

*Advancy has established strong expertise in Private Equity over the past 10 years. We have completed over 150 engagements for leading mid-market and large cap private equity funds in Europe, Asia and Australia along all stages of the investment life cycle: strategic due diligence, PMI, portfolio work and vendor due diligence.*

*Our due diligence approach aims at testing thoroughly and objectively the investment thesis whilst uncovering areas of risks and opportunities. We usually combine external and internal interviews with an in-depth analysis of key drivers and modelling of the target's value creation potential. Our skills rely on leveraging senior sector and functional expertise to work effectively with our private equity client and the management of the target company.*

## **Emerging investment potentials in sustainable energy**

As a consequence of the changes triggered by the turnaround in energy policy ("Energiewende"), funding requirements of energy suppliers soared dramatically. Especially small and medium sized energy suppliers have now reached the limit of their funding resources. In addition to developing joint projects with financial investors, stockholdings appear to be a further option. In the course of the resolutions taken within the 21<sup>st</sup> United Nations Climate Change conference on global warming, new investment opportunities in alternative energies are becoming increasingly attractive. Climate protection and energy policies plan a significantly higher share of renewable energy for the future. Investments needs are thereby not limited to the development of renewable energy, but also expand into networks, information technology and flexible conventional power plants. Industry-specific knowledge is as indispensable as bridging the gap between expected returns and long-term orientation in order to establish oneself in this industry.

Within the climate summit held from November 30, 2015 to December 12, 2015, government representatives from 195 countries agreed on a maximal increase in

global warming of 2° (3.6°F) above the pre-industrial temperature. This goal can only be achieved through further renunciation to fossil energy such as coal, oil and gas, as well as through increased investments in renewable energy. These new investment opportunities have already been identified by private equity companies, which have been addressing the sector's needs for some time now. With an invested volume of \$82.5 million in 2014, the energy/environment sector only represents a minor 0.9% fraction of German equity participations<sup>1</sup>. Capital interests of private equity companies remain at a very low level with a total investment volume of \$25 billion<sup>2</sup> in alternative energies for the year 2014.

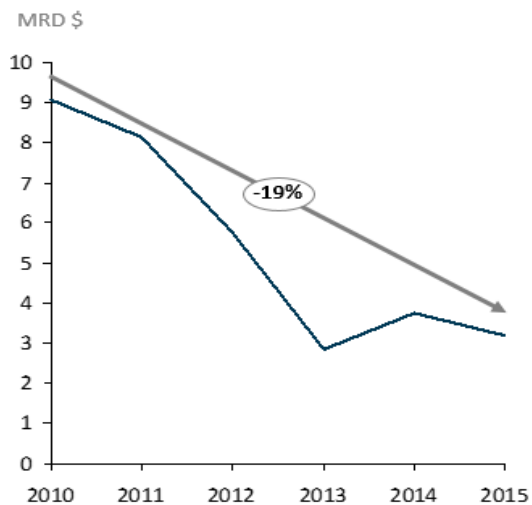
At the same time, there is a noticeable downward trend of new investments in alternative energies, since the 2010 peak. This decrease is attributable to cost reductions resulting from technological progress as well as to a declining number of new installations. The background for this trend was dampened not only by funding issues in the off-shore wind power systems area, but also by a shift on the producer side characterized by a decrease in the number of farmers, who perform very little investments in facilities on their farms. Moreover, the debate about retroactive

<sup>1</sup>Bundesverband Deutscher Kapitalbeteiligungsgesellschaften

<sup>2</sup> bmwi

reduction of EEG (“Erneuerbare-Energien-Gesetz”, German Renewable Energy Act) support funds led to uncertainty as well as in a drop in investment activities. The German government tries to counteract the aforesaid trend development through targeted measures, such as setting energy research as a funding priority goal.

QUARTERLY AVERAGE OF INVESTMENTS IN CLEAN ENERGY IN GERMANY



Source: Bloomberg New Energy Finance








Investment volumes in Germany decrease by 19% quarterly on average since 2010. The first quarter is characterized by the least investments annually, due to the inadequate season for solar energy as well as difficult construction conditions for wind farms along the North and Baltic Sea, which require the highest level of investments among this industry in Germany.

The high capital costs incurred by the construction of on- and offshore wind farms

force energy provider to achieve joint financing. Private equity companies are required to mobilise increasing financial resources in order to acquire ownership stakes in this business. That can be explained by a high risk exposure due to planning, approval stage and construction phases, which promise high yields. Following their construction, these plants, which ensure secure and positive cash flows, are then sold to institutional investors, funds and energy giants.

For instance, the private equity company specialising in the energy industry Blackstone Equity Partners, a subsidiary of the US based investment giant Blackstone Group L.P., and the company Windland Energieerzeugungs GmbH have built the first privately financed 288MW offshore wind farm “Meerwind Süd Ost” off Helgoland. Another example is Global Infrastructure Partners’ takeover of Donk Energy’s 50% equity stake in the 330MW offshore wind farm Gode Wind 1 in the German North Sea. GIP is a globally operating private equity infrastructure fund with a current investment volume of about \$16.1 billion. It mainly invests in the sectors of energy, transport, water and waste. By the turn of the year 2015/2016, the company WKN AG sold the Thuringian wind farm Westerengel to Hamburger Beteiligungsgesellschaft CEE. This is already the second successful cooperation between CEE and the aforesaid project developer. CEE is part of the Lampe Equity Management (LEM) Group, a subsidiary of Bankhaus Lampe. This company specializes in renewable energies and has €1 billion in assets under management.

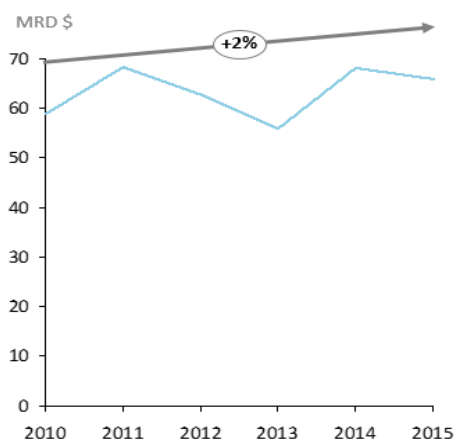
SELECTED ASSET FINANCE TRANSACTIONS OF 2015 | \$ M

Project Name	Country	Sector	Capacity	Value	Quarter
Veja Mate Offshore Wind Farm		Wind	402MW	\$2140.5m	2 <sup>nd</sup>
E.ON Rampion Offshore Wind Farm		Wind	400MW	\$2034.8m	2 <sup>nd</sup>
TenneT DolWin Transmission Facilities Portfolio		Wind	n/a	\$1094.9m	2 <sup>nd</sup>
Huaneng Rudong H12 Baxianjiao Offshore Wind Farm		Wind	300MW	\$869.6m	2 <sup>nd</sup>
Qinghai STEG Power Group Haixi Geermu		Solar	200MW	\$866.4m	3 <sup>rd</sup>
Wutumeiranxiang Boliqi STEG Plant					
Longyuan Haian Jiangjiasha Offshore Wind Farm		Wind	300MW	\$856.7m	3 <sup>rd</sup>
Aries Solar Termoelectrica STEG		Wind	100MW	\$818.4m	2 <sup>nd</sup>

Source: Bloomberg New Energy Finance

Unlike Germany, a global upward investment trend of 2% annually can be observed -

QUARTERLY AVERAGE OF GLOBAL INVESTMENTS IN CLEAN ENERGY



















Source: Bloomberg New Energy Finance

with investments amounting to \$29.4 billion<sup>3</sup> in the third quarter 2015 alone. China significantly accounts to this trend. Expected growth in investment activities arises from the government's five-year plan. Its goal to reach 200 Gigawatt power generated from renewable energy is likely to be achieved by 2020. The Chinese government's financial incentives, regulatory guidelines, tax benefits and feed-in premiums for wind power stations have created an excellent breeding ground for the development of alternative sources of energy.

The USA, however, only registered a slight increase in investments in renewable energy investments. Nevertheless, the largest proportion of VC/PE transactions is still carried out in the US, with the particularity that most of the deals focus on energy research.

<sup>3</sup> Bloomberg New Energy Finance

TOP VC/PE CLEAN ENERGY TRANSACTIONS OF THE SECOND HALF OF 2015 | € M

ORGANIZATION	COUNTRY	SECTOR	TYPE OF TRANSACTION	DEAL VALUE
 NEXTEV		E-Mobilität	VC Early Stage	€500m
 SunEdison		Solar	PE Expansion Capital	€175m
 view   Dynamic Glass		Bauwesen	VC Late Stage	€150m
 Enerkem		Biokraftstoff	PE Expansion Capital	€115.4m
 Silicor MATERIALS		Solar	PE Expansion Capital	€105m
 SUNLIGHT FINANCIAL		Solar	VC Early Stage	€80m
 VIONX ENERGY		Energiespeicherung	PE Expansion Capital	€58m
 PROTERRA		E-Mobilität	PE Expansion Capital	€55m

Source: Bloomberg New Energy Finance

Along with private equity investor Hudson Clean Energy Partners, exclusively operating in the field of renewable energies, Silicor Materials was able to secure \$150 million for the construction of a plant located in Island aimed at producing solar silicon. The required capital has been provided by Icelandic pension funds as well as strategic investors. Government aid opportunities are still being examined with President Olaf Ragnar Grimsson and the Ministry of Industry and Innovation. In Germany, PE investors also increasingly focus on research. For instance, DPE Deutsche Private Equity has taken over the services segment of biogas specialist MT-Energie. As one of the leading manufacturers of biogas plants, MT-Energie has already carried out more than 600 biogas projects. The service team of MT-Energie is in charge of 1,000 biogas plants in Germany, including equipment from other suppliers and numerous biomethane plants. These current examples are representative of the overall market evolution, characterised by an increasing number of PE investors venturing to the energy sector.

Dealing with particularities as well as with very strict laws, regulations and implementation provisions, which differ from one federal province to another, represent hereby a challenge. The harmonisation of mostly short-term exit strategies with long-term focus of suppliers also has to be mastered, for example through project-related equity stakes in production, trade, network, distribution and services. The renewable energies sector's attractiveness is fuelled not least because it is hedged against economic swings by legal regulations. Especially wind and solar energy play a key role within the electricity chain and bear a lower level of demand risk in comparison to nuclear energy, coal and gas.

Investments in alternative sources of energy will rise close to €145 billion by 2020. The European Wind Energy Association even assumes that by 2030, 28%<sup>4</sup> of the European energy supply could be covered by wind energy. Should the current trend remain steady, half of the energy demand might be covered by wind power plants.

Julia Wittemann, Selcuk Vural

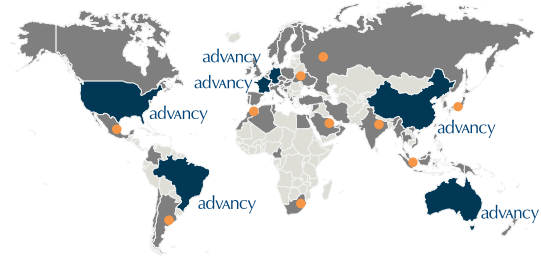
<sup>4</sup> EWEA

**Advancy is a true partner for the top management in various sectors**

**KEY FACTS**

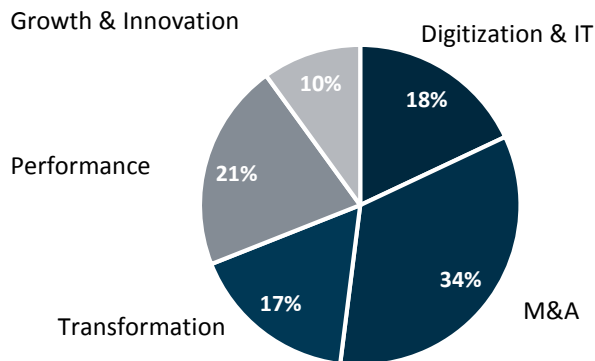
- ▶ A team of more than **150 professionals**
- ▶ Over **1,500 assignments** since 1999
- ▶ **Düsseldorf, Munich, Paris, Chicago, São Paulo, Shanghai, Sydney**
- ▶ An additional network of 10 partners around the world
- ▶ **100% loyalty rate** and one key client per sector
- ▶ **Focused teams:** on average 3 consultants per project

**INTERNATIONAL FOOTPRINT**

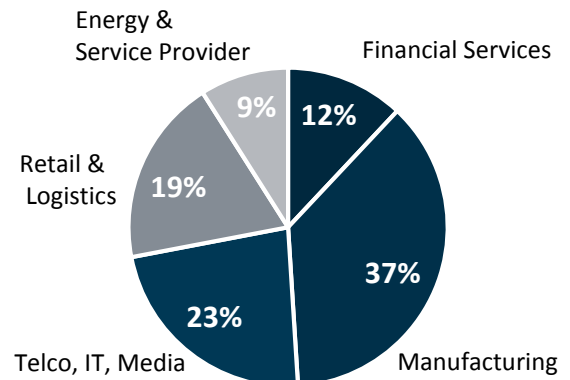


■ Advancy offices    ■ Advancy projects  
● Network of partners

**ENGAGEMENTS**



**INDUSTRY EXPERIENCE**



**Advancy is unique and has established a strong reputation in the private equity field**

**IMPACT**



*After five years, we are still using the methods and procedures we jointly came up with during the project. You really are the reference in management consulting. This project is **our success story of the year**.*

**INNOVATION**



*You encourage us to **think differently** and provided us with all the **intelligence needed to make the investment decision**. **Breakthrough recommendations** driven by thorough analysis.*

**DIFFERENTIATION**



*You're never generic, your solutions are always **100% customized to our company**. I see you as a **special forces unit**: you do what it takes to get the job done.*



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