



## RENEWABLE ENERGY INVESTMENT CONTINUES, IN MANY FORMS

Bloomberg New Energy Finance reported that global investment in renewable energy in 3Q13 fell 14% QoQ and 20% YoY to USD46bn, and expected the decline to push investment in renewable energy in 2013 below the 2012 figure of USD281bn, which itself was 11% lower than in 2011. ([Sustainable Insights: Edition 13; Article 3](#)).

However, recent news demonstrates that interest in renewable energy investment remains high among some governments and development organizations, and investors will likely continue to see significant opportunities in the space. For example, the Norwegian Government is considering establishing a separate mandate for renewable energy investments by its sovereign wealth fund (SWF). Given its size, the SWF could end up being the single largest clean energy investor in the world. ([Sustainable Insights: Edition 12; Article 1](#)). Dubai inaugurated a 13MW solar power plant in October, the largest of its kind in the Middle East and North Africa region, and plans to develop a total of 1,000MW of solar capacity by 2030 as part of its goal to generate 5% of its electricity from renewable energy. ([Sustainable Insights: Edition 14; Article 2](#)). Finally, the IFC issued another USD1bn green bond, bringing its total issuance to USD3.4bn. The proceeds of the issue will be used for private sector investments in renewable energy, energy efficiency, and other areas that reduce greenhouse gas emissions. By FY15, IFC expects its climate-related investments to account for 20% of its long-term financing, or USD3bn per year. ([Sustainable Insights: Edition 16; Article 3](#)).

*Although global investment in renewable energy is down, the governments of Norway and Dubai are increasing their investments in renewables. Meanwhile, the EU has passed a set of recommendations to increase support for government-aided renewable energy programs.*

As the renewable energy sector matures, and becomes more competitive with fossil fuels, government support for projects is expected to decline. Indeed, the EU recently presented a set of recommendations for governments to improve their state-aid mechanisms in energy markets, including support programs for renewable energy. The commission's recommendations are designed to increase the use of market prices to determine investment levels. ([Sustainable Insights: Edition 16; Article 1](#)). Wind is a clear winner and prime example in many markets. According to The American Wind Energy Association, the cost of wind power has declined about 90% in the past two decades, and 30% in the past three years. The 26% decline in turbine prices since 2009 has bought wind power within 5.5% of the cost of electricity generated using coal. It also implies that wind power will soon be able to compete profitably without subsidies. ([Sustainable Insights: Edition 22; Article 2](#)).

Long term, the share of renewable energy in total power generation is expected to increase to 31% in 2035 from 20% in 2011, according to the World Energy Outlook 2013 published by the International Energy Agency (IEA). This increase corresponds to a weakening of the dominance of fossil fuels in the power sector, with its share declining to 57% in 2035 from 68% in 2011. The caveat to these projections is that they are based on subsidies for renewable energy increasing to USD 220bn in 2035 from USD101bn in 2012. To those opposed to subsidies, the IEA astutely points out that fossil fuels currently receive subsidies over USD 500bn annually, despite their market distorting impacts. ([Sustainable Insights: Edition 17; Article 3](#)).

CONTINUED ►



*China invests in two new carbon trading pilots which will force firms to purchase credits to cover excess emissions, possibly leading to the closure of inefficient steel and cement plants.*

## IS CARBON PRICING INEVITABLE?

Two reports from the OECD highlight the importance of consistent carbon pricing and the benefits of carbon taxes and trading to reduce emissions, noting that countries could achieve higher levels of emission reductions at lower cost if they used smarter-market based policy instruments. ([Sustainable Insights: Edition 12; Article 2](#) and [Edition 16; Article 2](#)).

Despite the glacial pace of negotiations for international emission reduction agreements, the probability of universal carbon pricing increases every day. The evidence can be observed across the globe. A study conducted by CDP revealed that 29 US corporate giants who own assets with long productive lives use higher internal carbon prices to evaluate potential investments compared with consumer-goods firms whose products are mainly influenced by current policies. Exxon Mobil (XOM US) uses a cost as high as USD60/tonne, Shell (RDSA NA) uses USD40/tonne while ConocoPhillips (COP US) uses USD8/tonne to USD46/tonne for internal project evaluations. These forecasts can be compared with the current market price of USD 6.70 in the EU, 11.5/tonne in the California and the US government's estimated social cost of carbon of USD37/tonne. ([Sustainable Insights: Edition 21; Article 3](#)).

And China, the world's largest green energy investor, continues to expand its carbon trading schemes with two new carbon trading pilots in Beijing and Shanghai. Although the pilot phase won't impose carbon caps or enforce participation, industrial firms will be forced to buy credits to cover excess emissions, once the project goes live. Officials have recommended carbon credits as a financial incentive that could lead to inefficient steel or cement plants shutting down. Closures would free up the carbon credits to sell on the market. ([Sustainable Insights: Edition 19; Article 3](#)).

CONTINUED ►



*A majority of 1,000 large asset owners surveyed were exposed to carbon assets, making them vulnerable to tighter environmental regulations and fiercer competition from clean technologies.*

## SUSTAINABILITY ISSUES SHAPING PORTFOLIOS AS FOSSIL FUEL RISK IS RE-PRICED

Coal assets risk facing sustained selling pressure as the world transitions to a low-carbon economy, and the supporting evidence continues to accumulate. As asset owners announce divestments and policies to address carbon risk, HSBC estimates that coal assets may lose 44% of their value due to future curbs on emissions beyond 2020. ([Sustainable Insights: Edition 18; Article 1](#)). For example, Australia's coal exports will be affected as China continues to focus on green energy and curbing pollution. Owing to the declining Chinese demand, coal prices, which have already fallen 30% between 2011 and 2013, are likely to drop further. This could lead to the possible abandonment of a large portion of Australia's planned coal mining projects including the mega Galilee Basin projects, which are valued at AUD100bn over the next 15 years. ([Sustainable Insights: Edition 22; Article 1](#)). Meanwhile, the European Bank for Reconstruction and Development (EBRD) has decided to cease funding for coal plants with the exception of "rare and exceptional circumstances". This comes in the wake of the World Bank and European Investment Bank ([Sustainable Insights Edition 1](#)) also making a similar decision. ([Sustainable Insights: Edition 21; Article 2](#)).

Coal assets are not the only category receiving more attention from sustainability risk analysis. The materiality of carbon and other sustainability risks is beginning to impact some investment decisions. An Asset Owners Disclosure Project (AODP) study has found that a majority of 1,000 large asset owners surveyed, which included 800 pension funds, were heavily exposed to carbon assets, making them vulnerable to a carbon asset price collapse. Tighter environmental regulations and fiercer competition from clean technologies make this a possibility. The study reports that just 6% of 458 funds scored an A rating or above, only slightly more than last year. ([Sustainable Insights: Edition 21; Article 1](#)). Environmental issues were the impetus for a Norwegian 'oil fund' divesting five companies, and it divested another owed to its use of child labor. ([Sustainable Insights: Edition 13; Article 1](#)).

Generation Investment Management (GIM) recently published a report highlighting fossil fuel investment risk. In it they identified the possibility of increasing risk of carbon assets due to several key reasons: 1) Increasing emission rules: The IEA has calculated a global "carbon budget" that includes the burning of a mere one-third of the existing fossil fuel reserves by 2050; 2) Cheaper sources of renewable energy: The falling cost of renewable energy is squeezing utility profit margins in the US and Europe; 3) Sociopolitical pressures: These create an environment in which carbon-intensive businesses could lose their "license to operate," thereby stranding assets. ([Sustainable Insights: Edition 15; Article 1](#)).

Some asset managers are looking to capitalize on this trend, creating a virtuous cycle that will bring more attention to the issues and aid the re-pricing of sustainability risks. For example, the Northern Trust (NTRS US) Emerging Markets Custom Low Carbon Dioxide Equity Index Fund has been designed to offer investors exposure to the potential growth and diversification benefits of emerging markets, while essentially lowering long-term portfolio risks by excluding both companies with high greenhouse gas emissions and companies that have extensive reserves of fossil fuels, in addition to incorporating other ESG factors. ([Sustainable Insights: Edition 12; Article 3](#)).

The above research materials and any SICM-prepared materials that they cite to (collectively, "SICM Research") are for informational purposes only. They are not an offer or solicitation for any security or investment product managed by SICM and should not be construed as investment advice. Investment strategies implemented by SICM on behalf of its clients may or may not trade or hold positions in the securities referred to in SICM Research. Further, investment accounts managed by SICM may or may not employ strategies based on or related to SICM Research.