crisis value. While there was some recovery over the last nine months of 2009, the indices are still faring worse than the general market indicators. The first three months of 2010 have not seen any improvement as investor confidence in

equities remains shaky in the American and European markets. More positively, several IPOs in Asia made big headlines toward the end of 2009, with the Chinese government ending a nine-month IPO freeze on the Shanghai Exchange.

While most attention in the renewable power sector has been focused on big European utilities such as Enel and Iberdrola, it is important to mention that the US, whose wind power capacity soared by 39 percent in 2009, also witnessed healthy M&A activity among its utilities. Examples include Kansas-based Westar Energy’s acquisition of the development rights to a 500-MW wind project from Infinity Wind Power in January 2010, utility giant Constellation Energy’s purchase of its first wind asset in November 2009 –

the 70-MW Criterion farm in Maryland – and Duke Energy’s entry into the solar market with its January 2010 purchase of the 16-MW Blue Wing project in Texas. These transactions indicate that US federal and state policies are finally convincing some of the more traditional investors and energy firms to turn to cleaner sources of power generation to grow their businesses.

One final trend worth noting in 2009 was the heightened M&A activity of large industrial corporates. Companies including Robert Bosch GmbH, Areva SA, BayerCropScience AG, Daewoo International, General Electric, Saint-Gobain SA, Siemens Energy AG and Royal Philips Electronics acquired renewable energy companies during 2009.

Focus on...

Solar

M&A in the solar sector is being driven in three ways – market consolidation, to increase the dominance of existing players through M&As; technology-motivated acquisitions; and downstream acquisitions, to improve access to the end-user. The solar market stands out in this respect with 24 percent of the total M&A deals in 2009 covering technology companies, manufacturers, service providers and installers. China, which supplies about half the world's solar modules, has seen a big share of the action.

This is due to a combination of over-capacity among panel manufacturers and a sharp plunge in global silicon prices, both of which have led to an unsustainable situation for many smaller factory owners. One large player that has capitalized is GCL-Poly Energy Holdings, which has transacted over US\$5bn in completed or announced acquisitions in 2009 and early 2010. Production cost concerns will also push developers toward regions providing low-cost manufacturing solutions, especially

following the decision to cut solar subsidies in Spain and Germany.

In 2010, notable solar deals include Solutia's acquisition of Etimex, which produces plastics for solar panels, and French nuclear operator Areva's acquisition of Ausra, an Australian developer that moved to California in 2008 to focus on large, utility-scale solar thermal projects. The latter is of particular interest, as an example of a mature player in the power industry seeking to expand in the renewable energy sector.

Wind generation

In the wind sector, large project buyers in 2009 and 2010 included Italy's Enel, Spain's Iberdrola, UK's Renewable Energy Systems, Ireland's Bord Gais Eireann and North America's NextEra Energy Resources. Gamesa was also active, announcing its intention to acquire a minority stake of German offshore wind developer BARD in February 2010. The German company recently launched its tailor-made installation vessel and is planning to use it for its own 5-MW turbines at a 400-MW wind farm in the North Sea in 2010.

In the UK, the British Government's 2009 Budget announced a series of support measures aimed at stimulating renewable energy projects including £525m for offshore wind farms through the Renewable Obligation scheme. Since this announcement a series of transactions have taken place as developers have sought to reduce their risk and attract third party capital to their offshore wind commitments. These transactions included investment company TCW's acquisition in October 2009 of a 50 percent stake in Centrica's Boreas portfolio (total installed and

projected capacity of 206-MW) along with a refinancing of the project. At the end of 2009, DONG Energy and Siemens Project Ventures acquired a 50 percent stake in Centrica's 270-MW Lincs project. DONG Energy also announced the sale of a minority stake in its 367-MW Walney offshore wind farm project to Scottish & Southern Energy. The UK remains a highly attractive market boasting potentially the largest wind resources in Europe and a well-defined subsidy regime.

Biofuel

Uncertainty in the US over the continuation of its tax credits regime, which is expected to expire at the end of 2010 (and in 2012 for cellulosic biofuels), has also driven market consolidation in the biofuel sub-sector. VeraSun, which at one point claimed to be the biggest ethanol producer in the US, was forced to seek bankruptcy protection after a rapid decline in corn prices, becoming the most prominent casualty in 2009. Valero Energy emerged as the biggest winner from VeraSun's liquidation, acquiring seven different ethanol plants for US\$477m (US\$0.60 per gallon of operating capacity), reported to represent only 30 percent of the assets' replacement value. Other bankruptcies hastened fire sales in 2009, including

Northeast Biofuels, acquired by Sunoco, and Panda Ethanol's partially complete plant by Societe Generale. In March 2010, the Renewable Fuels Reinvestment Act, seeking to extend the US\$0.45 per gallon blender credit, was presented to the house members but has not yet been ratified.

In Brazil, the most significant announcement in January 2010 was Shell and Cosan's US\$12bn joint venture (JV). Shell is paying US\$1.625bn over the next two years for its share in the venture, and is also contributing its Brazilian downstream assets and its interests in logen Energy and Codexis, which are biotech firms that specialize in advanced ethanol production. Cosan is contributing both its downstream and production assets, which include

the capacity to produce about 2 billion liters of ethanol per annum. The joint venture should enable these two companies to dominate the domestic Brazilian market and become major global players within the sub-sector. Nonetheless, the success of marketing Brazilian ethanol globally will depend on several factors beyond the companies' control, with the prevailing price of oil and US import tariff restrictions being the most important. Other recent entrants in the Brazilian ethanol market include India's Shree Renuka Sugars and North America's Amyris Biotechnologies. Brazil's cheap sugar cane and its well-developed biofuel infrastructure have played a large role in attracting big names to its biofuel market.

The table below lists some of the largest transactions tracked during 2009 and the first months of 2010. Only transactions for which a deal value has been announced have been listed in the table.

Notable M&A Transactions – 2010 Year To Date

Target	Target country	Acquirer	Acquirer country	Sector	Date	Deal value (US\$m)	Valuation metrics
Cosan Ltd.	Brazil	Royal Dutch Shell plc	The Netherlands	Biofuels	Jan 2010	1,625	N/A ¹
Gamesa's El Andevalo wind farm (244-MW)	Spain	Iberdrola SA	Spain	Wind	Feb 2010	440	1,800 (US\$ per kW in operation)
Equipav S.A. Açúcar e Álcool	Brazil	Shree Renuka Sugars Ltd.	India	Biofuels	Feb 2010	324	N/A ¹
Endesa Renovables (1,460-MW)	Spain	Enel Spa	Italy	Wind (mostly)	Mar 2010	1,184	1,350 (US\$ per kW in operation) ²
Etimex Solar GmbH	Germany	Solutia Inc.	USA	Solar	Mar 2010	326	10.1x EBITDA

Notable M&A Transactions – 2009

Target	Target country	Acquirer	Acquirer country	Sector	Date	Deal value (US\$m)	Valuation metrics
Endesa renewable portfolio (2,105-MW)	Spain	Enel Spa	Italy	Wind, Hydro	Feb 2009	3,558	1,690 (US\$ per kW in operation) ²
Greatest Joy International Ltd.	China	GCL-Poly Energy Holdings Limited	China	Solar	Jun 2009	912	N/A ¹
Waneta Dam (490-MW)	Canada	BC Hydro	Canada	Hydro	Jun 2009	729	4,460 (US\$ per kW in operation) ³
Canadian Hydro Developers, Inc. (700-MW of operational assets)	Canada	Transalta Corp.	Canada	Hydro, Wind, Biomass	Jul 2009	1,470	2,250 (US\$ per kW in operation) ³
Turkish wind farm portfolio (500-MW)	Turkey	Renewable Energy Systems Ltd.	UK	Wind	Oct 2009	1,107	2,200 (US\$ per kW in late development)
Elkem AS hydro plants (350-MW)	Norway	Norsk Vannkraftproduksjon AS	Norway	Hydro	Oct 2009	1,033	2,995 (US\$ per kW in operation)
Apollo Precision Ltd.	China	RBI Holdings Ltd.	China	Solar	Oct 2009	539	N/A ¹
SWS Natural Resources	Ireland	Bord Gais Eireann	Ireland	Wind	Dec 2009	755	14.3x EBITDA
Moema Group (5 Sugar mills, 130-MGY)	Brazil	Bunge Ltd.	USA	Biofuels	Dec 2009	896	6.90 (US\$ per gallon of annual operating capacity)

Source: VB/Research

¹ The relevant information was not available at the time the deal was announced.

² Enel purchased a 60 percent stake. The valuation multiple has been calculated on the basis of an implied 100 percent acquisition.

³ Transalta ultimately ended up purchasing a 93.5 percent stake in November 2009. The valuation multiple has been calculated on the basis of an implied 100 percent acquisition.

Biomass and Clean Coal

Rounding up recent power generation deals, Greenspark Power Holdings, a subsidiary of the Australian private equity firm Pacific Equity Partners, acquired a 79.6 percent share of the power plant operator Energy Developments Ltd., which generates 600-MW of worldwide capacity from waste coal mine gas, compressed natural gas and landfill gas. In the US, Arch Coal obtained a 35 percent equity interest in the 600-MW Trailblazer Energy Center project from Tenaska. Trailblazer will be one of the world's cleanest coal plants, capturing 85 – 90 percent of the carbon dioxide produced in combustion and then piping the gas for use in enhanced oil recovery at a nearby oil field.

Wind technology

This sub-sector has been impacted by weakening demand in the wind turbine market. The deep backlogs in turbine orders that were commonplace in early 2009 have been replaced by rapidly shrinking orders as developers struggled to obtain financing for their projects. Industry players reacted swiftly to this trend. For example, Iberdrola divested 10 percent of its holding in Gamesa for over €391.7m in a private placement in June 2009. Later in the year, AE Rotor received £224m for its 35 percent share in Hansen Transmissions, while United Technologies acquired a 49.5 percent stake in Clipper Windpower for £166m.

Hydro

The more mature forms of renewable generation, such as wind and hydro, have also witnessed an increase in M&A activity in the second half of 2009 and early 2010. On the hydro front, several large transactions were announced in Canada by companies such as BC Hydro in June 2009 (CAD\$825m) and Transalta Corp. in July 2009 (CAD\$754m). In addition, the Canadian Brookfield Renewable Power Fund, formerly known as Great Lakes Hydro Income Fund, acquired 15 hydroelectric plants from Brookfield Renewable Power Inc. in July 2009 for CAD\$945m.

Although a global agreement on emission targets was not achieved at COP15 in December 2009, the lack of a binding agreement is unlikely to discourage corporates and investors from investing further in the renewable energy sector.

Government incentives are fuelling M&A

Among the surveyed respondents, an overwhelming 88 percent believe that the result of the summit will not directly affect M&A activity worldwide.

Anil Srivastava comments, "I believe [the lack of outcome of COP15] will mainly impact the number of projects in emerging countries, which will decrease, and affect the broader development of renewable energy generation projects worldwide." This is despite an agreement during the summit to provide US\$30bn in short-term financing to support developing countries. "The key question," says Yvo de Boer "is how will these funds be delivered and how will the money be put back into greening the economy? A clear financial architecture has to be defined. In addition the role of financial institutions such as The World Bank has to be clarified."

Regional climate change concerns, energy security issues and economic rationale are all prompting developed countries to provide the renewable energy sector with a range of increasingly differentiated incentives and grants. According to Yvo de Boer, "Regions and countries have to do what they can on a regional and country basis. A global agreement is the last resort, i.e. when it cannot be avoided. The slimmer the international agreement, the better!"



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Yvo de Boer, United Nations Framework Convention on Climate Change (UNFCCC)

Significantly over half of the surveyed respondents predict that these regional regulations and tariffs will actually accelerate M&A activity during the next 18 months. At the sub-sector level, these incentives will also have a profound impact on M&A. As Thomas Kneip, Vice President of Business Development at Centrosolar Group, comments, “In the photovoltaic industry, M&A activity is largely driven by valuation and country specific regulations. For example, the US, India and China have developed important stimuli packages to support the industry.”

These government initiatives will also drive cross-border M&A activity. Countries with attractive incentives will enhance their appeal to foreign corporates and investors, who are increasingly looking for scale and a global footprint. Surveyed respondents strongly agree – over 65 percent of the corporates and investors based in North America or Europe intend to invest or acquire a renewable energy company or project outside their own region in the next 18 months.

In line with last year’s survey, North America is forecast to attract a majority of active investors and acquirers globally,

as indicated by 54 percent of those surveyed (see Figure 2). Since the beginning of 2010, 46 percent of the announced M&A deals (69) have involved companies based in North America, up from 41 percent (46 deals) in 2009.

Compared with last year’s survey, India (36 percent) and China (34 percent) are increasingly being targeted by companies considering acquisitions (2009: India – 23 percent and China – 22 percent).



Focus on...

North America

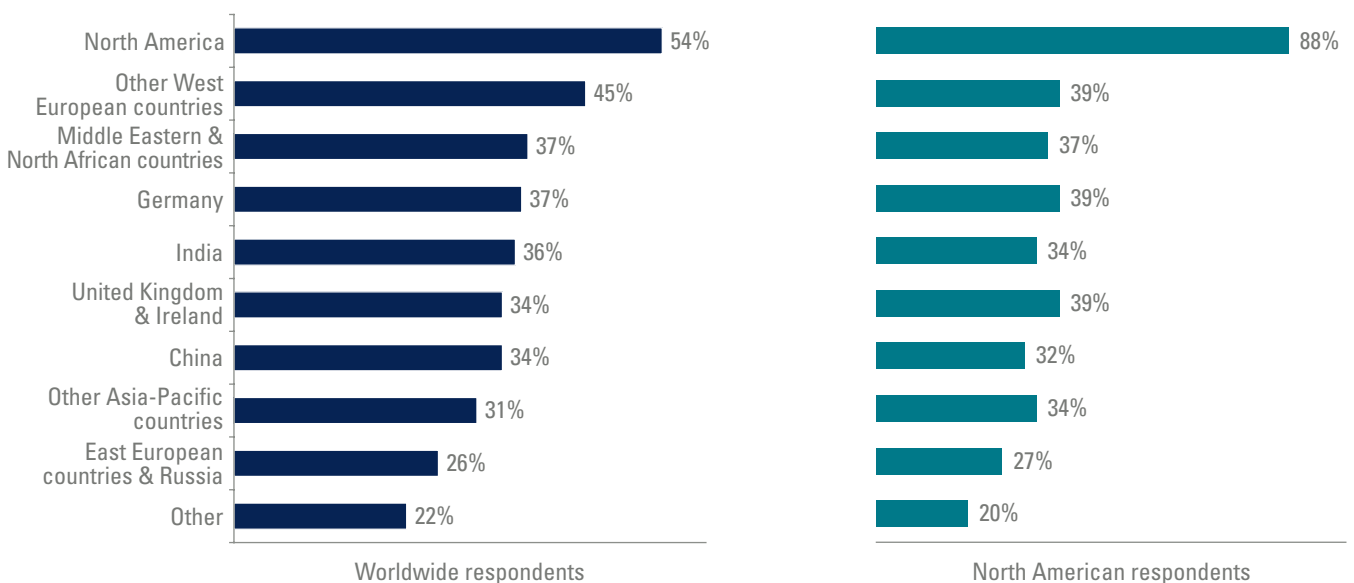
The American Recovery and Reinvestment Act (ARRA), which came into effect in early 2009, and subsequent incentives and stimulus have made North America the preferred geography for acquisitions of renewable energy projects or companies. Almost half of European and a third of Asia-Pacific respondents are considering acquisition targets in North America in the next 18 months (see Figure 2). The largest share of respondents (36 percent) specifically stated that they are motivated by local government incentives (see Figure 3).

Although the Clean Energy and Security Act (ACES), which would introduce a carbon cap-and-trade scheme and federal Renewable Energy Standard, is still pending approval by the Senate, recent initiatives continue to confirm the US Government's ongoing support for the sector. These include

- Earmarking of grants, loans and loan guarantees from the Department of Energy (allocated since mid-2009), including a loan guarantee program of US\$30bn; major support includes a US\$249m grant for A123 Systems and a US\$1.37bn loan guarantee for BrightSource Energy
- State-led plans, such as California's decision in September 2009 to increase its percentage of energy consumption from renewable energy sources to 33 percent by 2020, following an executive order from the Governor, and a grant of US\$40m allocated by ARRA to renewable energy initiatives in the state of Virginia in October 2009
- An increase in the required volume of biofuel to be blended into transportation fuel from a base of 9 billion gallons in 2008 to 36 billion gallons by 2022 (approved by the Environmental Protection Agency in February 2010).

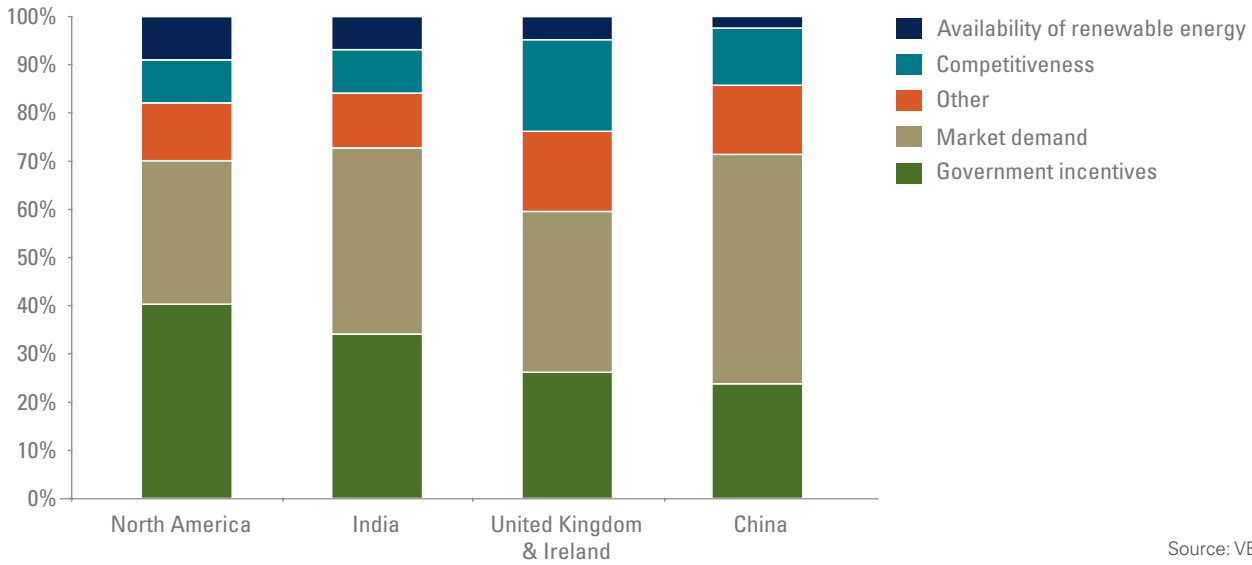
Canada has also undertaken several initiatives such as the launch of a CAD\$1bn Clean Energy Fund by the Canadian government to invest in large-scale carbon capture storage pilot projects and smaller-scale pilot projects of renewable and alternative energy technologies (May 2009). This is in addition to Ontario's Green Energy and Green Economy Act (passed in May 2009), which supports a range of renewable energy, energy efficiency and smart grid projects, including the adoption of a FiT program. This program is similar to other FiT schemes in European countries and covers solar, wind, water, biomass, biogas and landfill gas.

Figure 2: In which of these countries do you envisage your company investing in renewable energy projects or companies in the next 18 months? (Respondents: Corporates and Investors)



Source: VB/Research

Figure 3: What is the main reason for your company’s expected investments in these regions in the next 18 months? (Respondents: Corporates and Investors)

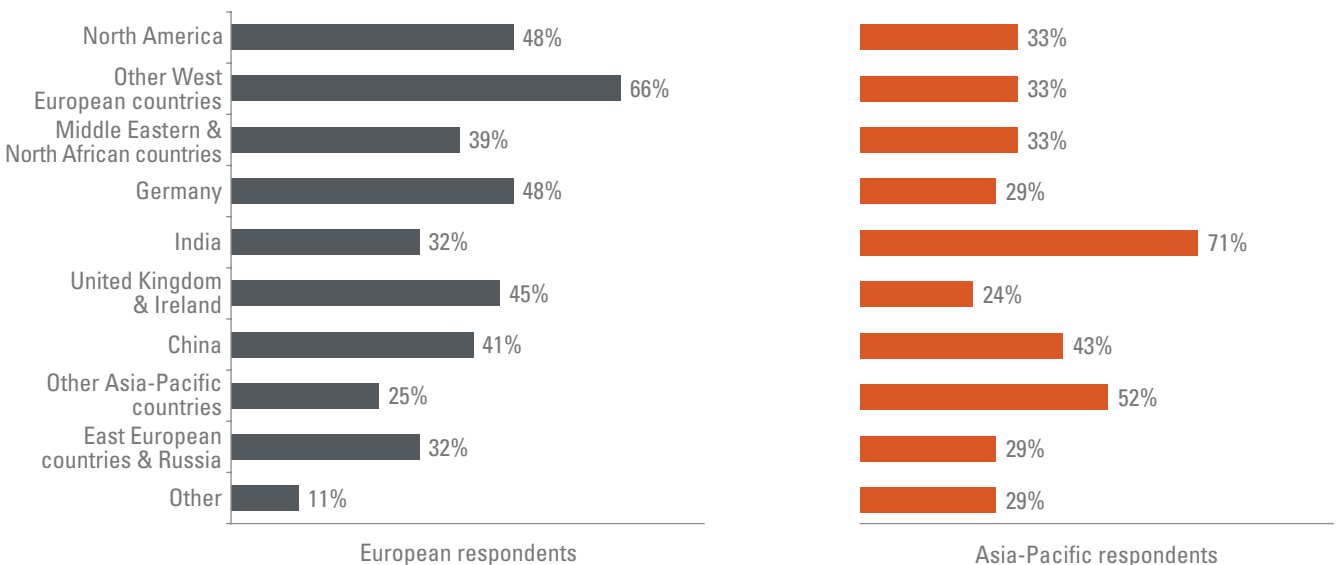


India

While Western European countries such as Germany have recently announced plans to reduce their subsidies, other countries, including India have increased their incentive programs. In September 2009, India’s Central Electricity Regulatory Commission announced the launch of a FiT scheme for renewable energy projects, including wind and solar energy. The Solar India Initiative, announced later in the year, targets

the installation of 20-GW of solar energy (both photovoltaic and solar thermal) capacity by 2022. It is one of eight national programs the Indian Government intends to deploy as part of its National Action Plan on Climate Change. This plan will be developed in three phases. The first phase, running up to 2013, will focus on installing solar thermal systems and promoting off-grid systems to serve communities without access to grid infrastructure. The second phase, up to 2017, involves

the creation of a competitive environment for solar energy development, leading to 20-GW of power, which is planned by the end of the third phase in 2022. This supplements the existing Electricity Act 2003 and National Tariff Policy 2006, which make provisions for state and central electricity boards to buy grid-based power from renewable sources.



Source: VB/Research

“The central Government in China has committed to significant renewable energy generation targets. By 2010, 10 percent of the total energy generation mix is expected to come from renewable energy sources. As of today, the country is close to reaching this target.”

Allard Nooy, Covanta Energy Corporation

China

Over 40 percent of the surveyed European corporates and investors and a third of North American respondents are considering Chinese acquisition targets in the next 18 months (see Figure 2). Recent regulations have increased China’s attractiveness to non-domestic corporates and investors. Allard Nooy, President, Asia-Pacific, at Covanta Energy, comments, “The central Government in China has committed to significant renewable energy generation targets. By the end of 2010, 10 percent of the total energy generation mix is expected to come from renewable energy sources. As of today, the country is close to reaching this target.” Examples include

- Solar subsidies for new solar installations larger than 50-kW (March 2009), with a priority on building integrated photovoltaics

- The Golden Sun initiative, launched in June 2009, which aims to install 500-MW of solar electricity across China over the next three years. Under this initiative, the Government will subsidize 50 percent of the total investment cost per project as well as relevant power transmission and distribution systems to connect them to the grid
- A plan to increase solar capacity by 2011 by the local Government of Beijing (late 2009) by developing a promotion program for new energy. This includes developing solar power infrastructure for the city, which would be capable of producing up to 70-MW of solar power
- The introduction of a standardized FiT for wind farm projects approved since August 1, 2009.

United Kingdom

European respondents slightly favor North America (48 percent) as a target region for M&A activity over the UK & Ireland (45 percent). Interestingly, Figure 2 indicates that the UK & Ireland and China ranked at the same level in terms of attractiveness for M&A transactions.

A few months after an announcement in the 2009 budget to allocate £1.4bn to clean technologies and renewable energy, including £525m for offshore wind farms through the Renewable Obligation scheme, the UK Government proposed a Low Carbon Transition Plan in July 2009 including

- A suite of FiTs for small scale, low-carbon electricity installations of up to 5-MW which became effective in April 2010, along with a plan for a renewable heat incentive to be introduced in April 2011
- £60m in funding to build wave and tidal testing facilities to pilot new technologies in strategic parts of the country
- Up to £120m to support the growth of an offshore wind industry.

In addition, £8.6bn was announced in May 2009 to equip every home in Britain with smart meters by the end of 2020. In late March 2010,

the Government announced several measures to support offshore renewable energy, including £60m for the development of port sites to host offshore wind turbine manufacturers as well as a £2bn Green Investment Bank. This will be invested in renewable energy, with a focus on offshore wind and green transport schemes. Despite this, the largest share of respondents (33 percent) who selected the UK & Ireland cited public demand for greater provision of renewable energy as the main driver, ahead of government incentives (see Figure 3).

“We aim in the long run to achieve grid parity without subsidies. ...we would not choose locations with poor or uncertain access to the energy source, even though they could benefit from important incentive-based regimes.”

Cord Landsmann, E.ON Climate and Renewables GmbH

Other Asia-Pacific countries

Large energy importer South Korea announced a considerable US\$84.5bn investment plan in July 2009 to support environment-related industries and set its greenhouse gas emission reduction target at 30 percent by 2020. Although the country proposed plans to decrease subsidies in August 2009 for large-scale solar systems and reduce subsidized solar power caps, South Korea continues to reiterate its plan to play a major role in the renewable energy sector. Early this year, the South Korean government announced a smart grid plan to support the development of smart electricity grids with funding up to US\$24bn.

Australia's extensive renewable energy resources are largely undeveloped (with the exception of hydro and wind). Nevertheless, the country, in its 2009 budget, announced a A\$4.5bn Clean Energy Initiative to support the development of renewable energy, including A\$1.4bn to support the Solar Flagship Program to fund the construction of large-scale, grid-connected solar power stations using solar thermal and photovoltaic technologies. The program aims to build up to 1,000 megawatts of solar power generation capacity to provide a large scale market demonstration of the potential of solar energy to be constructed and operational within a major electricity grid. Together with the Australian Government's recent announcement in March 2010 to enhance the Renewable Energy Target to further encourage the deployment of large scale renewable power generation, these initiatives will assist to deliver on the 20 percent (or 41,000-GWh) target by 2020.



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“Businesses are under pressure to hold with the sustainability and climate change agendas by improving their products and services.”

Yvo de Boer, United Nations Framework Convention on Climate Change (UNFCCC)

Non government M&A drivers

Although government incentives make a substantial impact on the direction of investments, their limited duration is an important factor that should be considered. As Cord Landsmann, Chief Financial Officer at E.ON Climate and Renewables GmbH, notes, “We aim in the long run to achieve grid parity without subsidies. ...we would not choose locations with poor or uncertain access to the energy source, even though they could benefit from important incentive-based regimes.” Other drivers of cross-border M&A in the sector include energy security in the form of reliable energy supply and secure production facilities; volatile fossil fuel prices; market consolidation; and increasing demand within society for a renewable/alternative energy supply. As Yvo de Boer points out, “Businesses are under pressure to hold with the

sustainability and climate change agendas by improving their products and services.”

Acquisition strategies are also closely associated with building market share. The largest share of respondents interested in Middle Eastern and North African targets (33 percent) cited public demand for greater provision of renewable energy as the main driver for investment and M&A activity in the region.

M&A deals will also be boosted by financial backers looking to exit their current portfolio companies. Venture capital investors who reached their investment limit during the downturn by providing follow-on financing to their portfolio companies, and funds that were raised over five years ago are desperately looking to exit some of their investments. With the IPO market still fragile, M&A is the most attractive exit route.

Additional incentives

Sixteen government and trade organizations were surveyed this year, among which 7 were based in Western Europe, 5 in North America and 4 in the Middle East & North Africa.

Most of these organizations nurture small businesses in “clusters.” Examples include the National Renewable Energy Lab in the US, the Vancouver Fuel Cell Cluster in Canada, “Silicon Fen” in the UK and the Copenhagen Cleantech Cluster in Denmark. Among the surveyed government organizations, the four most common services offered to businesses are accelerated access to strategic vendors; subsidy and grant schemes; mentoring; and funding. To achieve their objectives, most

government and trade organizations collaborate with well-established private and public companies, which fuels partnerships between innovators and more established operators. Most surveyed government participants cooperate with utilities and Independent Power Producers (88 percent), as well as specialist renewable energy companies or subsidiaries of integrated utilities (75 percent). For example, the Copenhagen Cleantech Cluster, launched in late 2009, comprises 40 companies, including DONG Energy and Vestas. The Finnish Cleantech Cluster is partnering with Yes Bank in India to create cross-border partnership opportunities.

After a year on the sidelines, corporates and investors have regained confidence and are now actively looking to make acquisitions in 2010 in the renewable energy sector. More than 90 percent of surveyed respondents are considering M&A activity in the next 18 months.

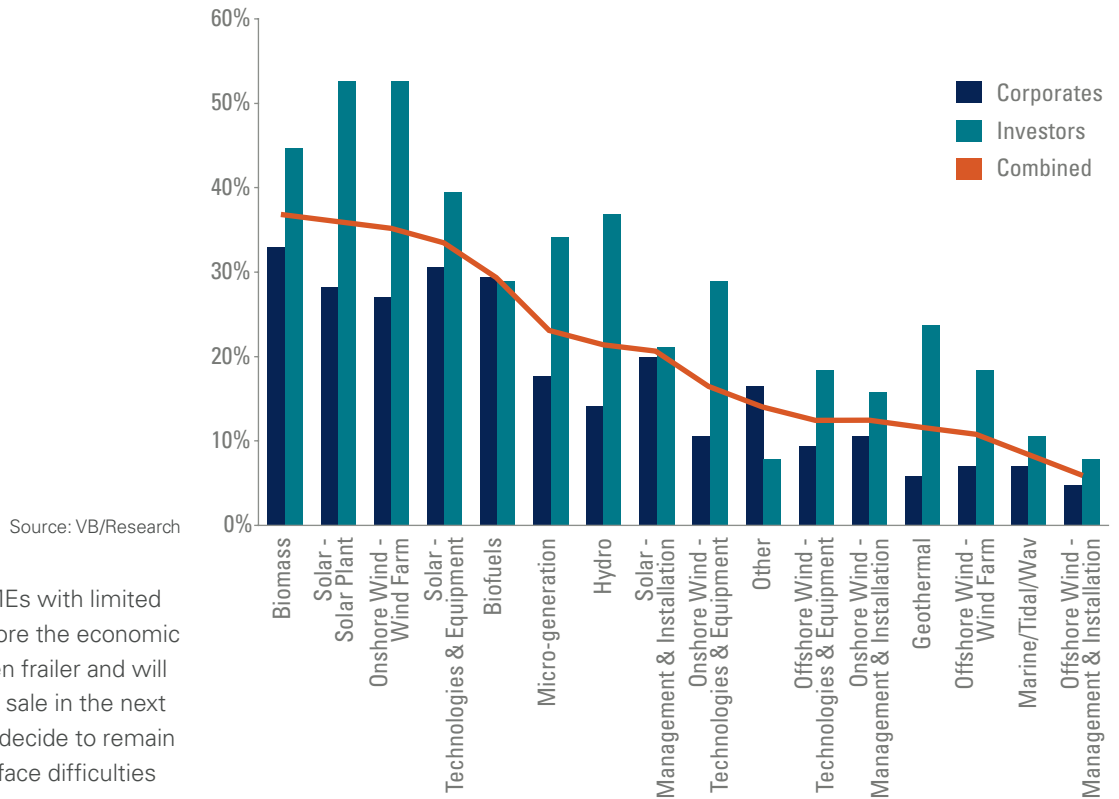
M&A rises to the top of the agenda

Last year, 45 percent of the surveyed respondents were either not planning to make any acquisitions during the following 12 months or were undecided. During the first quarter of 2010, 150 transactions with a combined value of US\$14.3bn were announced, compared with 61 deals representing US\$8.8bn during the first quarter of last year (see Figure 1). This momentum is expected to be maintained in 2010, with companies continuing to announce acquisition plans on the back of prior-year profits, in parallel with a fundraising and in some cases to counterbalance disappointing trading. Recent examples include Boralex Inc., the Canadian diversified renewable energy company, which intends to pursue its acquisition strategy throughout 2010 along with obtaining financing and developing projects; and Schneider Electric SA, which intends to maintain its acquisitions strategy despite a 49 percent decline in profitability in 2009.

Inorganic growth through acquisitions will essentially be twofold: technology-motivated, driven by technology or manufacturing conglomerates' intent on entering or expanding their activities in the sector and establishing an end-to-end solution or service; and client-side motivated, to get closer to the end-user. Both types of transactions are set to intensify. As Thomas Kneip notes, "Corporates, already active in the renewable energy sector, will seek to integrate horizontally for geographical expansion or downstream to get access to installers and system integrators."



Figure 4: Please specify your company’s target sub-sectors for acquisitions of renewable energy projects or companies. (Respondents: Corporates and Investors)



Source: VB/Research

Many start-ups and SMEs with limited financial resources before the economic slowdown are now even frailer and will be forced to consider a sale in the next 18 months. Those that decide to remain independent may well face difficulties in 2010. As Anil Srivastava notes, “The companies that are able to partner or be acquired will stay, the others will struggle to survive.”

This trend started in 2009, mainly in solar and wind. In 2009, there were over 300 completed M&A transactions of which nearly 50 percent were in the solar and wind sub-sectors (24 percent each). The consolidation dynamic is also picking up in the highly fragmented biomass sub-sector, as indicated by a number of large transactions last year. In July 2009, Covanta Holding

Corporation acquired most of Veolia Environmental Services’ US energy-from-waste business for US\$450m. Later, in a revised offer in November 2009, Infinis Energy offered £64m for a majority stake in Novera Energy that generated, at the time of the transaction, half of its total installed capacity of 143-MW from landfill gas plants.

In terms of sub-sectors that are most attractive to respondents, the survey findings indicate a change in appetite from last year’s findings, with biomass reaching a similar level of appeal (37 percent) to solar (36 percent) and onshore wind (35 percent) (see Figure 4).



Focus on...

Biomass

Dealmakers, particularly large corporates such as the utilities, are emphasizing biomass targets in their M&A plans in the next 18 months (see Figure 4).

Biomass plants have much greater potential to yield higher returns than other renewable sources – a well-executed biomass plant can deliver substantially greater economies of scale than wind; and the heat generated from incineration can supply neighboring buildings, creating an additional revenue stream.

Furthermore, the potential for biomass to operate as a base-load power source provides advantages in comparison to intermittent technologies such as wind and solar, particularly with regard to integration into large-scale electricity distribution networks.

However, biomass companies have important challenges to address, in particular focusing on the visibility of long-term fuel supply and pricing. These challenges are hampering the availability of funding for many projects. Furthermore, securing funding for construction is no mean feat in the

current environment with many lenders requiring a “turnkey” construction contract, which effectively guarantees the construction cost and delivery program for projects, with clear contractor penalties if there are delays. Unfortunately, turnkey contracts in biomass do come at a price – adding up to 20 percent to the capital cost. Despite the fuel and construction challenges, it is interesting to see that the companies with the money to support their convictions are driving biomass forward alongside their wind and solar portfolios, which are arguably easier to deliver in the short-to-medium term.

“Corporates, already active in the renewable energy sector, will seek to integrate horizontally for geographical expansion or downstream to get access to installers and system integrators.”

Thomas Kneip, Centrosolar Group AG

Solar

Technology gaps and improved access to end-users will underpin corporate acquisition activity in the solar sub-sector.

Over 30 percent of the surveyed corporates indicated an interest in acquiring solar technologies and equipment companies (see Figure 4). Anil Srivastava believes this trend may be more pronounced within the less-developed sub-sectors of the solar market, “While the solar photovoltaic sector has already seen significant consolidation, concentrated solar power is earlier in the process as it requires large amounts of capital.” In a move to secure access to customers and increase market share, 20 percent

of the corporate respondents are targeting acquisitions in solar management and installation businesses over the next 18 months.

Aside from solar plants, investors are showing a substantial interest in solar technologies and equipment companies (39 percent; see Figure 4), driven by the expected rapid market consolidation in the sub-sector. “We will see a good level of M&A activity over the next 18 months, especially in the solar sector, as its value chain is currently changing substantially and is impacted by Asia on the manufacturing side,” explains Marcel Gerritsen, Global Head of Renewable Energy & Infrastructure Finance at Rabobank.

“The offshore wind sector will be one of the sectors that will suffer the most from this phenomenon. New players like institutional investors can help in reducing the gap between supply and demand of debt.”

Marcel Gerritsen, Rabobank International



“We follow our boutique to industrial approach and target projects based on scalable technologies that can provide synergies, and reduce costs. ...The wind sector is at an advanced stage of development and provides such characteristics, while the solar sector is the next to follow with a huge potential of scalability.”

Cord Landsmann, E.ON Climate and Renewables GmbH

Wind

Corporates will target acquisitions that increase generation capacity, leaving technology and equipment company acquisitions to investors.

Projects in the wind industry remain attractive targets for both corporates and investors. Cord Landsmann explains, “We follow our boutique to industrial approach and target projects based on scalable technologies that can provide synergies, and reduce costs. ...The wind sector is at an advanced stage of development and provides such characteristics, while the solar sector is the next to follow with a huge potential of scalability.”

As the most mature renewable energy sub-sector, synergistic technology acquisitions and downstream integration is less critical to corporates.

We expect financial investors to be the major players in takeovers and investments in technology and equipment companies. Figure 4 indicates that few of the surveyed corporates plan to acquire onshore wind technologies and equipment or onshore wind management and installation companies, whereas we expect investors to be more active in these markets, driving efficiency savings through market consolidation.

“The onshore wind sector started its consolidation in 2002-2003, but there is still room for deals to be done. If further consolidation does not take place over the next 18 months some companies will disappear,” Anil Srivastava explains. “If Chinese companies begin to move outside China, I think this will push existing onshore wind players to consolidate further.”

Investors will play a vital role in this process, explains Marcel Gerritsen, “I believe the crucial question for the next 18 months will be: is there sufficient debt available to reach the EU’s 20 percent target by 2020?” He expects the availability of debt financing to recover more slowly than the renewable energy sector, adding, “The offshore wind sector will be one of the sectors that will suffer the most from this phenomenon. New players like institutional investors can help in reducing the gap between supply and demand of debt.”

During the last two years, the gap between sellers' and acquirers' price expectations widened, causing many M&A deals to collapse.

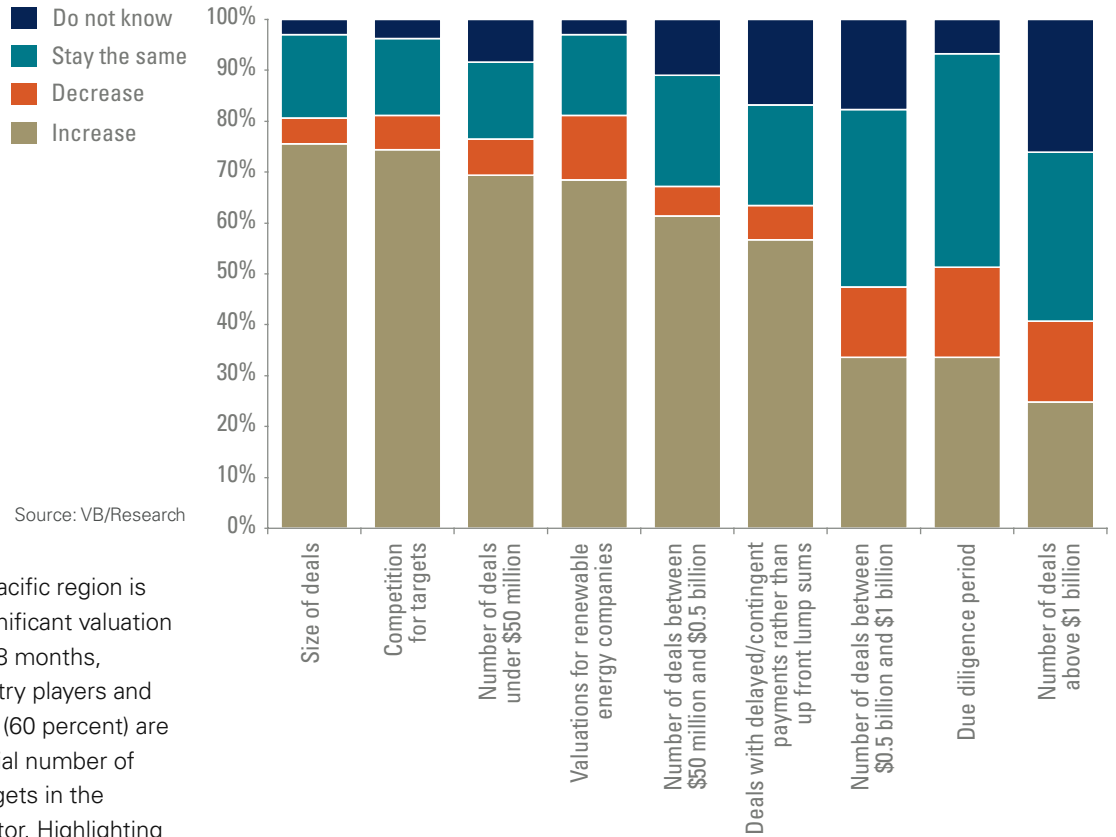
How long will it remain a buyers' market?

Over a third of the surveyed corporates and investors indicated that a seller's price expectation was the primary cause for a failed deal, followed by issues emerging during due diligence (27 percent) and uncertainties caused by the economic climate (22 percent). More recently, this valuation gap seems to have narrowed, albeit by differing degrees worldwide.

Globally, 50 percent of the surveyed respondents expect to see financially stable and fairly priced acquisition targets in 2010, a marked change from our 2008 report, when more than half of the respondents agreed with the statement that there was a risk that a bubble in the renewable energy sector was being created. Cord Landsmann agrees, "We are now seeing more acquisition options compared to 12 months ago, when such opportunities were rare and not value-enhancing." In parallel, we are predicting a continued flow of distressed assets coming to the market in the next 18 months, exacerbated by ongoing tight debt financing conditions. This trend is forecast by a majority of North American survey participants (57 percent) and a smaller share of European participants (39 percent). Discussing the type of distressed companies that will come to market, Thomas Kneip notes, "I expect to see mainly new technology companies, upstream players with lack of scale, or downstream players with no established sales organization or with a lack of flexibility in their supply organization (such as extensive long-term supply contracts)."



Figure 5: Over the next 18 months, how do you expect the following dynamics of the renewable sector M&A environment to change? (Respondents: All respondents)



Source: VB/Research

Conversely, the Asia-Pacific region is not registering any significant valuation re-rating. In the next 18 months, a majority of the industry players and investors in the region (60 percent) are forecasting a substantial number of highly priced M&A targets in the renewable energy sector. Highlighting China as an example, Allard Nooy commented, "We have not seen a substantial decrease in prices in China, mainly because it is a high growth market. In addition, the central Government's plans have encouraged industrial activity, including the renewable energy sector."

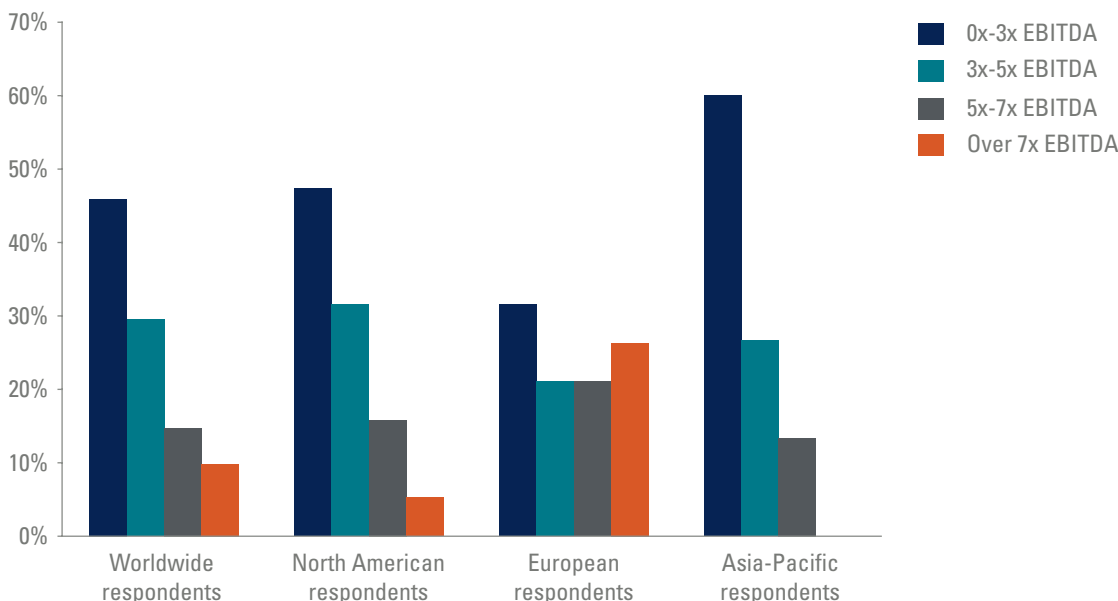
Most industry players and investors expect valuations to recover in 2010 (see Figure 5) as competition for targets intensifies and financing

conditions improve. This should accelerate M&A activity among corporate acquirers, particularly those with large balance sheets, in the coming months before the advantage starts to swing back toward the seller. As John Cavalier, Managing Partner at Hudson Clean Energy Partners, explains, "The combination of these dynamics, among others, means that we expect valuation metrics will increase and the average size of deals

should increase again." Figure 5 indicates that this opinion is shared by 75 percent of the respondents worldwide and is particularly evident for deals with a valuation below US\$1bn. Anil Srivastava agrees but adds a note of caution, "I expect the size of deals to increase as the industry will reopen and achieve bigger multiples. However, I do not think valuations will experience some kind of magical turnaround in 2010."

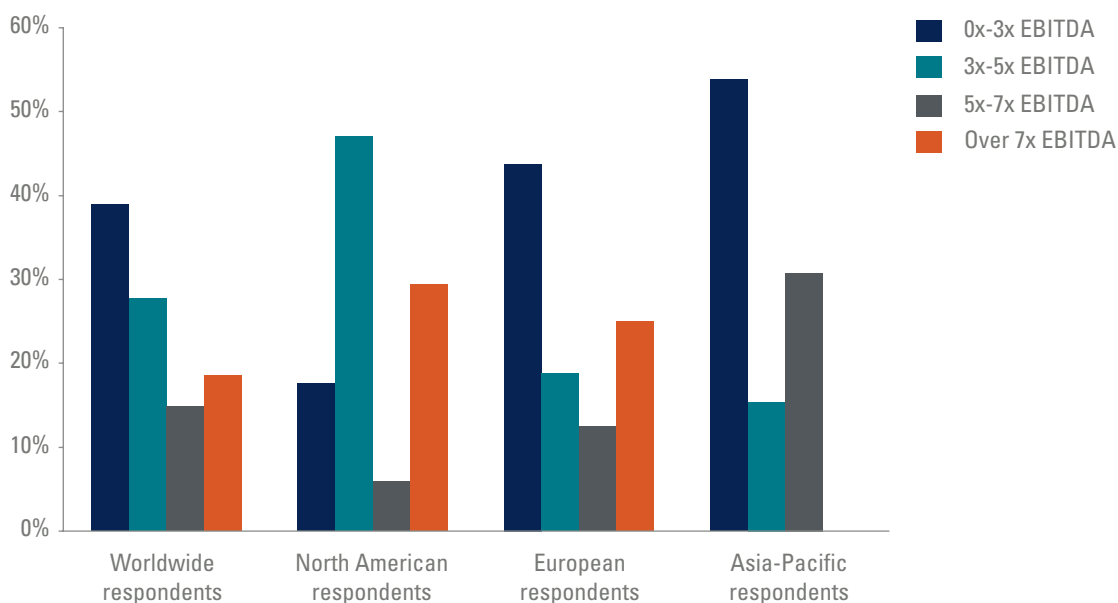


Figure 6: Expected acquisition multiple for acquisition of renewable energy projects (Respondents: Corporates)



Source: VB/Research

Figure 7: Expected acquisition multiple for acquisition of renewable energy companies (Respondents: Corporates)



Source: VB/Research

Despite the forecast increase in valuation multiples, a sizeable buyer/seller valuation gap still remains. Renewable energy M&A deals completed in 2009 for an enterprise value above US\$100m were priced at an approximate 9x historic EBITDA multiple. Interestingly, over two-thirds of surveyed corporates do not expect to pay more than 5x historic EBITDA for either renewable energy projects

(75 percent – Figure 6) or companies (67 percent – Figure 7) over the next 18 months. Furthermore, around 40 percent of the corporates surveyed will not even consider deals above 3x historic EBITDA for either renewable energy projects (46 percent) or companies (39 percent). Any increase in valuation multiples will be driven by corporates mainly in North America and Europe - around a quarter would be comfortable

with acquiring companies above 7x historic EBITDA (see Figure 7), whereas none of the Asia-Pacific respondents indicated their intention to consider valuation multiples above this level.

The institutions that will be most active in the next 18 months are large corporates with strong balance sheets and an international presence, enabling them

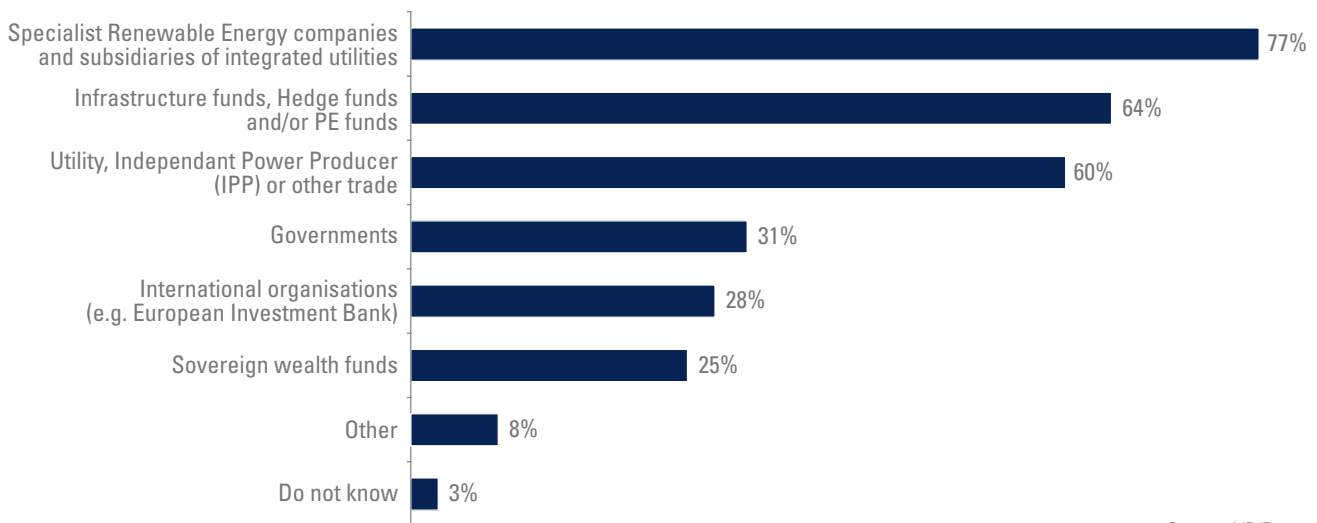
“I expect to see mainly new technology companies, upstream players with lack of scale, or downstream players with no established sales organization or with a lack of flexibility in their supply organization (such as extensive long-term supply contracts).”

Thomas Kneip, Centrosolar Group AG

“I expect the size of deals to increase as the industry will reopen and achieve bigger multiples. However, I do not think valuations will experience some kind of magical turnaround in 2010.”

Anil Srivastava, Areva SA

Figure 8: Over the next 18 months, which of the following institutions do you think are likely to be the most active investors in Renewable Energy? (Select all that apply)



Source: VB/Research

to pursue deals without needing to secure additional debt finance. An overwhelming majority of respondents (77 percent) expect specialist renewable energy companies and subsidiaries of integrated utilities to be the most active participants (see Figure 8). John Cavalier notes, “There are benefits of being a global company, such as economies of scale, which are too important to ignore. ...

The sector is becoming much more competitive. Large companies that are expecting to have a strong presence globally must act now; otherwise they will not be able to dominate the market.”

Large financial investors, including insurance and pension funds, are also likely to play a major role in 2010, given the attractive long-term returns offered by the renewable energy sector. In Asia, financial returns may also be enhanced

through exchange rate movements, as suggested by Allard Nooy, “[In China], Government support for renewable energy ...has increased attention from non-industry players such as private equity funds. They forecast substantial capital appreciation, as well as an appreciation of the renminbi over other currencies.” As indicated in Figure 8, almost two-thirds of the respondents believe that financial investors will be

the most active acquirers in the next 18 months. This proportion is more than double when compared with last year's survey results and represents a substantial increase in forecast activity by financial investors. This is slightly ahead of forecast activity by from utilities and Independent Power Producers (IPPs) – 60 percent of the surveyed respondents expect utilities and IPPs to be the leading investors in the renewable energy sector during the next 18 months.

"Utilities are very active in the [renewable energy] sector as they are building up their share of renewable energy in their generation mix," Cord Landsmann explains. "However, it is not enough to finance all the projects. Institutions, such as pension funds and sovereign wealth funds, will facilitate the access to finance for highly capital intensive industries such as the offshore wind sector, where single projects can require in excess of €1bn of capex."

“There are benefits of being a global company, such as economies of scale, which are too important to ignore. ...The sector is becoming much more competitive. Large companies that are expecting to have a strong presence globally must act now; otherwise they will not be able to dominate the market.”

John Cavalier, Hudson Clean Energy Partners



The past 12 months have proved very demanding for companies seeking debt finance. Globally, a majority of the respondents believe that securing finance for acquisitions in the renewable energy sector became harder or moderately harder during the last year (see Figure 9).

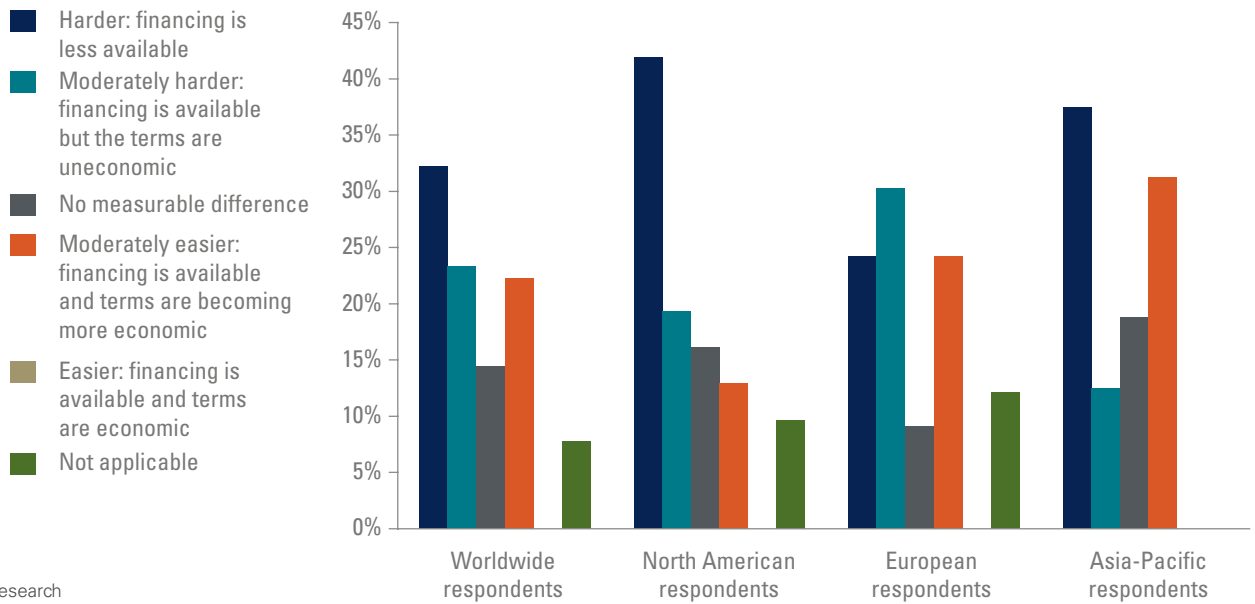
Financing conditions remain demanding

A further breakdown of Figure 9 by type of respondents shows that financial investors were most seriously affected – 48 percent faced harder financing conditions, forcing many of them to re-consider their leveraging strategy. Our 2010 survey indicates that only 36 percent of financial investors worldwide are expecting to use leverage above 50 percent over the next 18 months (i.e., a debt-to-equity ratio greater than 1:1). The majority (64 percent) anticipate using leverage below 50 percent (i.e., a debt-to-equity ratio less than 1:1). This is in stark contrast with the 2008 survey, when half of the surveyed companies were targeting leverage above 50 percent.

The availability of financing is forecast to improve, as banks become less risk-averse than they were during the past 12 months. Anil Srivastava notes, “We have seen that our customers have had a harder time securing finance. However, it seems that banks are coming back to the table.” A third of the surveyed debt providers indicated an intention to increase their exposure to the sector in the next 18 months. In parallel, 46 percent of the surveyed corporates planning acquisitions over the next 18 months are considering using bank financing to support their acquisition plans. Concrete plans that have already been announced include Rabobank’s intention to raise up to €1.5bn for a fund that will provide project finance for renewable power projects across Europe.



Figure 9: Which option best describes your experience of securing finance for acquisitions of renewable energy projects or companies now compared to 12 months ago? (Respondents: Corporates and Investors)



Source: VB/Research

As Marcel Gerritsen comments, “I expect to see an increased level of debt financing activity in 2010, especially in Asia and North America, where investment will be supported by government schemes. Europe should see a similar level of activity to 2009.” Partly echoing this statement, the same percentage of the surveyed debt providers (42 percent) are considering offering financial solutions in North America, India and China, and 58 percent are eyeing financing deals in other Asia-Pacific countries. As Figure 10 indicates, they are especially interested in financing onshore wind farms (75 percent) and solar plants (67 percent). Approximately 25 percent will also provide financing solutions to technology and equipment

companies in the wind and solar sub-sectors. Already in April this year EDF Energies Nouvelles signed a €500m financing framework agreement with the European Investment Bank (EIB), Banco Bilbao Vizcaya Argentaria SA, BNP Paribas, Dexia Credit Local and Societe Generale for the French part of a 2010-2012 solar photovoltaic investment program set up by the company in France and Italy.

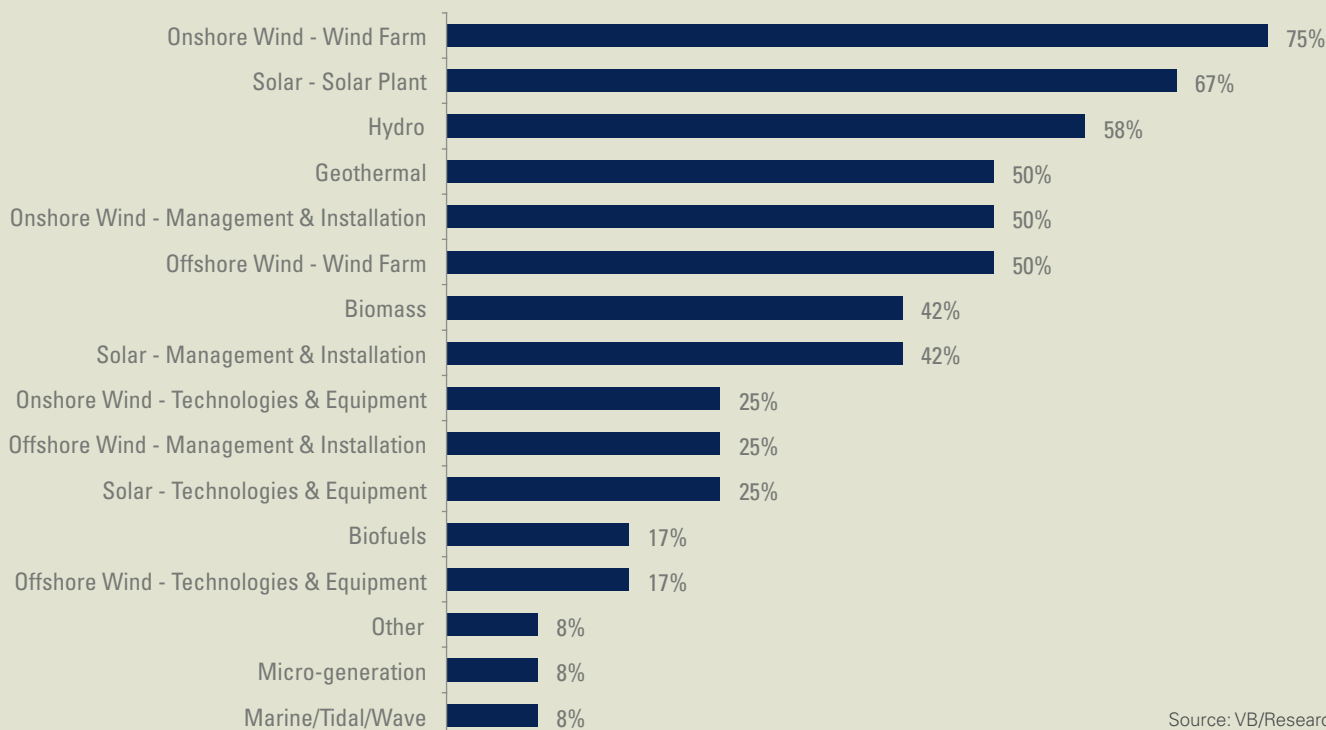
Although debt providers are expected to increase their exposure to the renewable energy sector over the next few months, the scale and speed of the recovery will clearly depend on the quality of the assets being financed. As Anil

Srivastava notes, “Prior to the crisis, it was an industry of announcements, announcements of projects that would not be feasible to build. Today, contractors are required to have a real ability to execute and a large balance sheet.”

Asset quality aside, Marcel Gerritsen notes, “The renewable energy market will grow more quickly than the banks’ ability to provide financing.” With the competition for assets intensifying, this limited availability of debt is impacting the financial terms on which banks are prepared to lend. Although banks are still, by a majority, keen to lend with a period of more than 10 years, the premium on such loans is expected to increase.



Figure 10: Please specify the target sub-sectors for renewable energy projects or companies financing. (Respondents: Debt providers)



“I expect to see an increased level of debt financing activity in 2010, especially in Asia and North America, where investment will be supported by government schemes. Europe should see a similar level of activity to 2009.”

Marcel Gerritsen, Rabobank International

Today, the majority of the surveyed institutions active in the sector offer loans over 10 years. Only 21 percent target loan terms of 2 – 5. However, an issue persists with debt tenures above 15 years. Marcel Gerritsen points out, “Three years ago solar projects could be financed on the basis of a 15 to 20 year loan. Now debt tenure is between 12-18 years for this type of project in Europe.”

He continues “Generally speaking, margins have increased significantly over the past two to three years. For example, onshore wind projects in Europe are now financed on average at 300bps over the base rate, compared to

100bps three years ago,” although he added that pricing (the margin over the base rate) varies from project to project based on multiple risk assessments.

“The main reason is the scarcity of long term bank debt, which I do not expect to return in the next two to three years.”

He also does not expect a significant reduction in margins over the next 18 months, “...margins could decrease by 25bps or 50bps, but not more than that because regulators are defining new rules towards banks regarding long term financing. These rules have to be priced.”

Financing will also rely on the equity capital markets. Over a quarter of the corporates worldwide expect to raise equity capital to fund acquisitions, with North American respondents most confident of accessing this form of financing (32 percent). The IPO market, which was effectively closed throughout 2009, is also touted as an increasingly viable option for private companies in 2010. A number of companies are preparing for an IPO, including Abengoa and Enel, which are expected to list part of their renewable energy businesses, and the Chinese company Sinovel, which has announced plans to list on the Shanghai Stock Exchange.



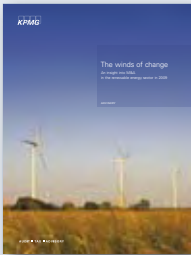
However, some companies that announced public plans in the first weeks of 2010 have already put their listings on hold including Jinko Solar and Brazil's Renova Energia. John Cavalier adds a word of caution on the public market's re-emergence as a source of fresh capital: "I am worried that valuations in the public market are excessive. If shareholders do not see effective returns on investments made to date or see failed investments, new companies undertaking such public fundraisings will not be able to raise and attract the money they need, even if they are deserving of investment."

Although traditional financing sources are reopening, financing M&A transactions may not be straightforward. As per last year's report acquirers in the sector may well need to continue to find creative financing arrangements to bring their renewable plans to life.

"Prior to the crisis, it was an industry of announcements, announcements of projects that would not be feasible to build. Today, contractors are required to have a real ability to execute and a large balance sheet."

Anil Srivastava, Areva SA

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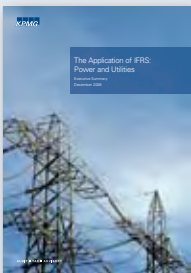
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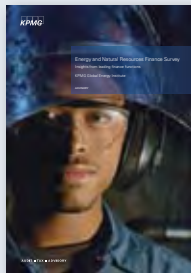
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The M&A Energy and Utilities team at KPMG is a leading global network of transaction professionals that regularly advises on some of the largest deals in the sector. The team provides strategic, financial and commercial advice on all types of transactions including acquisitions, disposals, fund raisings and capital market offerings.

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The KPMG Global Energy Institute has been established to provide an open forum where industry financial executives can share knowledge, gain insights, and access thought leadership about key industry issues and emerging trends.

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Designed and produced by KPMG LLP (UK)'s Design Services

Publication name: Powering ahead: 2010

Publication number: RRD-194525

Publication date: May 2010

Printed on recycled material.