FINANCIER WORLDWIDE corporatefinanceintelligence

KPMG

ROUNDTABLE

ENERGY SECTOR OUTLOOK

Current economic conditions and capital expenditure requirements are raising concerns about future profitability for energy companies. Regulatory change is influencing the way companies operate and strategise. Technology is playing an important role in reshaping the industry and presenting new opportunities, particularly in renewable energy.

www.financierworldwide.com

FW MAGAZINE

REPRINTED FROM

Financier Worldwide December Issue 2009

MODERATOR

Jeffrey R. Holzschuh
Chairman of the Global Power and Utility Group,
Morgan Stanley
T: +1 (212) 761 4711
E: jeffrey.holzschuh@morganstanley.com
www.morganstanley.com

Jeffrey R. Holzschuh is Vice Chairman of Institutional Securities Group and Chairman of Morgan Stanley's Global Power and Utility Group. He has been actively involved in many of the industry's largest mergers and acquisitions and a wide variety of advisory and financing transactions. He also serves as the Chairman of Morgan Stanley's Environmental Policy Committee, and has been appointed by the US Secretary of Energy to serve on the US Electricity Advisory Board.

THE PANELLISTS

Thomas J. Flaherty
Senior Vice President, Booz & Co.
T: +1 (214) 746 6553
E: tom.flaherty@booz.com
www.booz.com

Thomas J. Flaherty is a Senior Partner in the Utility Practice of Booz & Company. He has led more than 400 assignments in strategy development, M&A, organisational restructuring, perf ormance improvement, financial management and capital allocation, and regulatory strategy and assistance.

Francesco Camilotti
Senior Partner, CBA Studio Legale e Tributario
T: +39 049 877 5811
E: francesco.camilotti@cbalex.it
www.cbalex.it

Francesco Camilotti is a senior partner of CBA Studio Legale e Tributario and a member of the CBA Energy Team. He represents various Italian and foreign clients in domestic and cross-border transactions with particular focus on M&A, corporate, project finance and renewable energy projects.

Kostadin Sirleshtov
Partner, CMS Cameron McKenna
T: +359 2 921 99 42
E: kostadin.sirleshtov@cms-cmck.com
www.cms-cmck.com

Kostadin Sirleshtov heads the energy, projects and construction practice at CMS Cameron McKenna's Sofia office. He has extensive experience in advising power, oil & gas and renewable energy projects. Formerly chief of minister's cabinet at the Ministry of Energy and Energy Resources, Mr Sirleshtov combines sector knowledge with solid regulatory background.

Jimmy Daboo
Partner, KPMG LLP
T: +44 (0) 207 311 8350
E: jimmy.daboo@kpmg.co.uk
www.kpmg.co.uk

Jimmy Daboo joined KPMG in 1984 and has worked in the Energy & Natural Resources sectors ever since. He is partner in charge of audit and assurance services for KPMG's global energy and natural resources practice. He is a member of the UK Oil Industry Accounting Committee and Financial Reporting Review Panel and has represented KPMG on a number of international committees.

Gus J. Papamichalopoulos
Partner, Kyriakides Georgopoulos & Daniolos Issaias
T: +30 210 8171 571
E: g.papamichalopoulos@kgdi.gr
www.kgdi.gr

Gus Papamichalopoulos is a partner with the firm and is the head of the Energy Infrastructure Team. He represents major industrial clients institutional organisations and public companies active in the energy sector. Also, he acts for private equity funds, financial and credit institutions. Mr Papamichalopoulos is a member of the American Bar Association and the International Bar Association. He is also a founding member of the Energy Institution of South East Europe and participates in the panels for oil & gas. He is also the co-chairman of SEE LEGAL Group, an association of law firms.

Laurie J. Oppel
Managing Director, Navigant Consulting Inc.
T: +1 (202) 481 7534
E: loppel@navigantconsulting.com
www.navigantconsulting.com

As a Managing Director, Ms Oppel's expertise includes transmission pricing and tariff development, energy market pricing, interconnection contract development and negotiation, transmission planning and design, technical and economic analyses, and asset valuation. She has more than 20 years of experience as a project manager and power systems engineer on a wide array of projects.

Gordon Grieve
Managing Partner, Piper Alderman
T: +61 2 9253 9908
E: ggrieve@piperalderman.com.au
www.piperalderman.com.au

Gordon Grieve is the Managing Partner of Piper Alderman and practises in corporate and commercial litigation. He advises and acts primarily in corporate matters involving commercial matters, public fundraising, directors' duties, trade practices, minority shareholder rights and criminal aspects. Mr Grieve has significant international experience having undertaken matters for clients in the UK, US and Continental Europe and is experienced in managing teams of professionals involved in major transactions. He is a former Corporate Affairs Commissioner for South Australia and was the Deputy Chairman of the Australian Financial Institution Commission.

Allen C. Barron
President, Ralph E. Davis Associates, Inc.
T: +1 (713) 622 8955, ext 313
E: acbarron@ralphedavis.com
www.ralphedavis.com

Allen C. Barron is President of Ralph E. Davis Associates, Inc. located in Houston, Texas and has more than 40 years' experience in the evaluation and certification of oil and gas properties throughout the world. He began his career with field operations and property development with Amoco, natural gas transmission and reservoir evaluations with Houston Natural Gas. He entered the consulting business by joining Ralph E. Davis in 1978 and advises public and private companies on reserve evaluations and reporting requirements.

Holzschuh: Broadly speaking, how would you describe the strength of companies' balance sheets in this sector? How have they fared since the onset of the financial crisis?

Camilotti: In the space of the past 18 months, utility companies have found themselves in a very different world, with a series of momentous events, such as the collapse of giants of the banking system, the credit and wider financial crisis, the reversal in demand and price growth, and the worst recession since the Second World War. Recession and the financial crisis have heightened the risks that utility companies must manage. A major area of risk for utility companies comes from balancing short-term and long-term supply and demand. In turn, that means judging the pace of investment programmes to respond to a complex mix of future demand, energy security and climate change drivers. Governments in advanced economies, through their central banks, have responded forcefully to the financial crisis with extraordinary measures. In addition, government action to support investment through additional public spending stimulus packages will help to strengthen the soundness of companies in this sector. These moves are a positive step in the right direction.

Oppel: Energy sector companies in the US fared relatively well in comparison to other sectors. Many energy companies experienced cutbacks in the form of streamlining their operations – such as layoffs and the sale of non-core competencies – as well as minimising their discretionary spending in an effort to maintain the strength of their balance sheets.

Sirleshtov: Various parts of the power industry have been affected differently by the financial crisis. We have seen some large and mid-sized oil and gas companies' balance sheets being significantly affected, both by the lack of consumption and decrease of offtake prices. Companies in the renewable sector are probably the ones least affected, partly due to the growing market for photovoltaic projects. Investments into new wind projects were frozen in the beginning of 2009, but continued throughout the second half of the year. The producers of power equipment suffered with decline of the sales in their traditional Asian and Middle East markets, but showed flexibility by participating actively on the European scene. Compared to other sectors, the power sector has managed to survive the crisis, and still has huge potential.

Grieve: Australia hasn't been as badly affected by the financial crisis as other places – so generally, the balance sheets of companies that were producing before the crisis are still pretty strong, and as such, they have been able to raise capital in recent months. Some exploration companies have found it tough, but balance sheets are strong overall.

Barron: Many energy E&P companies have been severely impacted by the financial crisis, as cash flow has been greatly reduced, and costs of operations have not been reduced on a comparable basis. Various companies had significant cash reserves built up during the realm of high product prices but at some companies, these reserves have been reduced as recovery drags on. As such, balance sheets have weakened and project plans have been delayed during the past year. Many of the majors, major independent and NOCs have not been impacted to the same extent as other companies due to their size of operations and previously reported cash holdings. However, a drawn-out recovery may cause similar downward pressure on balance sheets and stock price recovery.

Papamichalopoulos: We understand that balance sheets in the public energy utilities sector are burdened with significant debt, and the conditions of the new financial credit environment do not support decisions to take on more debt, or to refinance a significant portion of it. Financing terms, in cases where funds are available are, commercially speaking, not attractive compared with offers made before the financial crisis. This shortage of economically viable financing tools has resulted in a significant delay in the implementation of business plans which require third party equity, as it is also sought by other financiers, including private equity and venture capital funds.

Daboo: Many energy companies have come through the credit crunch with strong balance sheets and the ability to invest strongly, should they choose to do so. For instance, China's CNPC has recently raised a $30bn loan for acquisitions. Nevertheless, the global recession has significantly reduced demand – electricity consumption may fall in 2009 for the first time since the Second World War – resulting in reduced profits, and this together with a shortage of credit has unmasked structural problems. As a result, many companies have been forced into looking seriously at their cost base and investment levels have plunged. This is against a background where the amount of investment needed to meet projected energy demands in the medium term, even taking account of the impact of the recession on global growth projections, remains extraordinary. The deferral of projects has significant ramifications not only for energy poverty but also for climate change and potentially energy security.

Flaherty: Today, most utility balance sheets are reasonably balanced, with sufficient liquidity. The issue is really not about current strength as much as it is about future flexibility – most utilities were very aggressive about securing lines of credit and borrowing sources to preserve liquidity when the markets looked as if they could be disrupted. Further, some companies were able to issue equity even when conventional wisdom thought that to be unlikely. Thus, in the short-term, adequate flexibility was achieved and balance sheet strength was preserved for the near-term. The challenge now relates to the need for a continual flow of borrowing and equity to fund the extended capex programs of companies. From this perspective, two outcomes need to happen to assure adequate strength: the debt and equity markets need to be efficiently accessible, and; regulators need to avoid decisions that impede utility access to capital at reasonable costs.

Holzschuh: How has limited financing availability affected key strategies, such as large capital expenditure programs?

Grieve: There have been some big projects that have not gone forward, but in general, companies have been able to move

projects on – particularly in the areas of LNG and coal seam methane, which are two of the happening areas at the moment. There has also been considerable government expenditure, particularly in the renewable energy and carbon sequestration areas. As such, the limited access to finance has not had as significant an effect as one might have thought. Indeed, China is still investing in Australia, and equity raisings are still possible.

Papamichalopoulos: There has certainly been a response in the strategies players follow, given the current market limitations. It is not a unique feature of the energy and utilities sector that capital has been hard to come by. While we have seen that there is an interest in project development and acquisition, and that there are a number of players with the ability to invest, we have also seen that an unease to secure other financing proves to be a major obstacle for the completion of such transactions. This can of course be attributed to the uncertainty the players feel in terms of not knowing if and when the capital they have on hand will be needed, so that large capital-intensive programs do not move forward.

Daboo: Leverage is a feature of many projects in the industry – many energy companies have survived the credit crunch in good shape, but finance is still in short supply, particularly for smaller companies. Whilst finance is needed for new projects, we should not overlook the very significant requirement to refinance existing leverage, especially in power generation and power transmission. The impact on new projects is significant. In oil and gas alone it is estimated that investment will be $100bn less than in 2008. Whilst some national oil companies indicated earlier this year that investment would not be curtailed, experience now shows that to have been an optimistic prediction. Investment in coal has also declined by as much as 40 percent on a year-on-year basis, albeit from all-time highs. Power sector investment has been severely affected by financing difficulties, as well as by weak demand. Investment in renewables projects has varied, but has overall fallen more than for other types of generation.

Sirleshtov: Limited financing and the financial crisis affects key strategies and key projects in Bulgaria and in the region. The Bulgarian second nuclear project for Belene power plant has effectively been put on hold, with RWE pulling out of its joint venture with the Bulgarian national electricity company. Similarly, Romania is suffering with the project financing of Unit 3 of their nuclear project and could not complete the financing on schedule. Bulgaria's national energy strategy until 2020 has been in discussion since 2008, but, mainly due to the debate about the huge investments in environmental technologies, it remains in draft form.

While there is an interest in project development and acquisition, and that there are a number of players with the ability to invest, we have also seen that an unease to secure other financing proves to be a major obstacle for the completion of such transactions.

GUS J. PAPAMICHALOPOULOS

Flaherty: At this time last year, most companies were restraining their growth strategies – whether organic or inorganic. By the time fourth quarter earnings had been released, we had experienced a sharp reduction in capex on the order of around 15 percent for the US utility industry. This reduction was generally focused on 2010, but has also affected the plans of companies for 2011. Today, the level of planned capex still remains constrained for 2011, but by a smaller amount than occurred for 2010. In part, this reflects a loosening in the market for well-capitalised companies with constructive regulation and attractive projects for the core business. Nonetheless, the financial markets remain very discerning with respect to the availability and placement of funds in the sector. For companies that are not well-capitalised, or where projects are too significant as a proportion of their business, financing has continued to be constrained.

Barron: In response to the restricted access to financing, many projects were placed on hold, or development was delayed where the option was available. Near term projects in the one to three year timeframe requiring significant capital have been delayed. Mid term and long term strategic developments have been re-evaluated within the concept of an altered market for costs of operations and forecasted product prices. M&A opportunities, as well as joint venture participation may become a part of the development of the energy sector moving forward as capital rich companies seek opportunities to leverage their cash holdings into stagnant projects placed on hold.

Camilotti: Reliable data on recent trends in capital spending and demand is still coming in, but there is clear evidence that energy investments in most regions and sectors could drop sharply in 2009. The financial turmoil severely affected the interbank market, increasing credit spreads as well as the overall cost of funding. This notwithstanding, some positive factors should be considered. In the second half of the year, some major companies successfully launched jumbo bond issuance, attracting a good response in the financial markets. For example, in September, ENEL successfully conducted a bond issue for an aggregate amount of €6.5bn. The demand exceeded €28bn, showing a continued access to capital markets. In addition, project financing still remains appealing, representing one of the more interesting options. Growth prospects, especially in the renewable energy market, appear solid in most parts of the world. However, the lessons learned and persistent market constraints influenced deal structures in terms of their tight financial ratio and sponsor support.

Oppel: Limited financing availability and uncertainty of cost recovery has caused the cancellation or delay of several major

transmission projects. Further, environmental and political pressures have caused the cancellations of numerous coal-fired plants. Finally, the global economy, regulatory uncertainty, perceived design and construction risk, lack of clarity in recovery of incurred costs and lack of loan guarantees caused some nuclear generation development plans to be placed on hold. In many cases the deferral of new projects was matched with a decline in system loads. One possible concern is whether an economic rebound will catch utilities behind in their system additions or simply pick up the pace with a year or two of delay in load growth.

Holzschuh: Can you describe some of the major legal and regulatory developments impacting energy & utilities companies? How will these changes influence board-level decisions?

Barron: Global warming, carbon emissions, access to new territory for exploration, timely permitting of utility facilities, certainty of market, contract terms and more will impact the industry. Many legal and political influences are not new, but the uncertainty of their implementation means that companies often schedule their future projects with numerous considerations either ill-defined or left to future analysis. Board decisions will have to be made with access to the latest information available and the realisation that contingency planning is a part of the initial decision in order to be in a position to adapt to changes that are certain to occur.

Oppel: A number of legal regulatory factors are likely to have an effect on energy and utilities companies in the near term, including continued carbon legislation uncertainty, transmission siting and jurisdiction, cost allocation and recovery for transmission projects based on economic need, cost recovery for new nuclear generation projects, smart grid deployment and recovery of costs for those investments, plug-in hybrid electric vehicle (PHEV) deployment, and increased demand side programs and corresponding rate designs to support them. All of the above matters will influence where investments are focused, as well as the structure and direction of the upcoming rate cases.

Grieve: Australia had a change in government recently, which changed the focus of things – we signed Kyoto, and there is a push to do things in a more renewable way. We have not got through all the legislation that the government hoped they would, but the renewable energy target scheme has been set up, and that will have an effect on how investors are going to use their funds. The Foreign Investment Review Board (FIRB) has also changed its outlook somewhat under the new government, by taking a stronger stance on decisions regarding foreign investment – take, for example, the problems Chinalco had when trying to acquire Rio Tinto. Companies at board level now have to think more about carbon costs and renewable energy targets, and there is a plethora of state legislation dealing with all sorts of green issues that are affecting directors' duties.

Sirleshtov: The Bulgarian Parliament introduced an extension of the 12-year offtake period for renewable energy producers in November 2008. Currently, the offtake period varies from 15 years for wind power plants to 25 years for photovoltaic systems.

Many legal and political influences are not new, but the uncertainty of their implementation means that companies often schedule their future projects with numerous considerations either ill-defined or left to future analysis.

ALLEN C. BARRON

The State Energy and Water Regulatory Commission approved higher offtake prices for renewable energy in March 2009, and passed some key decisions on licensing of new projects and diversification of the offtake prices for various hydro power technologies. Energy packages were approved in the summer of 2009 at the EU level, thus leading to further drafts of changes to national legislation.

Flaherty: For the most part, current policy at Federal and state levels is focused on creating programs that require significant and sustained capital commitment such as transmission build, efficiency investment, renewables proliferation and environmental compliance. However, these programs will have the unintentional effect of exposing companies to financial market risk as regulators may later determine that while the capital should be expended, it doesn't mean it will always be recoverable. In addition, these policy directives require long lead-times to benefit investments and will place intermediate term pressure on both corporate balance sheets and customer rates before benefits are realised. Thus, the risk of prudent costs not being fully recognised by regulators for recovery because of the cumulative affect on escalating prices to customers looms in the future. Boards have to assess the potential risk of non-recovery in evaluating the merits of growth, modernisation and compliance programs.

Papamichalopoulos: The European Union's 20/20/20 climate change plan – 20 percent greenhouse gas emissions reductions, and 20 percent increase in the share for renewables by 2020 – has had wide-ranging effects on the decision making of companies in a number of areas. These include multinational and intercontinental natural gas agreements, waste management policies and goals, the lowering of feed-in tariffs and subsidies available to renewable energy developers. However, decisions based on these framework changes often have inconsistent effects: whereas an EU directive may promote government and private commitment to further development, other national rules and policies, based on other criteria like foreign policy and economic concerns, may actually hinder such developments on infrastructure.

Daboo: The big issue is how energy policy and regulation will develop to deal with climate change. Governments are yet to really ▸▸

grip this issue, and whilst talk of the actions needed to achieve 2020 targets is of some interest, the scope and scale of the change needed will only be seen by modelling the longer term outlook to say 2050. Indeed, the implications are far reaching – for instance, to make a meaningful impact, electricity generation capacity will need to be refocused and economics will drive a significant increase in nuclear generation – the relative cost of alternative technologies be they CCS or renewables just do not add up at the moment. However, other impacts, such as the need to move logistics off the road and onto rail, may play a significant role. Finally, recent regulation of the energy sector has been primarily focused on managing the short term cost to the consumer. In future, it will need to also deal much more clearly with the long term sustainability of the power generation business – a shift that, for instance, the railway regulator in the UK has successfully made.

Holzschuh: In your opinion, what are the core principles of government energy policies in your region?

Flaherty: Unfortunately, it is the lack of core principles that hamstrings intelligent policy design in the US. While it sounds politically correct to advocate a green future, addressing this issue in the absence of others simply makes any consideration incomplete. The US needs to step back from single issue policy design and think about a truly integrated national energy policy that would align supply, demand, technology, pricing, the environment and risk tolerance. Piecemeal policy creation runs the risk of overlooking the cumulative impacts of change, as well as the natural need for integration of interests and outcomes. An unnatural outgrowth of the lack of clear energy policy principles is that mandates are now competing for the 'first call' on corporate capital investment, which substitutes governmental decision-making for that of management.

Barron: The US energy policy has always seemed to be 'cheap energy at whatever cost it takes to keep it cheap'. Whichever government is in office wants a voting populace that has an abundant supply of inexpensive energy that is readily available at the push of a button. Direct taxes to the consumer are kept low, with the industry itself carrying the burden through various taxes placed upon development and distribution. Social and economic costs are hidden under political agendas. As with all taxes and obligations, ultimately the consumer bears the burden. Alternative energy sources are supported by the government not only through the conception and development stage, but into distribution in lieu of practical market driven economics determining the best energy mix for the country. A comprehensive energy policy is often debated but never concluded in a practical manner.

Piecemeal policy creation runs the risk of overlooking the cumulative impacts of change, as well as the natural need for integration of interests and outcomes.

THOMAS J. FLAHERTY

Daboo: In Europe, energy regulation may well be at an inflection point. As energy integration increases, regulation will inevitably become more integrated. Energy security remains a big issue, and this is driving a push for greater connectivity within the EU. Affordability and energy poverty, particularly in Eastern Europe, are also high priority. So too is climate change. The regulators can contribute significantly to tackling climate change, notably through providing the regulatory and legal stability which is needed to attract appropriate large-scale and long-term investment in networks, through providing adequate incentives to meet the EU's sustainability and security of supply objectives, and through market monitoring and transparency. It is questionable as to whether the approach to regulation in Europe has focused sufficiently on these objectives to date.

Camilotti: The core principles underlying the Italian government's energy policies were aimed at ensuring that competition and efficiency will be promoted in the sphere of public utility services, in addition to adequate levels of quality in these services under economically viable and profitable conditions. The government further wished to guarantee their uniform availability and distribution throughout the country by establishing an unequivocal system of tariffs based on set criteria, as well as promoting the interests of users and consumers in light of EU regulations on the matter and general policies laid down by the government. The system of tariffs should reconcile the economic and financial objectives of the parties providing the service with general objectives of a social nature, including resources.

Papamichalopoulos: The energy policies of past Greek governments have been made keeping in mind a balancing act between several important, if divergent factors. These include certain strategic partnership interests, European law and mandates, environmental concerns as well as the economic reality. Unfortunately, burdened by a cumbersome bureaucratic process, these have proven uneasy partners, to the detriment of newer and cleaner energy policies. However, there is an indication by the newly elected government that, to the largest possible extent allowed by the current economic situation, there will be a serious commitment towards green energy, clean energy, and alignment with the goals set forth by the European Union. The core principles may not change themselves, but the focus from one to another is likely to shift.

Sirleshtov: The core principles of the governmental energy policy in Bulgaria are security of supply for the imported energy resources, energy efficiency and the development of local energy sources.

The security of energy supply relates to the mix of nuclear, thermal and renewable electrical energy that Bulgaria enjoys and plans to develop further. Energy efficiency has been supported by both local and international financial sources, and with the approval of the amendments to the Energy Efficiency Act, these issues have been elevated to national importance. The development of local energy sources has been supported by amendments to the renewable energy legislation and the support given to exploration activities, which are currently under way.

Grieve: The government is looking at a variety of areas – for example, nuclear is a live issue almost all the time. We have huge nuclear resources in Australia, but at the moment, we're not prepared to allow that resource to be properly utilised. LNG is also a big issue in Australia, and the government is fast-tracking a lot of development approvals for LNG, in the hope that we will become one of the world's largest producers and exporters of LNG in the next decade or so. Further, there are a lot of British companies out here involved in that area – notably British Gas. Ultimately, anything that looks like it will allow the government to hit its renewable energy and carbon minimisation requirements will become a core principle of government energy policy.

Oppel: The core principles centre on encouraging changes in end user behaviour regarding the use of electricity and decisions concerning the fuel source for the electricity. This is primarily the result of the energy efficiency target, renewable portfolio standards, demand response participation in capacity markets, and emissions legislation – all of which are focused on achieving a low carbon future.

Holzschuh: To what extent are environmental issues dominating management thinking? Is this a positive development for the energy & utilities sector?

Grieve: To a great extent – we have a government that got into power on the back of its green credentials, supported by the Green Party, so I think management is aware that their companies are going to have to comply with the new regulations. It is expected that there will be a cap and trade policy, but no one is quite sure what form it will take – it is currently being negotiated by the Opposition and the government. So it is at the forefront of everyone's thinking, that there will need to be some compliance, and what the costs will be, and there is a huge amount of lobbying from industry to government to try and ameliorate what is seen to be some of the downsides to such regulation.

Sirleshtov: Environmental issues have been traditionally considered as a burden to the industry, and did not preoccupy management thinking as the sanctions were of limited nature. This is changing, and it is safe to say that management thinking is considering environmental issues as one of the key matters in the power sector. As part of the EU accession process Bulgaria negotiated the closure of some units of its existing nuclear and thermal power projects and these commitments were duly fulfilled. Nowadays energy and environment are closely linked and in my opinion this is a positive development.

The mandatory targets imposed by the EU are inevitably influencing medium to long-term business strategies and policies. Developing environmentally conscious products utilising energy efficient technologies has become a must, no longer an option.

FRANCESCO CAMILOTTI

Camilotti: Environmental compliance is no longer the target, but the floor from which economic value can be created. Awareness in the overall community of the crucial role played by environmental issues is probably one of the most important goals achieved by the EU. The mandatory targets imposed by the EU, inserted in a legislative rather than a voluntary domestic context, are inevitably influencing medium to long-term business strategies and policies. Developing environmentally conscious products utilising energy efficient technologies has become a must, no longer an option. A sound environmental management approach seeks to make companies simultaneously more competitive and environmentally responsible and offers new opportunities for growth. This new scenario represents, at the same time, an important challenge and a potential opportunity for the energy and utilities sector.

Oppel: Environmental issues and pending carbon legislation is at the forefront of energy companies' management minds. This is driving their power supply investment decisions and their portfolio valuations. An obsession on the reduced carbon future without due consideration of reliability impacts on the grid and system operations is not viewed as a positive development for the energy and utility sectors. A comprehensive energy policy recognising the use of natural gas as a bridge fuel to the low carbon future, as well as the reliability needs of the grid, will be required. Some utilities may view carbon regulations as creating a potential new source of corporate wealth and competitive advantage.

Papamichalopoulos: There is an increase in the extent to which environmental factors play a part in management thinking today, both private and public. The public part is especially important in Greece, where private initiative has often been thwarted by insufficient government regulations, frameworks and financial support. A top-to-bottom approach in the protection of the environment in all areas, but especially in the energy and utilities sector, where the government should actively support such protection, can only have a positive development in a sector that was due for modernisation a long time ago. It will take some time for the necessary changes to come into effect, but increasingly management thinking is forward looking and more of a support rather than an obstacle to modernisation.

Barron: Environmental concerns dictate many boardroom decisions. Projects have died because of the environmental concerns associated with a project and its potential impact on a corporation's balance sheet. Since a negative environmental occurrence can have a life of its own, even beyond the practical life of the project or the company that had ownership at the time, a management group must examine the risk of operations and assess the reward potential associated with the project. A well thought out business strategy dealing with the possible occurrence of an environmental concern is a necessity for businesses in today's market. The energy and utility sectors are often burdened with being in the public eye so that negative situations are more pronounced. Usually the preparation for these potential outcomes results in companies being better prepared when dealing with the situation.

Daboo: In many ways tactical priorities are dominating management's thinking at the moment. The day to day issues of reducing costs, managing the workforce and suppliers and accurately forecasting demand are taking up time. However, energy policy is a key topic in strategic decision making and inevitably environmental issues are a significant piece of that jigsaw. To invest, in particular in less carbon intensive energy sources, requires the right regulatory regime and the belief that this will be maintained over the long term. In many parts of the world governments have started to encourage this shift and this can be seen in some of the elements of the various economic stimulus packages that have been put in place. But the consensus is that there is a very long way to go. A good example would be wind farm development in the US where the tax incentives appear attractive but investment is still very slow.

Flaherty: The pendulum has swung too far back from the value of diversity to the penalty of non-compliance. Environmentalism has become omnipresent in both policy development and the surrounding rhetoric. Unfortunately, the depiction of environmental stewardship is biased. It will be impossible to achieve desired emissions targets without the consideration of the most necessary element of a generation portfolio – nuclear. Yet, in their zeal for reform, environmentalists are dismissive toward the most meaningful contribution to large-scale emissions avoidance. Too often, management thus find itself responding to the passion, rather than the logic, of the evangelists, and this invites incrementalism in policy development and adherence, rather than optimisation of choices and outcomes.

There is a real prospect that renewable energy production will grow significantly in the context of reducing cost, high fossil fuel prices and continuing government policy support.

JIMMY DABOO

Holzschuh: What trends are you seeing in the push for renewable energy throughout the sector? In what ways is this reshaping the future of the industry?

Daboo: There is no doubt that fossil fuels will remain a key – indeed the dominant – source of energy for the near term. At present low carbon technology on a large scale remains prohibitively expensive and only government incentives are allowing its introduction. Companies are reluctant to investment whilst policy remains uncertain. However there is a real prospect that renewable energy production will grow significantly in the context of reducing cost (as technology matures), high fossil fuel prices and continuing government policy support. However these sources are unlikely to exceed five percent of energy generation in 20 years time, so they are not a significant factor in the sector as a whole. However, if energy policy is reshaped by the growing imperative of managing climate change then the picture will be very different.

Flaherty: While many companies are chasing alternative energy as a matter of sound corporate citizenship or conformance to existing mandates, others are asking whether this is simply 'fools gold'. In one sense, the renewables model is reminiscent of PURPA – expensive, subsidy dependent and non-scale – all non-virtues for efficient portfolio composition and operation. For large companies, the impact of adding renewables may well be inconsequential as they barely move the needle from a portfolio or earnings perspective. Thus, these investments become nothing more than an expensive distraction to management. I would expect that the level of 'dabbling' declines and companies rethink the wisdom of over-reaching in this sector.

Barron: Renewable energy is the buzzword of political and environmental directives, and that should result in a cleaner, greener landscape. The push is on for more of everything, as long as it's green. The general words of wisdom, even from the energy and utilities sectors, are that the drive to renewable energy is a good intention, but the drive must recognise the cost and time necessary to redirect the consuming public. That there will be still be trade-offs and compromises necessary to effect the change is the often overlooked corollary. In the mean time, non-renewable energy will carry the energy consumption burden and it will need a defined playing field with proper economic incentives in order to continue. Many traditional energy companies are addressing the push to non-traditional sources of energy since they are in the business of supplying basic energy.

Grieve: Australia is highly dependent on coal, not only for its own use, but for exporting too. One would think that that's not going to change drastically in the near future, but ultimately, renewable energies will have to be part of the energy mix. As such,

clean coal and carbon sequestration technologies are being looked at very carefully, and a lot of money is being put into those areas. There is also wind power, biomass, biofuels, solar, and some geothermal. However, we expect that hydro will be phased out – it used to be a big part of the renewable energy mix in Australia, but it's very costly and water is at a premium. Coal seam gas, whilst it's not renewable, is seen as being a lot greener than other fuels, so there is an enormous amount of investment going on in coal seam gas, particularly in Queensland.

Sirleshtov: Bulgaria has made some good progress towards changes in renewables legislation, in order to further promote investment in this sector. The trend is to potentially introduce a floor for the feed-in tariff of renewables until 2015 and keep the diversified off take periods. The energy mix is very much needed in order to keep the wholesale prices affordable for the end customer. The future of the power industry is closely related to the renewable sector and governmental support mechanisms are providing further incentives for this positive trend.

Camilotti: The Directive on the promotion of use of energy from renewable energy sources sets out the contribution expected from each member state – so-called 'burden sharing' – in order to meet the mandatory targets to be achieved by 2020. These targets include a 20 percent reduction of greenhouse gases, production of at least 20 percent of the total EU energy bill from renewable energy sources, increasing energy efficiency and savings by 200 percent, as well as reducing greenhouse gases by having at least 10 percent of transport fuel produced from renewable energy sources. This, coupled with the US's 'Green New Deal' and the recent opening up of the BRIC countries, leads us to conclude that renewable energy is not just a new passing trend or mere speculation but a solid choice of an alternative way, although limited in magnitude, of producing energy compliant with environmental requirements.

Oppel: Trends seen include: transmission development focused on renewables integration; increased loan guarantees, tax credits, and other incentives to increase rate of development; the mainstreaming of wind as a traditional generation resource; and increasing revenue requirements to pay for higher cost renewable resources.

Papamichalopoulos: Renewable energy has faced obstacles in the region and globally – and the current economic downturn is just one of these. There is quite a divergence between countries that have highly developed renewable energy strategies and those that have not. Issues such as grid connection and capacity, subsidies and investment costs can prove difficult for certain players that wish to push for the development of renewable energy projects, and at a time when project costs for renewables have fallen, the abilities of States to offer the subsidies that these projects almost always rely on have fallen likewise, not to mention the decrease of feed-in tariffs. In this sense, the economic crisis has created a lost opportunity for the effective push of renewable energy as a comprehensive alternative to and replacement for current energy schemes. However, as more and more players in industry see that the use of renewable energy is a one-way street if they wish to be successful in the long run, the future of the industry looks green. All it needs is the economic pendulum to swing the other way.

Institutional lenders supported M&A activities in the region by providing financing for some of the key acquisitions of projects from local developers, helping to get those projects to a financial close.

KOSTADIN SIRLESHTOV

Holzschuh: What have been some of the underlying drivers of M&A activity in the energy & utilities sector over the last 12-18 months? Do you expect to see an increase in cross-border transactions going forward?

Papamichalopoulos: Over the past 12-18 months, and especially the last year, we have seen a shift in M&A activity that has been in keeping with the overall credit crunch. While there are numerous private equity funds that have the capital to invest in the energy and utilities sector, their hesitation to do so has been notable. It is definitely a buyers' market, but there is also a big fear of buyers' remorse on the part of investors, and this has kept M&A at low levels, especially when it comes to large-scale investments. This hesitation can most likely be attributed to the uncertainty about how and when the current crisis will end. Also, the uncertainty created by the introduction of new regulations affecting the commercial operation of the sector, is another important element. Therefore, there is an unwillingness to commit capital in any market, but more so in a market that has traditionally relied on debt for its investments. Once there is a light at the end of the tunnel, it is almost certain that cross-border transactions will pick up at a rapid pace.

Sirleshtov: M&A activity in the power sector was driven by the lack of sufficient exploration companies to maintain research programs and by the growth of the number of renewable energy projects available on the market in various stages of development. We currently see many investment funds looking to invest into developers across Central and Eastern Europe with their main focus being wind and photovoltaic projects. Institutional lenders, such as the EBRD and JBIC, supported M&A activities in the region by providing financing for some of the key acquisitions of projects from local developers, helping to get those projects to a financial close.

Camilotti: Aggregation, in order to reach a reasonably competi-

tive market size, was the basic driver of M&A transactions over the last 12-18 months in Italy. Contrary to the European trend, which registered growth of 26 percent in 2008, Italy had a decrease of about 25 percent. This was mainly due to the fact that the aggregation process of domestic public utilities was almost completed over the past few years; nowadays the domestic market is actually composed of five or six leading players. Global national players like Eni, Enel and Edison have strengthened their presence abroad through important transactions like the acquisition of Endesa by Enel. At the same time, major foreign investors like E.ON and GdfSuez have entered the Italian market, while many foreign players have shifted their investments in the renewable sector from Germany and Spain to Italy, also due to the attractive incentive system in force, which is presently the most generous in Europe.

Daboo: Consolidation and joint ventures remain features of the energy and utilities sector. Smaller and highly leveraged companies find themselves vulnerable, whilst national oil companies and sovereign wealth funds remain strong buyers of the right energy assets. International oil companies are seeking new reserves and are looking at ways to access newly opening areas, such as Iraq, Kurdistan and Brazil's subsalt. However, for utilities, disruption to financing is putting already thin returns in doubt, resulting in some disposal activity. Furthermore, large financing requirements, even for high quality projects, is driving joint venturing and deregulation in some markets continues to drive unbundling of generation, transmission and supply. A desire to become 'fuel independent' is driving companies to diversify generation sources into 'alternatives' and to acquire equity gas. In addition, the re-emergence of nuclear generation has resulted in a number of strategic acquisitions and tie-ups of various sorts. One area for speculation will be whether the push for increased connectivity within the European region will lead to companies seeking to create truly pan-European utilities companies.

Grieve: We haven't had a huge amount of M&A, but what there has been has come from offshore. There has been quite a deal of investment from China, but much of it has been blocked by FIRB – for example, the merger between Rio and BHP Billiton failed, but they seem to be getting around that by entering into a joint vehicle for fine oil production in Australia. However, there has been the purchase of interests by entities like St. Austen and AGL, Shell has been involved in LNG and coal-bed methane in Queensland, as has British Gas. On a long term basis, these investments will take 20 or 30 years to really come to fruition. So that's where it is at the moment – at the smaller end of the market there has been a few takeovers, but that's mainly between companies that have been struggling and have been aggregating interests in smaller projects.

Drivers include the realignment of M&A priorities with anticipated low carbon future, the impacts of climate change on assets, and the recession, which is impacting transactions and resulting availability to a constrained and expensive credit market.

LAURIE J. OPPEL

Oppel: Drivers include the realignment of M&A priorities with anticipated low carbon future, the impacts of climate change on assets, and the recession, which is impacting transactions and resulting availability to a constrained and expensive credit market. Further, expect to see continued interest of European firms in acquiring assets in the US.

Flaherty: In the US, transactions – whether assets or stock – have ground to a virtual standstill. This is mostly the result of the uncertainty regarding future energy policy and the tightness in the markets for lending for this type of event. However, the lack of adequate balance sheet strength for the long-term to fund extended capex programs will drive companies toward one another in the desire to strengthen the enterprise and attain enhanced liquidity and flexibility. The vulnerability to intermediate weakness in financing capacity provides an opportunity for well-heeled entities like private equity, infrastructure funds, sovereign wealth funds and, foreign utilities to fill this balance sheet void. This is particularly true given the weakness in the dollar and the value that is recognised in quality assets. It is likely that the European and Asian investment and power communities will once again adorn the headlines in 2010 with unexpected acquisitions of companies and asset portfolios.

Barron: The need for companies to acquire cash to pay down debt during times of falling product prices has provided the market with certain assets for acquisition. In addition, partial sale of interest positions in the E&P sector has enabled companies to recoup investments driven by earlier decisions to become a major player in an emerging play, where intense competition for acreage positions had loaded front end costs to an almost burdensome position. A refocusing of long term goals has also meant that companies are again defining what comprises their core assets, a result of which will be significant non-core properties being designated for disposition. Cross-border transactions should continue only where the move makes economic and political sense, but will probably not increase if the financial recovery proceeds at a predictable but modest pace.

Holzschuh: What factors are affecting current valuations for energy & utilities companies?

Sirleshtov: The predictability of offtake prices and the lack of a fully introduced feed-in tariff are the two factors that are affecting valuations of energy and utilities companies in Bulgaria. The fact that some of the generation capacities and the electricity

distribution network have been privatised provides further uncertainty when evaluating the potential privatisation targets for the new government, which are mid-sized hydro power plants and the minority packages of the three electricity distribution companies. The lack of an approved energy strategy for Bulgaria, at least until 2020, also contributes to the current uncertainty in the power sector.

Camilotti: While regulated utilities generally have more predictable cash flows than companies in many other industries, it would be a mistake to view all regulated utilities as identically low-risk businesses. A number of credit concerns exist for regulated utilities. These include the regulatory and political environment specific to a given utility company, commodity price risks and the utility's ability to pass on costs to consumers, operating risk, including the risk of a prolonged, unplanned outage, competition, obsolescence and technology risks, and industry consolidation through M&A activity. The financial condition of regulated utilities can also vary widely and is an important component of credit evaluations. Usually, a financier's assessment emphasises cash flow financial measures rather than equity or earnings-based ratios. The analytical focus is on the adequacy of the utility's cash flow relative to fixed charges, debt obligations and capital expenditures, as well as its capital structure, liquidity and profitability.

Papamichalopoulos: Valuing energy and utilities companies is an inexact science, and as such there is always more than one way to measure a company's value. Some ways are better than others, and different factors affect different means of measuring different companies within different fields. However, some generalisations that hold relatively true can be made: in oil and gas companies, valuations are mainly affected by the price of oil, the production levels of gas and oil, and the security of supply, while for renewable energy companies, valuations shift based on factors like feed-in tariffs, grid capacity and the cost of technology.

Daboo: There are many drivers for individual companies, but the energy sector's valuations have two key drivers: the world economic outlook and short term commodity price trends. Other than this it is very difficult to generalise. For instance, values in the wind generation sector are strongly driven by the state of permitting of key projects whereas values in the utility sector are driven by factors such as the regulatory outlook, M&A potential and exposure to commodity prices. The impact of currently low gas prices and a short term expected over supply of LNG is also significant for some companies.

Flaherty: The lack of a clear policy and implementation timing in the US complicates the ability to understand market shape, dynamics and valuations. In many cases, the range of values is wide, reflecting different views of policy direction, specific mandated target levels and assessment of the ability to respond or prosper under these alternative regimes. Valuations simply cannot be accurately determined when the range of impacts is so dependent on rules and requirements that are not fully defined. More importantly, the interpretation and application of these mandates is also still unknown as there are several levels of regulatory oversight that need to be navigated. Given the uncertainty over the manner in which regulators will respond to sustained price increases, the earnings prospects and financial integrity of utilities is far from well understood, or capable being accurately differentiated.

There have been some large amounts of money paid for projects, because investors are taking a long-term view of the asset. But assets have not been snapped up at bargain basement prices.

GORDON GRIEVE

Barron: The long term outlook for energy prices has a major impact on the valuation of a company's assets, along with the cost and availability of capital to develop those assets. Historical prices realised over the past year will certainly dictate what many public companies will use to value their assets for reporting purposes, but use of these prices are not necessarily a good indication of the company's true value. However, these reported values may influence a company's relationship with its financial backing and an inability to meet its covenants could well result in a lower value rating and forced sale of assets.

Grieve: There have been some large amounts of money paid for these projects, because investors are taking a long-term view of the asset. It may be that some deals will not go through that might have had the economy continued to rock along, but assets have not been snapped up at bargain basement prices. The strength of the Australian dollar has probably affected the prices, as has the rising interest rates. However, the perceived growth of the Asian markets, particularly China and India, will support the value of assets in Australia.

Oppel: Uncertainty about carbon regulations, renewable energy requirements, energy efficiency mandated targets, fuel costs, plant construction costs, load growth, recovery on investment. Possible diminished ability to achieve cost reductions through synergies, given the belt tightening that many have undergone in the last 18 months.

Holzschuh: In terms of challenges and opportunities in this sector, what are your predictions for the year ahead?

Papamichalopoulos: It is pretty clear that the biggest short term challenges for the energy and utilities sector are the credit crunch and lack of debt financing, which has effectively frozen numerous projects all over the world, and insufficient national regulatory frameworks that often stifle development. There are also challenges that need to be addressed in energy infrastructure: expansion of the grid connection capacity, oil transport options to emerging markets, securing gas quantities from suppliers and ▸▸

This article first appeared in Financier Worldwide's *December Issue 2009*
© 2009 Financier Worldwide Limited. Permission to use this reprint has been granted by the publisher.
For further information on Financier Worldwide and its publications, please contact James Lowe on +44 (0)845 345 0456 or by email: james.lowe@financierworldwide.com

gas pipelines enabling the supply. All these need to be tackled as soon as possible, even if it is not possible to achieve objectives in a single year. However, as the economies of almost all countries are in some peril, there is a huge opportunity to create and use multilateral and international institutions to help develop the appropriate legal and regulatory framework to facilitate the proper flow of foreign direct investment for energy projects. Using the need for cooperation to set up the structures that support the maximisation of project development and financing is the most important step that can be taken, with far reaching short and long-term benefits.

Flaherty: It is probably more likely that another targeted energy act emerges than any climate legislation is enacted along the lines of what has been suggested. Given the number and cost of major programs offered by the Administration, the capacity of the economy to absorb these impacts is reaching an inflection point. With respect to industry consolidation, I expect that both an infrastructure fund and a foreign utility will announce transactions for US companies in this next year. While not jump-starting a new trend, it will spur renewed consideration among well-capitalised buyers, as the number of sub-$3bn market cap companies has swelled with the downturn in the utility index. Finally, it is likely that the EPA will seek to exercise its new-found authority and establish requirements that will be adverse to near-term utility strategies, valuations and options. The effects of these requirements are difficult to judge at this time, but promise to be demanding, expensive and yield unintended consequences.

Grieve: While our economy is not perhaps as strong as the Reserve Bank thinks it is, but clearly, we're in nowhere near the strife that other countries are. But the strength of the dollar is probably going to dampen the market a little bit. Furthermore, one of the things that has held us back was the infrastructure problems that we have – with our ports, with our railways, we need to spend a lot on infrastructure in this country. So in some respects, we are as always beholden to people from offshore investing in the country, and that will depend on China and India, and obviously Europe and the US when they recover. But that's a timing thing rather than something that will not happen. There is plenty of opportunity to tap into the government funding in renewable energy, and there are opportunities in renewable energy companies, but at the moment it is hard to get funding in those areas because of the uncertainty surrounding the new regulations.

Daboo: Short term drivers will remain strong for many companies, and particularly the imperative to cut costs, reduce debt and manage capital expenditures. However, the prospective of a disruptive and globally coordinated change in energy policy means that strategic planning is both the biggest challenge and opportunity facing the sector. In the words of the IEA "current global trends in energy supply and consumption are patently unsustainable – environmentally, economically and socially. But that can – and must – be altered; there's still time to change the road we're on". Predicting and/or reacting to, as well as contributing to shaping, the future energy policy for the world must be a priority. World energy needs will continue to increase and this provides huge opportunity for profitable investment. But what will be affected is where this investment will be spent – in a world with little change in policy it will be a case of more of the same with a huge need for investment in oil production capacity over the next 20 years. Much of this challenge lies in the hands of the OPEC countries. In a world where energy policy is driven by climate considerations, the impact will be driven by greenhouse gas targets. Investment will be diverted to low carbon sources of energy generation, including nuclear, CCS and other 'alternatives'.

Barron: Predictions run rampant and reliability runs underground. Limitation to capital will apparently continue for the near term until eventually the financial markets feel comfortable with predictions of energy sector stability and growth. It will be a challenge for both the energy and utility sectors to convince the capital markets that the adjustment period is over and moderate predictable growth will be the future for all concerned. The certainty of this prediction will not be known until sufficient time has passed, during which, changes in the marketplace may require a new prediction to become the norm. Industry cycles from boom to bust to boom have not been forecast with any apparent accuracy; however, their evidence occurs when viewing the past.

Oppel: I expect to see advancements in some, but not all of the following issues in 2010: transmission development – cost allocation and recovery will continue to be a major issue without FERC-mandated changes; increased pressure on regulators to set clear parameters for recovery of major project costs (such as generation and major transmission lines for economic purposes); advancements in carbon capture and sequestration demonstration, application, and investment; and recognition that transmission investment will be critical to aligning top energy policy agendas of smart grid, clean/renewable energy, electric vehicles, demand response, and energy efficiency.

Sirleshtov: The main challenge will be the security of the natural gas supply, especially during the winter season. The likelihood of the next gas crisis, following the one in January 2009, is high. In response, the government's next steps will be the second gas storage at Galata and facilitation of the local production of energy resources. The main investment opportunities are in the renewable sector, especially in wind, photovoltaic, biomass and hydro. Most likely throughout 2010 there will be many opportunities for some successful post-privatisation M&A deals for generation capacities and maintenance companies. If the government follows the advice and introduces the feed-in tariff completely, investment in renewable energy will increase immensely.

Camilotti: The current financial crisis, coupled with the shortage of liquidity, renders any predictions for 2010 difficult. However, I feel that the renewable energy sector will remain bright all over Europe. As a matter of fact the renewable energy sector is presently booming and is one of the few markets attracting both domestic and foreign investments. However, in order to confirm and assure this trend for the years to come, European governments have to iron out the creases, mainly by assuring a stable and reliable legislative framework. In particular, as far as Italy is concerned, it is my view that, should the current incentive tariffs be maintained and not significantly reduced – also taking into account the recent Spanish experience – we will see an ever growing increase in the sector for several years. ■