## **European Alternative Energy Application Study & Outlook**



## **European Alternative Energy Corporates**

Scope Ratings' (Scope) application study on European alternative energy corporates assesses the credit quality of nine such corporates based on Scope's Rating Methodology for European Alternative Energy Corporates published in December 2014. The study also provides an outlook on expected industry developments. Scope expects industry growth from large heavily debt-financed investments. This should be driven by the low interest environment and the European Union's targets to increase the share of renewable energies by 2020.

The corporates were selected from a wider peer group of 24 European alternative energy corporates, thereby covering all sub-sectors of renewable energy, as well as corporates of different sizes, ranging from small single-asset to very large multi-asset independent power producers (IPPs) and project developers. Some of these companies have not been rated by Scope; in those cases, Scope judges their credit quality based on publicly available information in order to derive an indicative credit assessment.

## Credit quality of assessed corporates

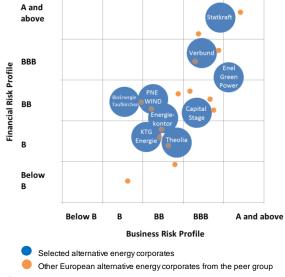
The credit quality of the assessed corporates varies widely. While large multinational alternative energy corporates can attain the 'A' rating category, small IPPs or project developers with volatile cash flow patterns remain mostly in the non-investment grade rating categories.

The solid credit quality of the aforementioned entities is attributable mainly to protected business models backed by stable regulatory incentive schemes or long-term power purchase agreements. They also display large well-diversified power production portfolios, robust profitability patterns, as well as solid debt protection and leverage measures.

By contrast, alternative energy corpoates in the non-investment grade categories are IPPs which operate limited portfolios of alternative energy power plants with few assets and little geographical diversification. As a result of unstable power production or a high portion of variable costs, these companies display volatile profitability patterns and comparably weak financial metrics. Cash flow volatilility typically associated with project development also limits an alternative energy corporate's ability to achieve an investment grade rating.

The following chart shows Scope's indicative credit quality assessment of selected European alternative energy corporates.

## Indicative Credit Quality Assessment of Selected European Alternative Energy **Corporates within a Wider Peer Group**



Source: Scope Ratings

Scope defines alternative energy corporates as companies that generate the majority of their total revenues and Funds from Operations ("FFO") from the generation of alternative energy (electricity and/or heat). Pure project development companies without own power generation assets, or companies that focus solely on fund management of alternative energy assets through "SPVs" (Special Purpose Vehicles) are not covered by this methodology.

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## **European Alternative Energy Industry**

## European Alternative Energy Corporates

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## **European Alternative Energy Industry**

**European Alternative Energy Corporates** 

## 1. The European Alternative Energy Industry

A fragmented industry

The European alternative energy industry is very fragmented, and participants often have a relatively small share of the European energy production market. This is due to the high degree of decentralised small-scale energy generation and the different degrees of sector maturities in the various regulatory frameworks across Europe.

**Different business models** 

Business models in the alternative energy industry vary greatly, ranging from power generation (electricity and/or heat) from different alternative energy sources, such as wind, solar, hydro, biomass and geothermal energy, to development activities comprising engineering, procurement and construction of alternative energy power plants.

Cash flow protection in a highly regulated business environment

The alternative energy industry is highly regulated. Regulation is driven heavily by the European Union's goals to reduce carbon emissions and fulfill so-called "renewable energy quotas". Regulation includes investment incentives, such as the guaranteed takeoff of produced energy, as well as a guaranteed remuneration through fixed feed-in tariffs or green certificates. With this regulatory support, many companies act as quasimonopolies with fairly stable and predictable cash flows, despite their relatively small size and very limited market shares. In cases where no regulatory tariff schemes exist, for example in countries with no feed-in tariffs or green certificates, alternative energy corporates usually enjoy long-term power purchase agreements with utilities, power traders or industrial companies.

**Capital intensive industry** 

The alternative energy sector is a capital intensive industry with significant investments required to acquire, build and maintain power generation assets. Many companies in the sector finance a large portion of these investments via project debt. As a result, they tend to have higher leverage levels than the average industrial company. However, these relatively high debt levels are frequently matched by higher levels of relatively stable asset values due to good visibility on long-term revenues and cash flows. The market for renewable energy assets tends to be comparably liquid. In most cases, sales of alternative energy assets are easily realisable.

Comparably stable cash flow from energy production

Alternative energy corporates' cash flows and their volatility differ widely depending on their business model. This tends to be either power generation or power plant development and construction. Although alternative energy producers may face volume risks arising from weather conditions, their revenues, profitability and cash flow tend to be relatively steady and predictable. This is a result of regulated tariffs or long-term power purchase agreements, as well as widely controllable cost structures.

Volatile cash flows from project development activities

In contrast, cash flows derived from project development activities tend to be volatile and less predictable. This depends to a great extent on the number and stages of projects in the development pipeline, the stability of the regulatory environment, and the stage of the economic cycle. Moreover, these project developers may face development and construction risks.

Investment-grade alternative energy corporates

Parameters which can qualify an alternative energy corporate for an investment-grade rating are the operation of a large pool of diversified power generation assets with protected revenue models — either backed by guaranteed feed-in tariffs in mature alternative energy markets or by long-lasting power purchase agreements. Other parameters are highly predictable cash flows and a solid and relatively stable profitability as well as strong financial measures.

Non-investment-grade alternative energy corporates

In contrast, high merchant and substitution risks, a comparatively small and less diversified power generation portfolio, as well as a significant revenue contribution from project development activities can be indicators for a sub-investment-grade rating. Further parameters which indicate a sub-investment-grade rating, are less predictable cash flows and profitability, as well as weaker financial measures. These are often driven by volatile energy production (i.e. hydro and wind power plants) or by a high proportion of variable costs (i.e. biomass power plants).

Ratings of alternative energy corporates can reach up to the higher investment-grade categories mostly driven by their size, their business protection through stable regulations as well as by their geographical focus.

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## **European Alternative Energy Industry**

**European Alternative Energy Corporates** 

9 European Alternative Energy Corporates Assessed in this Report

European alternative energy corporates assessed in this report

Scope's Rating Methodology on European alternative energy corporates has been applied to nine IPPs and project developers. These corporates have been selected from a wider peer group of 24 European alternative energy corporates. Companies in the peer group cover energy producers in all sub-sectors of renewable energy as well as corporates of different sizes, ranging from small single-asset to very large multi-asset independent power producers (IPPs) and project developers, e.g. EDP Renováveis SA, Albioma SA, Infinis Energy plc and ABO Invest AG.

| Alternative energy corporate         | Country of main business | Main type of business    | LTM revenues |
|--------------------------------------|--------------------------|--------------------------|--------------|
| BioEnergie Taufkirchen GmbH & Co. KG | Germany                  | Biomass cogeneration     | EUR 12m      |
| Capital Stage AG                     | Germany                  | Solar (photovoltaics)    | EUR 76m      |
| Enel Green Power SpA                 | Italy                    | Wind, hydro, geothermal  | EUR 2,832m   |
| Energiekontor AG                     | Germany                  | Wind                     | EUR 144m     |
| KTG Energie AG                       | Germany                  | Biogas                   | EUR 71m      |
| PNE WIND AG                          | Germany                  | Wind                     | EUR 285m     |
| Statkraft SA                         | Norway                   | Hydro                    | NOK 48,348m  |
| Theolia SA                           | France, Germany          | Wind                     | EUR 101m     |
| Verbund AG                           | Austria                  | Hydro, natural gas, wind | EUR 2,826m   |

Of the above-mentioned companies, BioEnergie Taufkirchen GmbH & Co. KG is rated by Scope<sup>1</sup>. For the other eight entities, which are not rated by Scope, a credit quality assessment was performed on a limited information basis. As a result, these assessments are only indicative.

In its analysis, Scope has assessed the public information available for the past five years. In some cases Scope incorporated private information as well as the companies' forecasts.

## Assessment in this study on a standalone basis

In this application study Scope has assessed the respective alternative energy corporates on a standalone basis. Scope did not take into account the companies' shareholder structure regardless of whether it consists of sovereign states or integrated utilities.

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Other alternative energy corporates, which have been assigned a private rating by Scope, have been included in the peer group comparison but are not mentioned in this report.



## **Indicative Credit Quality Assessment**

**European Alternative Energy Corporates** 

## 2. Indicative Credit Quality Assessment of Alternative Energy **Corporates**

Credit quality ranges from B to A categories

**Business Risk Profiles driven** by power plant portfolio and

merchant model

**Financial Risk Profile strongly** dependent on company size and stage of the investment cycle

Given the heterogeneity among European alternative energy corporates in terms of size, country and regulatory exposure, profitability patterns and financial structures, the credit quality of corporates in the sector is very diverse ranging from the B- to the high investmentgrade categories.

Large international IPPs such as renewable energy subsidiaries of Pan-European utilities but also large operators of hydro capacities tend to exhibit a solid Business Risk Profile in the investment-grade area. This is largely driven by the well-diversified power plant portfolios and stable profitability patterns. Mid-sized IPPs, which benefit from protected business models and have no substitution risks through the long-term provision of fixed feed-in tariffs can also attain Business Risk Profiles equivalent to an investment-grade rating. However, power plant operators, which sell generated electricity volumes at market prices or under short-term forward contracts generally face stronger cash flow volatility and hence, display weaker Business Risk Profiles.

Small IPPs, which operate a limited portfolio of power generation assets, display Business Risk Profiles in the non-investment categories given the lack of cash flow robustness. The same applies to alternative energy corporates that show volatile cash flow patterns stemming from a higher cost contribution from variable input costs such as biomass power plant operators.

Companies with a high cash flow contribution from project development activities would more likely be found in the non-investment grade categories due to potential high cash flow volatilities stemming from these companies' elastic business models.

The Financial Risk Profiles of European alternative energy corporates vary greatly, strongly depending on the companies' size but to a large extent on the stage of the corporates' investment cycle. Alternative energy corporates that operate a large portfolio of power plants tend to benefit from solid operating cash flows with comparably robust debt protection measures i.e. a low leverage (DEBT/EBITDAR <3.0x) and a comparably strong fixed charge coverage (EBITDAR/Fixed Charge >4.5x) within the investment-grade rating categories. The existing power plant portfolio generates sufficient operating cash flows to cover planned maintenance and expansion investments.

Smaller alternative energy corporates which have a critical mass of diverse power generation assets and which are in the early stages of the investment cycle exhibit high indebtedness and comparably low fixed charge coverage ratios in the non-investment grade rating categories (DEBT/EBITDAR >6.0x and EBITDAR/Fixed Charge <3.0x). These corporates depend heavily on external financing.

While alternative energy corporates with a strong exposure to project development activities can show comparably solid debt protection measures, these ratios are, however, less robust than for IPPs.

The following graphs exhibit the rating distribution of Scope's assessment of the industry's rating drivers as reflected by the peer group (see figure 1) as well as Scope's indicative rating assessment of the above-mentioned alternative energy corporates (see figure 2).

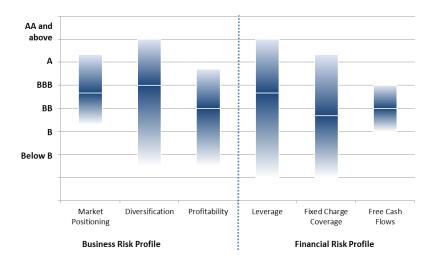
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## **Indicative Credit Quality Assessment**

European Alternative Energy Corporates

Figure 1: Distribution of Credit Quality within Different Rating Drivers within a Wider Peer Group

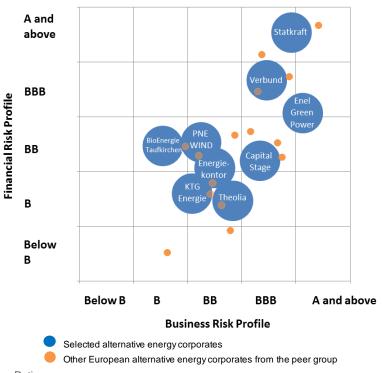


Source: Scope Ratings

Diverse picture on credit quality of selected alternative energy corporates

The credit quality of the assessed European alternative energy corporates varies widely. Of the assessed alternative energy corporates, Statkraft SA, Enel Green Power SpA and Verbund AG display the highest credit quality. The comparably strong credit quality is bolstered by these companies' large diversified power generation portfolio and sound financial metrics. The lowest credit quality is shown by small IPPs or corporates with exposure to project development activities (BioEnergie Taufkirchen GmbH & Co. KG, KTG Energie AG, PNE Wind AG). These corporates' credit quality is reflected by higher business risks stemming from a less diversified business model and weaker debt protection measures.

Figure 2: Indicative Credit Quality Assessment of European Alternative Energy Corporates within a Wider Peer Group



Source: Scope Ratings

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## **Market Outlook**

## **European Alternative Energy Corporates**

## 3. Key Market Drivers and Outlook

European renewable energy market boosted by regulations and renewable energy targets

The European alternative energy market has experienced substantial growth since 2005 (see figure 3) boosted by the European Union's climate change policies, which aim at a substantial reduction of  $CO_2$  emissions of 20% (compared to 1990 levels) and a renewable energy share of 20% of total energy production (gross consumption, 30% for electricity generated from renewable energy sources) by 2020.

This has led to a significant deterioration of market shares and margin erosion for operators of conventional power plants (hard coal, lignite, gas and nuclear). In order to achieve the EU's climate change targets, which have been specified for each EU member state, the renewable energy sector – particularly wind, biomass and solar – is geared for further growth. Such growth is driven not only by the expansion of European utilities, but also by small-scale IPPs. Hence, despite reduced macroeconomic growth expectations in many European countries, growth of the alternative energy sector will likely continue, driven by comparably predictable long-term investment returns.

IPPs benefit from little cyclical exposure and solid cash flow generation ...

Established IPPs, which operate renewable energy power plants under stable regulatory frameworks, largely benefit from a secured long-term income from produced energy (availability-based remuneration) – either subsidised through long-term fixed feed-in tariffs or green certificates. Thus they remain largely unaffected by the economic cycle. In contrast, IPPs which sell electricity (i.e. hydro and some wind farm operators) and/or heat at market/spot prices or under power purchase agreements (demand-based income), are exposed to cyclicality. Given the cost competitiveness of non-regulated renewable energies i.e. hydro power, these IPPs are well positioned in the so-called merit order system<sup>2</sup> (see figure 4) ahead of nuclear and conventionally generated electricity (nuclear, coal, gas/oil) with very limited merchant or substitution risks.

... while project developers face high cash flow volatility

Alternative energy corporates which generate a larger portion of cash flows from project development are strongly exposed to regulatory changes in some countries, unless they are strongly diversified through projects in different renewable energy markets.

Figure 3: Electricity Mix in the European Union (%)

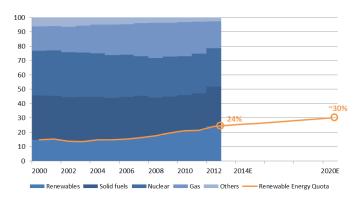
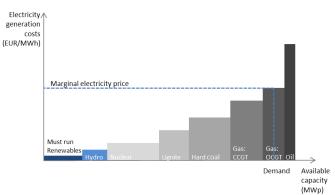


Figure 4: Merit Order Model for Electricity Supply in Energy Markets with Guaranteed Take-off of Renewable Energy



Source: European Union Statistical Pocketbook 2014, Scope Ratings

Source: Scope Ratings, own illustration

Inelastic business profiles due to business protection from sector regulations

Even with a macro-economic downturn in the European Union the business models of alternative energy corporates will remain inelastic due to the sector's protection from regulation. The guaranteed take-off at fixed feed-in prices for every kilowatt-hour of generated electricity implies that even smaller IPPs are likely to show comparably stable cash flow generation. IPPs which do not benefit from such long-term tariff structures but face deteriorating wholesale energy prices, are likely to see weaker margins and higher cash flow volatility. In contrast, companies in the biomass sub-sector will likely see margin improvements due to lower expected input costs from renewable raw materials.

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<sup>&</sup>lt;sup>2</sup> The merit order is a way of ranking available electrical generation, based on ascending order of price and priority together with amount of energy that will be generated. Renewable energies which have feed-in priority in many countries rank ahead of conventional energies.



## **Market Outlook**

## **European Alternative Energy Corporates**

Growth of new capacities expected to slow with weaker regulatory support

Constrained by amended regulations in many European countries, which suggest either reduced tariffs or targeted installation corridors, Scope expects growth of new renewable capacity to slow down from a CAGR of 7.7% between 2005 and 2013, to 2.9% between 2014 and 2020. This will likely hurt those corporates with a high exposure to project development activities.

Spreads narrow further for unregulated hydro capacities

Spreads are expected to narrow further for non-regulated power generation capacities including thermal, nuclear, but also hydro power plants. This is due to steep price declines for electricity futures in 2014 across all European electricity markets, based on sluggish demand expectations and the slump in oil, coal and gas prices. Alongside the modest macroeconomic growth expectations in Europe, the profitability of such alternative energy corporates will likely worsen in 2015 and beyond. In contrast, spreads of biomass power plants are expected to improve thanks to falling costs for renewable raw materials such as wood or energy plants. Profitability of other regulated alternative energy generators, i.e. wind and solar, are largely unaffected by these price developments.

Low interest rate environment boosts investment in renewable energy infrastructure

With interest rates left at a historical low of 0.05% in the Eurozone investments in additional renewable energy capacities will be driven by the compelling internal rates of return on such highly leveraged infrastructure assets. As a result, debt positions of alternative energy corporates are likely to increase further. While initially credit negative, this is mitigated by short-term cash flow generation of newly installed or acquired power generation assets, which keeps leverage and fixed charge coverage at solid levels.

Equity or quasi equity-support from financial institutions may strengthen credit quality of IPPs Given the benefits of renewable energy power plants in terms of predictable long-term yields, institutional investors such as pension funds and insurers are increasingly expanding their renewable energy exposure. Scope believes that the recent partnerships of German Gothaer Insurance Group with operators of wind and solar farms (Capital Stage AG and juwi renewable IPP Beteiligungs GmbH) is just the start of a trend. Such equity or quasi-equity injections (i.e. through participation rights) to alternative energy corporates may further strengthen their credit quality.

Continued restructuring of the European utilities landscape ...

The transformation of the European energy landscape from centralised national markets towards a higher sector fragmentation is likely to continue in 2015. This will result in further losses of market shares for conventional utilities. Although Pan-European utilities have to steer against such developments, their renewable energy subsidiaries, such as RWE Innogy GmbH, EDF Energies Nouvelles, Enel Green Power SpA., E.ON Climate and Renewables GmbH, do not have the financial capacity to accelerate investments. This is the result of constrained inter-company financing (due to declining earnings from conventional utilities) and a likely higher leverage for such utilities. The planned split-up of E.ON S.A. into a division comprising regulated activities such as renewables and networks, and a division covering conventional energy production and explorations/production may soon be copied by other European utilities.

... few M&A activities

Selected M&A transactions will likely be driven by the goal of sustaining market shares. Larger utilities and IPPs might acquire existing power generation portfolios from smaller IPPs thereby trying to reclaim market share.

Market shake-out between 2009 and 2013

Corporate defaults in the European alternative energy sector have historically been triggered by various sector events or corporate developments respectively. Particularly, high-risk corporates with a strong exposure to project development activities (i.e. S.A.G. Solarstrom AG, CarpeVigo AG, Solarhybrid AG), which suffered project delays and unexpected regulatory changes, have had to file for bankruptcy over the last few years. Other corporate defaults have been triggered either by a lack of diversification of power plant activities or a high proportion of volatile variable costs, i.e. operators of biomass power plants (i.e. AC Biogas GmbH). Scope believes that the defaults in the sector will likely become less frequent following the sector's shake-out between 2009 and 2013.

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## **Business and Financial Risk Drivers**

European Alternative Energy Corporates

## 4. Business and Financial Risk Drivers

Scope applies its corporate rating methodology to alternative energy corporates as outlined below. The following business risk and financial risk indicators are non-exhaustive and might not be fully applicable to all alternative energy corporates. Each company's business model determines the applicable indicators.

**Business Risk Drivers** 

Competitive positioning

Scope's analysis of an alternative energy corporate's market positioning concentrates on factors that determine the company's revenue protection, such as the degree and stability of regulations, the risks of substitution, as well as an alternative energy corporate's size.

Scope assesses the impact of different European regulatory frameworks with regard to the stability and predictability of an alternative energy corporate's cash flow generation. Regulations in some European countries tend to protect an alternative energy corporate's business model through a guaranteed take-off and remuneration of generated energy, thereby placing the alternative energy provider in a quasi-monopolistic position with almost no merchant, price or substitution risks. In its analysis, Scope incorporates the history of the regulatory framework as this may vary strongly across different European countries. The same may apply for heat suppliers that do not face true competition in their supply region but are exposed to price risks. On the other hand, alternative energy corporates that sell generated energy through power purchase agreements or at market prices do not enjoy comparable business protection and are exposed to price and substitution risks.

An alternative energy company's product and geographical diversification determines its ability to offset cash flow volatility caused by disruptions of power generation, regulatory changes, economic cycles and industry dynamics. While product and geographical diversification is less important for power generators that exhibit a quasi-monopolistic market

diversification is less important for power generators that exhibit a quasi-monopolistic market position through a fixed feed-in tariff model, it is particularly important for corporates with less predictable cash flows; for example, those that might face regulatory risks in less stable

jurisdictions, or that sell energy at market prices without guaranteed take-off.

Scope regards an alternative energy company's EBITDAR margin as the most important indicator of its profitability, efficiency and cash flow stability. Furthermore, Scope assesses whether the load factors of alternative energy power plant operators are in line with fuel-specific load expectations or significantly lower.

EBITDAR margins depend largely on the type of fuel used for power production, on the volatility of power generation volumes, on the tariff structure, and on the corresponding structure of fixed and variable costs. Some EBITDAR volatility might come with increasing exposure to project development activities.

**Financial Risk Drivers** 

Scope assesses the cash flow-adjusted leverage of an alternative energy utility measured as FFO/Debt (%) and Debt/EBITDAR(x). Given the long-term nature of assets in the industry, a large portion of project finance, and highly predictable earnings, alternative energy corporates tend to have greater leverage and longer debt maturities than an average industrial company. However, relatively high debt levels are frequently matched by higher levels of relatively stable asset values, which in many cases are easily realisable. Furthermore, the comparatively high adjusted leverage of alternative energy corporates is backed by solid debt protection measures, such as FFO/Fixed Charge (x) and EBITDAR/Fixed Charge (x).

Alternative energy companies tend to be highly capital-intensive. During investment cycles, Free Cash Flows (FCF) can be significantly negative (power generators because of capex, project developers because of working capital requirements), requiring new debt and/or equity to finance replacements and/or expansion. Nevertheless, due to comparatively short construction times compared with conventional power plants or power grids and networks, capex tends to be quickly covered through organic cash flow generation from power generation.

**Diversification** 

**Profitability** 

Debt protection

**Free Cash Flows** 

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## BioEnergie Taufkirchen GmbH & Co. KG\*

## Biomass cogeneration

Corporate name:

BioEnergie Taufkirchen GmbH & Co. KG

Country of origin:

Germany

Main country exposure:

Germany

Power plant focus: Generation capacity: Biomass cogeneration 30 MWp<sub>th</sub>

BioEnergie Taufkirchen GmbH & Co. KG ("BET") operates a biomass cogeneration plant in Taufkirchen, a community close to Munich. While the generated heat is fed into the company-owned district heating network, the electricity is fed into the existing power grid.

## **Business Risk Profile**

Very small IPP with quasimonopolistic market position With an annual EBITDAR of EUR 4m in 2013, BET is a very small alternative energy generator. Despite being small, BET holds a quasi-monopoly in a market with high entry barriers due to the company-owned district heating network of roughly 39km. This network ensures sales for district heating in Taufkirchen and neighbouring communities. Nevertheless, tariffs for generated heat are not supported by any regulatory incentive scheme; hence, the company faces higher price risks than most of the IPPs that operate under regulation-backed incentive schemes or long-term power purchase agreements.

Very low diversification

Being a single power plant operator BET bears high risks in case of operational disruptions. However, Scope does not see the company's low geographical and asset diversification as a major negative credit driver due to the above-mentioned quasi-monopolistic position.

Optimised sourcing mix stabilises profitability

As a biomass power plant operator with a high portion of variable costs stemming from sourcing renewable combustibles such as wood and biogas, but also oil and gas, the company is exposed to stronger fluctuations than other IPPs operating wind, hydro or solar power plants. As a result, BET shows a comparably low and volatile EBITDAR margin (2013: 32.4%). Thanks to the increased input of cheaper geothermal energy and favourable price developments, resulting from declining input prices for biomass and oil/gas, Scope expects the company's EBITDAR margin to improve to 35% in 2015.

#### **Financial Risk Profile**

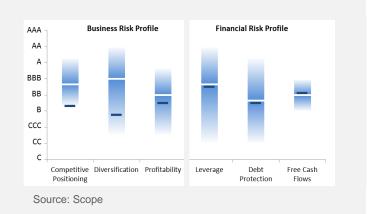
Moderate leverage and debt protection measures

Despite the company's low equity capitalisation and its leverage of 6.3x (NET DEBT/EBITDAR 2013), Scope does not see significant existential risks thanks to the company's recoverable asset base. With an improved EBITDAR, a continuing amortisation of bank loans and no significant investment needs, Scope expects that BET can improve its leverage to 5.1x in 2015. BET's EBITDAR/Fixed Charge stood at a moderate level of 2.4x in 2013, and is expected to improve to 3.1x in 2015.

### FCF positive going forward

Major investment projects, such as the further expansion of the company-owned local heat network were finalised in 2013. Considering the company's small size, operating cash flows are likely to be sufficient to cover planned investments. Hence, Free Cash Flows can be used to improve the company's debt position.

| Scope's Credit Quality Assessment                  |       |        |       |        |       |  |
|----------------------------------------------------|-------|--------|-------|--------|-------|--|
|                                                    | '10   | '11    | '12   | '13    | '14   |  |
| Total Assets (EURm)                                | 28    | 29     | 29    | 32     | 32    |  |
| Total Debt (EURm)                                  | 18    | 21     | 21    | 27     | 27    |  |
| Cash & Equivalents (EURm)                          | 0     | 0      | 2     | 2      | 4     |  |
| Revenues (EURm)                                    | 9     | 10     | 10    | 12     | 12    |  |
| EBITDAR (EURm)                                     | 2     | 2      | 4     | 4      | 4     |  |
| FFO (EURm)                                         | 1     | 1      | 3     | 2      | 3     |  |
| FCF (EURm)                                         | 2 -   | 3      | 0 -   | 3      | 2     |  |
| EBITDAR margin (%)                                 | 27.0% | 24.5%  | 40.1% | 32.4%  | 34.5% |  |
| Debt/EBITDAR (x)                                   | 7.3   | 8.6    | 5.2   | 6.7    | 6.3   |  |
| Net Debt/EBITDAR (x)                               | 7.3   | 8.4    | 4.8   | 6.3    | 5.4   |  |
| EBITDAR/Fixed Charge (x)                           | 2.2   | 2.2    | 3.7   | 2.4    | 2.9   |  |
| FFO/Fixed Charge (x)                               | 2.2   | 2.2    | 3.7   | 2.4    | 2.9   |  |
| Free Cash Flow margin (%)                          | 19.5% | -34.4% | 4.5%  | -25.8% | 15.6% |  |
| Source: Scope based on company's financial reports |       |        |       |        |       |  |



<sup>\*</sup> Scope has assigned a public rating of BBB- to BET's EUR 15m senior secured corporate bond (6.5% p.a., maturing in July 2020).

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## **Capital Stage AG**

## **Photovoltaics**

Corporate name: Country of origin: Main country exposure: Power plant focus:

Generation capacity:

Capital Stage AG Germany Germany

Photovoltaics 313 MWp Capital Stage AG ("CS") is the largest independent operator of large-scale photovoltaic power plants in Germany. Moreover, the company operates solar and wind parks in France and Italy. The current power generation portfolio comprises 41 power plants with a total capacity of 313 MWp.

#### **Business Risk Profile**

## High business protection through stable regulation

With an EBITDAR of EUR 69m (LTM to Sept 2014) and an operating power plant portfolio of 313MWp in November 2014, Capital Stage is one of the largest IPPs for solar energy. Scope regards the company's business model as well protected by stable regulatory support based on long-term fixed feed-in tariffs in Germany and France.

#### Strong asset diversification

The granular asset base of 47 solar and wind power plants in different regions of Germany (60% of asset portfolio at the end of H1 2014), Italy (12%) and France (28%) leaves the company's credit quality largely unaffected by potential operational disruptions.

## Solid above-average profitability pattern

With an EBITDAR margin of 90.4% for the LTM to Sept 2014, CS shows an excellent profitability far above the sector average. Bolstered by the company's small share of variable costs and the remuneration through fixed feed-in tariffs, the company's profitability and cash flow generation are highly visible and predictable. The profitability is likely to persist over the next few years due to the long-term provision of fixed feed-in tariffs.

# Strong growth ambitions with capital support from strategic partner

Backed by the company's deal pipeline of >200 MWp in Germany, France and the UK, and capital support from a recently agreed strategic alliance with Gothaer Insurance Group, the company is geared for strong revenue and EBITDAR growth in 2015/16E. The financial support of EUR 150m of quasi-equity from the insurance group provides excellent access to debt financing at comparably low interest rates.

#### **Financial Risk Profile**

## Moderate leverage and fixed charge coverage

The company's leverage of 6.1x in terms of NET DEBT/EBITDAR (LTM) stands at a moderate level for a European IPP. Given the company's growth ambitions for 2015/16E CS's indebtedness is likely to increase accordingly, based on an assumed 25/75 equity/debt financing for additional power plants. However, Scope believes that the leverage will likely remain close to 6.0x provided the company invests in operating power plants which directly strengthen the company's EBITDAR. The EBITDAR/Fixed Charge of 3.1x for the LTM is considered moderate.

#### FCF to remain negative

Despite the comparably strong operational strength of the company, with solid operating cash flows, CS's Free Cash Flows are likely to remain negative over the next 2-3 years. This is caused by the company's growth ambitions through the acquisition of power plants (potentially doubling the portfolio until the end of 2015 to 600 MWp).

## Scope's Credit Quality Assessment

|                           | '10    | '11    | '12    | '13    | LTM '14 |
|---------------------------|--------|--------|--------|--------|---------|
| Total Assets (EURm)       | 182    | 300    | 455    | 593    | 791     |
| Total Debt (EURm)         | 111    | 188    | 281    | 327    | 469     |
| Cash & Equivalents (EURm) | 23     | 32     | 34     | 56     | 51      |
| Revenues (EURm)           | 13     | 35     | 45     | 57     | 76      |
| EBITDAR (EURm)            | 14     | 25     | 34     | 50     | 69      |
| FFO (EURm)                | 5      | 13     | 15     | 23     | 34      |
| FCF (EURm) -              | 8 -    | 19 -   | 27 -   | 11 -   | 46      |
| EBITDAR margin (%)        | 104.7% | 69.9%  | 74.8%  | 88.4%  | 90.4%   |
| Debt/EBITDAR (x)          | 8.2    | 7.6    | 8.3    | 6.5    | 6.8     |
| Net Debt/EBITDAR (x)      | 6.5    | 6.3    | 7.3    | 5.4    | 6.1     |
| EBITDAR/Fixed Charge (x)  | 2.5    | 2.8    | 2.9    | 3.0    | 3.1     |
| FFO/Fixed Charge (x)      | 0.9    | 1.4    | 1.3    | 1.4    | 1.5     |
| Free Cash Flow margin (%) | -59.8% | -52.5% | -58.9% | -18.6% | -60.3%  |

Source: Scope based on company's financial reports



Source: Scope

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## **Enel Green Power SpA**

## Multi-asset Pan-European IPP

Corporate name:

Enel Green Power SpA

Country of origin:

Italy, Spain, US

Main country exposure:

Power plant focus: Generation capacity: Wind, hydro 9.530 MWp

Enel Green Power SpA ("EGP") comprises the Italian Enel Group's renewable energy power plants. The current power plant portfolio ranges across all renewable fuel sources, from wind, hydro, solar, geothermal to biomass energy, adding to a total installed power generation capacity of 9,530 MWp. The company operates on a global level, with a presence in Europe, the Americas and Africa. Enel Group - which is 31.2% owned by the Italian government – holds 68.3% of EGP.

#### **Business Risk Profile**

## Strong market position in South **Europe and emerging markets**

With a power generation volume of 29.5 TWh and a net capacity of >9.5 GWp in 2013, EGP ranks among the largest European alternative energy corporates. Given the protection provided by renewable energy incentive schemes (28% of 2013 sales) and the large share of electricity sold under long-term power purchase agreements (70% of EGP's power generation volumes), EGP's revenue streams are largely protected.

## **Excellent geographical and asset** diversification

As a large global renewable energy utility, EGP exhibits an excellent degree of diversification, operating more than 750 independent power plants. While the company's geographical focus is in Italy with roughly 35% of EGP's operational capacities, the group maintains a very diversified power plant basis in about 20 countries, including Spain, Greece, France, the US as well as emerging markets in Eastern Europe, South America, the Middle East and Africa. Moreover, the company benefits from utilising a variety of renewable energy fuel sources with about 60% from wind farms, 25% from hydro plants and the remaining power generation stemming from solar, biomass and geothermal power plants. Given the investment plans of the group this diversification is likely to improve further.

### Stable profitability

EGP's EBITDAR margin stands at a very robust level between 60-65% from 2010 to 9M 2014, backed by the highly profitable cash flow contribution from hydro and wind power plants. While new capacity additions, such as wind farms, are expected to improve the group's profitability, lower achievable forward electricity prices in the company's core markets of Italy, Spain and the US may lead to slightly weaker EBITDAR margins.

### **Financial Risk Profile**

## Leveraging ahead

Despite a strong increase of the company's leverage from a DEBT/EBITDAR of 2.6x in 2010 to 4.1x over the LTM to Sept 2014, EGP shows below-average leverage among European alternative energy corporates. The group's EBITDAR/Fixed Charge stood at a strong 5.1x in 2013. While Scope expects these ratios to remain at solid levels, they may weaken slightly as a result of the company's large debt-financed investment plan.

## **Negative FCFs due to large** investment programme

Reflecting the company's envisaged capacity expansion plans (addition of 3.8 GWp by 2018), Free Cash Flows are expected to remain negative over the next few years.

**Business Risk Profile** 

## **Scope's Credit Quality Assessment**

|                           | '10     | '11    | '12    | '13    | LTM '14 |
|---------------------------|---------|--------|--------|--------|---------|
| Total Assets (EURm)       | 13,131  | 14,953 | 16,166 | 16,936 | 18,762  |
| Total Debt (EURm)         | 3,417   | 4,763  | 5,591  | 6,246  | 7,458   |
| Cash & Equivalents (EURm) | 199     | 349    | 333    | 343    | 343     |
| Revenues (EURm)           | 2,179   | 2,539  | 2,484  | 2,757  | 2,832   |
| EBITDAR (EURm)            | 1,313   | 1,583  | 1,626  | 1,787  | 1,799   |
| FFO (EURm)                | 1,012   | 1,184  | 1,161  | 1,259  | 1,303   |
| FCF (EURm)                | 1,299 - | 599 -  | 504 -  | 579 -  | 749     |
| EBITDAR margin (%)        | 60.3%   | 62.3%  | 65.5%  | 64.8%  | 63.5%   |
| Debt/EBITDAR (x)          | 2.6     | 3.0    | 3.4    | 3.5    | 4.1     |
| Net Debt/EBITDAR (x)      | 2.5     | 2.8    | 3.2    | 3.3    | 4.0     |
| EBITDAR/Fixed Charge (x)  | 7.4     | 5.4    | 4.5    | 5.1    | 5.1     |
| FFO/Fixed Charge (x)      | 5.7     | 4.1    | 3.2    | 3.6    | 4.3     |
| Free Cash Flow margin (%) | -59.6%  | -23.6% | -20.3% | -21.0% | -26.4%  |
|                           |         |        |        |        |         |

Source: Scope based on company's financial reports

AΑ BBB BB В CCC CC Competitive Positioning Diversification Profitability Free Cash

**Financial Risk Profile** 

Source: Scope

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AAA



## **Energiekontor AG**

Wind

Corporate name: Country of origin:

Energiekontor AG Germany Germany

Wind

exposure: Power plant focus:

Main country

Generation 221 MWp

Energiekontor AG (EK) acts as an international project developer of onshore and offshore wind farms, thereby covering engineering, procurement and construction. Moreover, the company operates own onshore windfarms in Germany, Portugal and the United Kingdom (UK) with a total production capacity of 221 MWp.

#### **Business Risk Profile**

No business protection in competitive project development With a developed onshore and offshore wind capacity of >700 MWp since 1990, EK is one of the leading European project developers of large-scale wind farms. However, the group faces strong competition for suitable project sites in the company's core markets Germany. UK and Portugal (67% of 2013 sales). While EK has widely secured its future project development activities through a project pipeline of 1.4 GWp, the company is still vulnerable to unforeseen regulatory changes for newly installed wind farms which may threaten these projects. Within the business segment of electricity production (33% of 2013 revenues) Scope regards EK as a comparably small IPP with a total production capacity of 221 MWp (Sept 2014). However, the company's operated wind farms benefit strongly from guaranteed feed-in tariffs or renewable obligation certificates in Germany/Portugal and UK respectively; hence, the company faces little to no merchant risks for its wind park portfolio.

**Project development strongly** dependent on few markets

**Modest diversification in power** plant operation

Volatile profitability from project

development activities

Credit metrics volatile due to high exposure to project development

EK's project development activities are highly dependent on just three markets (Germany, Portugal and the UK), leaving it heavily exposed to regulatory changes in these markets. From Scope's perspective, such dependence is particularly critical in Germany (with 56% of current project pipeline) with stiff competition for newly developed wind farms after the regulatory changes in August 2014 and the introduction of an annual target corridor of 2.4-2.6 GWp for new wind installations. Nevertheless, the company shows modest diversification in its asset base which covers 29 independent wind parks in northern Germany operated under the company's own accounts.

Due to the company's high exposure to project development activities, EK's profitability is comparably volatile, ranging from 33.0% to 46.7% over the last four years. Reflecting the company's growth ambitions in the power plant business which provides comparably stable EBITDAR margins of 75-80%, EK's profitability patterns are expected to stabilise going forward.

### **Financial Risk Profile**

Although the company has strongly improved its leverage from a high NET DEBT/EBITDAR of 9.7x in 2012 to a good 3.6x over the LTM (ending in June 2014), EK's leverage is likely to remain volatile. This is a result of the company's volatile cash flow development. The same volatility is seen for the company's fixed charge coverage with an EBITDAR/Fixed Charge ranging between a low 1.5x in 2010 to a good 3.4x in 2013.

## **Negative FCFs**

EK's Free Cash Flows are likely to remain negative over the next few years, given the company's growth ambitions and investment requirements for capacity additions.

| Scope's Credit Quality Assessment                  |        |        |         |        |         |  |
|----------------------------------------------------|--------|--------|---------|--------|---------|--|
|                                                    | '10    | '11    | '12     | '13    | LTM '14 |  |
| Total Assets (EURm)                                | 178    | 216    | 270     | 351    | 345     |  |
| Total Debt (EURm)                                  | 134    | 163    | 218     | 270    | 272     |  |
| Cash & Equivalents (EURm)                          | 38     | 52     | 53      | 71     | 74      |  |
| Revenues (EURm)                                    | 35     | 63     | 40      | 118    | 144     |  |
| EBITDAR (EURm)                                     | 12     | 30     | 17      | 46     | 55      |  |
| FFO (EURm)                                         | 5      | 22     | 8       | 26     | 30      |  |
| FCF (EURm) -                                       | 4 -    | 11 -   | 53 -    | 29     | 18      |  |
| EBITDAR margin (%)                                 | 33.0%  | 46.7%  | 41.7%   | 39.2%  | 38.3%   |  |
| Debt/EBITDAR (x)                                   | 11.6   | 5.5    | 12.9    | 5.8    | 4.9     |  |
| Net Debt/EBITDAR (x)                               | 8.3    | 3.7    | 9.7     | 4.3    | 3.6     |  |
| EBITDAR/Fixed Charge (x)                           | 1.5    | 3.7    | 1.8     | 3.4    | 3.3     |  |
| FFO/Fixed Charge (x)                               | 0.6    | 2.8    | 0.9     | 1.9    | 1.8     |  |
| Free Cash Flow margin (%)                          | -11.3% | -16.9% | -131.4% | -24.7% | 12.5%   |  |
| Source: Scope based on company's financial reports |        |        |         |        |         |  |

**Business Risk Profile** Financial Risk Profile AAA AΑ ввв вв CCC CC Competitive Positioning Diversification Profitability Free Cash

Source: Scope

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## **KTG Energie AG**

## Biogas

Corporate name: KTG
Country of origin: Germ
Main country exposure: Germ
Power plant focus: Biom
Generation capacity: 53 M

KTG Energie AG Germany Germany Biomass 53 MWp

KTG Energie AG (KTGE) covers the operation of own-developed biogas power plants with a total capacity of 53 MWp in Germany, thereby providing natural gas, electricity and heat as well as fertilisers. The company's major shareholder (57%) is the European agriculture company KTG Agrar SE.

#### **Business Risk Profile**

### **Existing substitution risks**

With an EBITDAR of EUR 22m in KTGE's business year 2013/14 (ending on 31 Oct 2014), stemming from the operation of biogas power plants with a production capacity of 53 MWp the company is considered a very small alternative energy generator. Nonetheless, KTG's revenues are protected to a large extent (60% in BY 2013/14) by regulations, as the sale of electricity generated by the combustion of biogas benefits from guaranteed feed-in tariffs. The company's remaining business activities relating to the feed-in of bio-methane into the gas network and the sale of fertilisers, however, face strong substitution risks.

#### Moderate diversification

KTGE covers the whole biogas value chain from biogas production (31% of 2014 revenues), electricity generation from the combustion of bio-methane (60% of 2014 revenues) and the sale of natural fertilisers. The company's geographical and asset diversification is still low with a strong exposure to 18 biogas power plants in East Germany.

## Volatile profitability patterns

As an operator of biogas power plants, KTGE is generally exposed to volatile cost developments stemming from sourcing renewable raw material but also from price developments for biogas as a substitute for natural gas. Given the high proportion of variable costs compared to IPPs operating other renewable energy power plants with no variable costs, KTGE shows a comparably low and volatile EBITDAR margin (2014: 31.0%). From Scope's perspective, volatility stemming from the costs of raw material is partly offset by the co-operation with KTG's majority owner KTG Agrar SE which provides raw material at competitive prices.

## **Financial Risk Profile**

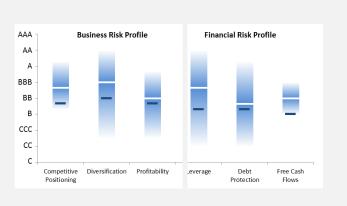
## **Below-average credit metrics**

KTGE shows below-average credit metrics with a moderate DEBT/EBITDAR of 6.9x in the company's financial year 2013/14. The fixed charge coverage of 2.6x in 2014 stands at a weak level. The credit metrics are expected to remain at comparably weak levels in light of the envisaged capacity expansion but are also weakened by the newly introduced (2014) dividend distribution of >EUR 2.4m per annum (>EUR 0.4 per share going forward).

#### **Negative FCFs**

In its ongoing investment phase the company's Free Cash Flows remain negative; hence, KTGE is strongly dependent on external financing.

| Scope's Credit Quality Assessment                                                  |         |         |         |        |        |  |  |
|------------------------------------------------------------------------------------|---------|---------|---------|--------|--------|--|--|
|                                                                                    | '10     | '11     | '12     | '13*   | '14    |  |  |
| Total Assets (EURm)                                                                | 63      | 95      | 170     | 208    | 238    |  |  |
| Total Debt (EURm)                                                                  | 79      | 58      | 97      | 134    | 151    |  |  |
| Cash & Equivalents (EURm)                                                          | 2       | 2       | 21      | 9      | 8      |  |  |
| Revenues (EURm)                                                                    | 14      | 21      | 32      | 51     | 71     |  |  |
| EBITDAR (EURm)                                                                     | 4       | 6       | 9       | 13     | 22     |  |  |
| FFO (EURm)                                                                         | 3       | 3       | 3       | 7      | 13     |  |  |
| FCF (EURm)                                                                         | 21 -    | 25 -    | 48 -    | 25 -   | 16     |  |  |
| EBITDAR margin (%)                                                                 | 30.5%   | 29.1%   | 28.5%   | 25.9%  | 31.0%  |  |  |
| Debt/EBITDAR (x)                                                                   | 18.2    | 9.3     | 10.8    | 10.2   | 6.9    |  |  |
| Net Debt/EBITDAR (x)                                                               | 17.8    | 9.0     | 8.4     | 9.5    | 6.5    |  |  |
| EBITDAR/Fixed Charge (x)                                                           | 2.7     | 2.4     | 2.4     | 2.3    | 2.6    |  |  |
| FFO/Fixed Charge (x)                                                               | 1.8     | 1.2     | 0.8     | 1.2    | 1.5    |  |  |
| Free Cash Flow margin (%) * Short fiscal year (31.10.2013)                         | -149.4% | -114.4% | -150.9% | -49.1% | -22.0% |  |  |
| *Short fiscal year (31.10.2013) Source: Scope based on company's financial reports |         |         |         |        |        |  |  |



Source: Scope

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Corporate name:
Country of origin:
Main country exposure:
Power plant focus:
Generation capacity:

PNE Wind AG Germany Germany Wind 40 MWp

PNE WIND AG (PNE) primarily develops onshore and offshore wind farm projects in 14 countries in Europe, South Africa and North America. In addition, the company is currently ramping up operations of its own wind farms, based predominantly in Germany. Capacity is set to rise from 40 MWp in September 2014 to 150 MWp in the medium term.

## Business risks in project development partly offset by project pipeline and wind farms

## With

**Business Risk Profile** 

With an aggregated developed wind capacity of >800 MWp, PNE is one of the leading European project developers of large-scale wind farms. With the current business focus on project development of wind farms (95% of 9M 2014 revenues) PNE faces a highly volatile market environment, driven by pull-in effects or project delays stemming from adjustments of national regulatory incentive schemes for wind energy. As a result, PNE's market position is not as stable and protected compared to alternative energy IPPs, which benefit from comparably stable cash flows protected by fixed tariff schemes or long-term power purchase agreements. Nevertheless, the company profits from a large project pipeline of currently 10.2 GWp in different countries, thus indicating a good market position for the company's future project development activities. Moreover, the newly established so-called YieldCo, which operates self-developed wind farms (5% of 9M 2014 revenues), benefits from protected cash flow streams backed by fixed long-term feed-in tariffs.

Modest geographical diversification but strong diversification in the pipeline

While PNE historically has the largest country exposure to the German wind market (98% of 2013 revenues), the company has expanded its project development activities to 14 countries in Europe, North America and Africa. The acquisition of its competitor WKN AG in July 2013 has helped to put the international project franchise on a broader footing. This is particularly important with the weakened regulatory support in its core market Germany, which stems from reduced feed-in tariffs and a recently introduced annual target corridor of 2.4-2.6 GWp for new wind installations. The current project pipeline of 10.2 GWp comprises 75% of projects in non-domestic markets which Scope regards as positive for the company's business risk profile.

Highly volatile profitability expected to stabilise with expansion of wind farm operation

With an EBITDAR margin ranging between 10.7% and 35.5% over the last four years, PNE shows a very volatile profitability. This is attributable to the company's exposure to project development of wind farms. PNE's profitability is likely to remain volatile, but will stabilise with the expansion of PNE's YieldCo with strong EBITDAR margins of >55%.

## **Financial Risk Profile**

## Comparably low leverage and high fixed charge coverage

With a DEBT/EBITDAR of 3.0x (LTM to Sept 2014) PNE shows a lower leverage compared to more capital intensive corporates that concentrate on power plant operations. Going forward, Scope expects the company's financial leverage to increase significantly, given the future focus on power plant operations under the YieldCo. Accordingly, the high EBITDAR/Fixed Charge of 4.8x (2013) is expected to decrease and remain at satisfactory levels.

## FCFs to remain negative

PNE's Free Cash Flows are likely to remain negative over the next few years driven by the expansion of the YieldCo (targeted capacity increase from 40 MWp to 150 MWp). Hence, external equity and debt financing is clearly required.

## Scope's Credit Quality Assessment

|                           | '10    | '11    | '12   | '13    | LTM '14 |
|---------------------------|--------|--------|-------|--------|---------|
| Total Assets (EURm)       | 200    | 192    | 183   | 435    | 426     |
| Total Debt (EURm)         | 86     | 85     | 76    | 211    | 201     |
| Cash & Equivalents (EURm) | 39     | 19     | 37    | 77     | 41      |
| Revenues (EURm)           | 66     | 49     | 84    | 144    | 285     |
| EBITDAR (EURm)            | 14     | 5      | 26    | 51     | 66      |
| FFO (EURm)                | 12     | 0      | 21    | 45     | 55      |
| FCF (EURm) -              | 24 -   | 15     | 14 -  | 62     | 34      |
| EBITDAR margin (%)        | 22.0%  | 10.7%  | 30.6% | 35.5%  | 23.2%   |
| Debt/EBITDAR (x)          | 5.9    | 16.3   | 2.9   | 4.1    | 3.0     |
| Net Debt/EBITDAR (x)      | 3.2    | 12.6   | 1.5   | 2.6    | 2.4     |
| EBITDAR/Fixed Charge (x)  | 3.1    | 0.9    | 4.6   | 4.8    | 4.5     |
| FFO/Fixed Charge (x)      | 2.6    | 0.0    | 3.6   | 4.2    | 4.8     |
| Free Cash Flow margin (%) | -37.0% | -31.8% | 17.1% | -43.3% | 12.0%   |
|                           |        |        |       |        |         |

Source: Scope based on company's financial reports



Source: Scope

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## Statkraft SA

Hvdro

Corporate name:
Country of origin:
Main country exposure:

Statkraft SA Norway Norway

Power plant focus: Generation capacity: Hydro, wind, natural gas

Statkraft SA (Statkraft) is Norway's largest and the Nordic (Norway, Sweden, Finland) region's third largest power producer. The company's power generation portfolio of 17.6 GWp consists mainly of hydropower. In addition, Statkraft operates wind, gas-fired and district heating power plants in more than 20 markets around the globe. Statkraft is wholly owned by the Norwegian state.

#### **Business Risk Profile**

## Dominant market position in the Nordic power market

With 17.6 GWp of power generation capacity at the end of 2014, 99% of which comes from renewables, such as hydro, wind and biomass Statkraft is the largest European alternative energy corporate. The company generates 13% of the Nordic's electricity production. Although it is strongly exposed to market price fluctuations given the lack of tariff regulation for its hydro, wind and gas power generation capacities, the group largely mitigates such risks through a large share of long-term contracts (>30% of production volumes are contracted through long-term forwards). Furthermore, Scope believes that the company's flexible and low costs electricity generation from hydro power widely reduces substitution risks in the relevant markets' merit order.

#### **Excellent diversification**

Geographically Statkraft is still heavily weighted in the Nordic power market where 79% of its power generation capacities are located. The remainder of its power generation portfolio is strongly diversified across almost 400 independent power plants in more than 20 countries in Western Europe (17%), South America (1%) and Asia (2%). Such excellent diversification is, however, partly constrained by the high correlation of electricity generation from hydro power plants, which strongly depends on water reservoirs in Scandinavia.

## Profitability is volatile and strongly dependent on market conditions

Given the high exposure to fluctuating wholesale prices and CO<sub>2</sub> emission prices, and the strong dependence on Nordic water reservoirs, Statkraft's profitability is highly volatile. From 2010-2013 EBITDAR margins ranged between 28-54%. Although such volatility can partly be mitigated by forward selling through long-term industrial contracts, Statkraft's profitability remains more strongly exposed to non-controllable external factors than operators of fully regulated renewable energy assets.

### **Financial Risk Profile**

#### Solid debt protection measures

Given Statkraft's inherent volatility in cash flow generation, debt protection measures tend to be volatile. The company's 2014 NET DEBT/EBITDAR of 2.1x is very solid, but may increase substantially in coming years with low water reservoirs and low electricity wholesale prices. The EBITDAR/Fixed Charge 2014 stands at a very high level at 9.3x.

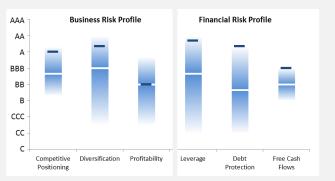
#### **Positive FCFs**

Statkraft has indicated a large capex programme comprising investments of up to NOK 60m between 2014 and 2018. Nevertheless, Statkraft's Free Cash Flows are expected to be positive given the strong operating cash flow generation and the flexibility on asset disposals.

## **Scope's Credit Quality Assessment**

|                           | '10     | '11     | '12     | '13     | '14     |
|---------------------------|---------|---------|---------|---------|---------|
| Total Assets (NOKm)       | 155,967 | 143,878 | 144,992 | 153,687 | 167,817 |
| Total Debt (NOKm)         | 40,486  | 37,287  | 40,625  | 40,377  | 38,468  |
| Cash & Equivalents (NOKm) | 19,278  | 8,605   | 5,440   | 7,685   | 12,663  |
| Revenues (NOKm)           | 29,252  | 22,449  | 37,550  | 47,458  | 48,348  |
| EBITDAR (NOKm)            | 15,955  | 9,795   | 10,492  | 12,444  | 12,132  |
| FFO (NOKm)                | 9,577   | 5,432   | 5,073   | 7,951   | 6,594   |
| FCF (NOKm)                | 3,738 - | 2,458 - | 2,194   | 8,653   | 1,447   |
| EBITDAR margin (%)        | 54.5%   | 43.6%   | 27.9%   | 26.2%   | 25.1%   |
| Debt/EBITDAR (x)          | 2.5     | 3.8     | 3.9     | 3.2     | 3.2     |
| Net Debt/EBITDAR (x)      | 1.3     | 2.9     | 3.4     | 2.6     | 2.1     |
| EBITDAR/Fixed Charge (x)  | 10.4    | 6.5     | 7.3     | 9.2     | 9.3     |
| FFO/Fixed Charge (x)      | 6.3     | 3.6     | 3.5     | 5.9     | 6.0     |
| Free Cash Flow margin (%) | 12.8%   | -10.9%  | -5.8%   | 18.2%   | 3.0%    |

Source: Scope based on company's financial reports



Source: Scope

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## Theolia SA

Wind

Corporate name:
Country of origin:
Main country
exposure:

Theolia SA
France
France, Germany

Power plant focus: Wind Generation capacity: 664 MWp THEOLIA SA (Theolia) is an independent producer of electricity from onshore wind energy. The company develops, builds and operates wind farms in four main countries: Germany, France, Morocco and Italy.

#### **Business Risk Profile**

### Market position protected by longterm feed-in tariffs

With 664 MWp of onshore wind capacity under management and an EBITDAR of EUR 57m over the LTM ending in June 2014, Theolia can be classified as a mid-sized IPP. With the operation of onshore wind farms mainly in Germany and France, the company benefits from a protected market position secured by a guaranteed feed-in of generated electricity at fixed feed-in tariffs over a long-term horizon of 15 to 20 years, thereby providing protection against market volatility. The company's operation of wind farms for third-parties covering 579 MWp further strengthens the market position by providing long-term cash flows over the lifetime of these power plants.

#### Solid diversification

Theolia enjoys a solid operational and geographical diversification covering the whole onshore wind value chain, from project development through to own power generation as well as plant operation for third-parties. Power plant operation for Theolia's own account covers >30 independent production sites in Germany with 69% of Theolia's installed capacities, France with 17%, Italy with 4% and Morocco with 8%, ensuring high risk mitigation from an underperformance of parts of the wind park portfolio.

# Stabilising profitability given stronger focus on energy generation

With the increasing focus on power generation and plant operation for third-parties, Theolia displays comparably stable EBITDAR margins of >65% in the power generation business. However, volatility in the company's profitability stems from project development activities, as margins in this business segment tend to be less predictable and highly dependent on market developments. As a result, Theolia's profitability faces strong volatility from possible insufficient cost coverage if projects cannot be sold on time or at targeted prices.

## **Financial Risk Profile**

## High leverage, low fixed charge coverage

Theolia's leverage in terms of DEBT/EBITDAR stood at a high level of 8.7x at the end of June 2014. Given Theolia's high indebtedness, the company's LTM fixed charge coverage of 1.6x (EBITDAR/Fixed Charge) is very low compared to its peer group. These comparably weak credit metrics are expected to improve over the next few years given the increased focus on the highly profitable power plant operation business.

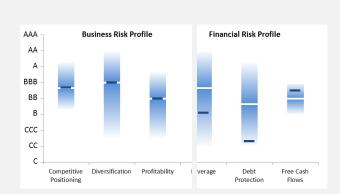
## **FCF** positive

Theolia has reached a critical mass where capex can widely be covered by the company's operating cash flows. Moreover, the company can selectively dispose wind assets, thereby strengthening liquidity and internal cash flow generation.

## Scope's Credit Quality Assessment

|                           | '10   | '11    | '12   | '13   | LTM '14 |
|---------------------------|-------|--------|-------|-------|---------|
| Total Assets (EURm)       | 692   | 617    | 538   | 745   | 728     |
| Total Debt (EURm)         | 348   | 332    | 298   | 506   | 498     |
| Cash & Equivalents (EURm) | 110   | 88     | 69    | 85    | 100     |
| Revenues (EURm)           | 155   | 67     | 68    | 95    | 101     |
| EBITDAR (EURm)            | 3     | 26     | 33    | 51    | 57      |
| FFO (EURm)                | - 25  | 6      | 10    | 9     | 19      |
| FCF (EURm)                | - 1   | - 10   | 26    | 78    | 65      |
| EBITDAR margin (%)        | 2.2%  | 38.2%  | 48.5% | 53.0% | 56.9%   |
| Debt/EBITDAR (x)          | 101.3 | 12.9   | 9.1   | 10.0  | 8.7     |
| Net Debt/EBITDAR (x)      | 69.2  | 9.5    | 7.0   | 8.3   | 6.9     |
| EBITDAR/Fixed Charge (x)  | 0.1   | 1.4    | 1.5   | 1.3   | 1.6     |
| FFO/Fixed Charge (x)      | - 0.1 | 1.3    | 1.3   | 1.2   | 1.5     |
| Free Cash Flow margin (%) | -0.5% | -15.1% | 38.7% | 81.9% | 64.5%   |
|                           |       |        |       |       |         |

Source: Scope based on company's financial reports



Source: Scope

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## **Verbund AG**

Hvdro

Corporate name:
Country of origin:
Main country exposure:
Power plant focus:

Generation capacity:

Verbund AG Austria Austria

Hydro, Gas, Wind 10,915 MWp Verbund AG (Verbund) is Austria's leading electricity company and one of the largest producers of electricity from hydropower in Europe. Verbund covers energy production, energy trading and the operation of Austria's high-voltage transmission grid (3,500km). 51 % of Verbund's share capital is owned by the Republic of Austria.

### **Business Risk Profile**

Strong market position despite non-regulated energy feed-in and monopoly in grid operation With an EBITDAR of EUR 1.1bn over the LTM to Sept 2014 and generated electricity of >35 TWh in 2013, Verbund enjoys a leading position among European alternative energy corporates. This is due to its large fleet of operated power plants totalling 10.9 GWp. Although the company's power generation capacities (98% of traded electricity volumes in 2013) are widely non-regulated and hence, power sale is generally exposed to merchant and substitution risks, Scope regards Verbund's business as well protected by a high portion of forward sales (>50%) and the competitiveness of hydro power in Austria's and Germany's merit order system. Moreover, Verbund holds the monopoly of Austria's fully regulated electricity transmission grid (100% stake in Austrian Power Grid AG), thereby facing no merchant risks for fully regulated energy transmission fees.

Vertically integrated utility with excellent diversification

Verbund is a vertically integrated utility, which covers the electricity value chain from electricity generation and trading to transmission. The company's 153 independent power plants show a strong diversification across markets, thereby mitigating production disruptions in individual power plants. Nevertheless, the company is strongly dependent on the Austrian domestic market, with more than 50% of electricity sales.

Volatile profitability from operation of hydro power plants

Given its demand-based merchant model, Verbund's profitability is highly dependent on attainable wholesale prices (base/peak load) in Central Europe, as well as available water reservoirs. With fluctuating wholesale power prices (one-year-baseload-futures fluctuated between 39-56 EUR/MWh between 2012 and 2014) Verbund's profitability tends to be more volatile than for alternative energy corporates which benefit from generation-based merchant models. As a result, Verbund's EBITDAR margin fluctuated from 32-41% between 2010 and 2013. While the highly regulated transmission grid smooths Verbund's cash flow generation, profitability is expected to decline in 2015/16 with current one-year futures trading 10% lower than in 2014. Verbund's operation of the fully regulated Austrian high-voltage transmission grid (~15% of 2013 EBITDAR) provides stable returns and partly stabilises the non-regulated electricity generation and trading business.

#### **Financial Risk Profile**

Deteriorating leverage and fixed charge coverage

Given the company's EBITDAR erosion from EUR 1.3bn in 2013 to EUR 0.9bn (LTM ending in Sept 2014), Verbund's leverage has significantly increased from 3.1x in 2013 to 4.8x (DEBT/EBITDAR). Incorporating the expected decline in profitability stemming from lower electricity wholesale prices, Scope believes that Verbund's leverage will exceed the threshold of 5.0x in 2015E. The same applies to the company's fixed charge coverage, which has fallen from a very solid 7.0x in 2013 to 4.2x over the LTM.

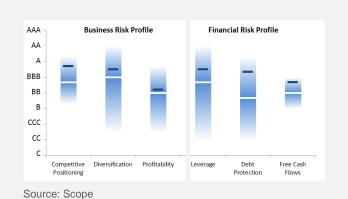
Selected investments covered by operating cash flows

Verbund's operating cash flows can widely cover dividends and the envisaged investments (EUR 1.5bn between 2014 and 2018) in new power production capacities and the maintenance of the power grid.

#### **Scope's Credit Quality Assessment**

|                           | '10    | '11    | '12    | '13    | LTM '14 |
|---------------------------|--------|--------|--------|--------|---------|
| Total Assets (EURm)       | 11,291 | 11,859 | 12,387 | 12,809 | 11,918  |
| Total Debt (EURm)         | 4,496  | 4,234  | 4,321  | 4,014  | 4,155   |
| Cash & Equivalents (EURm) | 489    | 333    | 122    | 83     | 189     |
| Revenues (EURm)           | 3,308  | 3,865  | 3,160  | 3,182  | 2,826   |
| EBITDAR (EURm)            | 1,058  | 1,243  | 1,302  | 1,296  | 867     |
| FFO (EURm)                | 714    | 704    | 966    | 1,073  | 776     |
| FCF (EURm) -              | 811 -  | 208    | 13     | 112 -  | 436     |
| EBITDAR margin (%)        | 32.0%  | 32.2%  | 41.2%  | 40.7%  | 30.7%   |
| Debt/EBITDAR (x)          | 4.2    | 3.4    | 3.3    | 3.1    | 4.8     |
| Net Debt/EBITDAR (x)      | 3.8    | 3.1    | 3.2    | 3.0    | 4.6     |
| EBITDAR/Fixed Charge (x)  | 4.3    | 6.3    | 7.1    | 6.9    | 4.2     |
| FFO/Fixed Charge (x)      | 2.9    | 3.5    | 5.3    | 5.7    | 4.9     |
| Free Cash Flow margin (%) | -24.5% | -5.4%  | 0.4%   | 3.5%   | -15.4%  |
|                           |        |        |        |        |         |

Source: Scope based on company's financial reports



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