

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.

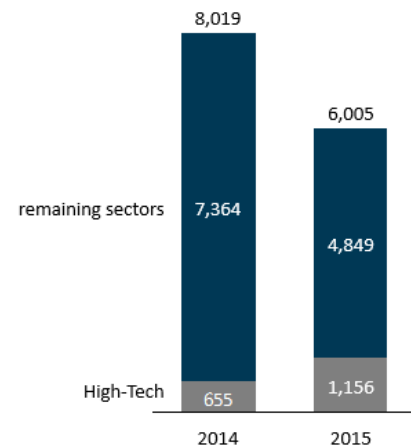
Refreshed high tech appetite

In the wake of Brexit, Europe's private equity scene has gained complexity as investment firms have to expect effects on investing periods by the process of the UK exiting the EU. At the same time, economic growth remains hesitant and banking systems troubled.

In Germany, the deal landscape was dominated by high tech in 2015. The majority of deals took place in the field of IT and the sector attracted fresh capital of \$1,156 billion from private equity investors in 251 buyouts. Quite a few large buy out companies invested in fast growing tech companies recently: KKR invested in Arago, a start-up working on artificial intelligence. PE giants react on the fact that there are far more competitors inclined to buy than ready to open family businesses. In terms of size, PE companies need to scale down from what they are used to in the IT sector: No single deal could surpass the billion barrier in 2015; for the ongoing year several deals with an above billion value can be listed though.

Despite a sharp decrease of private equity investments in Germany due to reduced investments in industrial products and the service market, volume in high-tech has almost doubled in 2015 to 20%¹.

PE INVESTMENTS IN GERMANY BY SECTOR | \$M



Source: Bundesverband deutscher Kapitalbeteiligungsgesellschaften

As high tech companies often demand high upfront investment private equity is a suitable form of financing in the sector. Thus, private equity backed companies have shown to grow faster than other types of companies in the sector also due to know how input from experienced private equity executives. Vice versa, the output for PE firms is considerable in terms of value enhancement. The transaction cycle of Multiplan Corporation illustrates the profitability potential of high tech firms. In 2014 Ardian, Partners Group and Starr Investment Holdings invested a buy out volume of \$4.4 billion and realized an exit in 2016 with a deal value of \$7.5 billion. This is a return of approximately 70%. For 2016 the majority of

¹ Bundesverband deutscher Kapitalbeteiligungsgesellschaften

private equity corporations foresees a market recovery, this is particularly true for German corporations expecting a stable or even slightly growing volume. Buyout shops as well have











become comfortable with some corners of the tech sector that they see as relatively stable, such as corporate-software providers.

Sub-sectors with the most promising outlook

Software is the predominant contributor in terms of volume, a trend that is expected to continue. IT Services is close with five large deals greater than \$1 billion and is expected to continue its bull run. Leidos bought the IT

Services arm of Lockheed for \$5.0 billion. The Hardware and Semiconductor sectors could realize some mid-cap deals while Internet deals were rare.

TOP HIGH-TECH PE DEALS FIRST HALF 2016 | GLOBAL VS. GERMANY

COMPANY	COUNTRY	SECTOR	TYPE OF TRANSACTION	DEAL VALUE
<i>ADT Security Services, Inc.</i>		Electronics	Merger	\$15bn
<i>MultiPlan, Inc.</i>		Healthcare IT	Buyout	\$7500m
<i>Qlik Technologies Inc.</i>		Software	Public to Private	\$3000m
<i>NXP Semiconductors</i>		Semiconductors	Buyout	\$2750m
<i>Vertafore, Inc.</i>		Software	Buyout	\$2700m
<i>Opera Software</i>		Software	Public to Private	\$1230m
<i>Airbus Group (defense electronics business)</i>		Electronics	Buyout	\$1225m
<i>Netsmart Technologies, Inc.</i>		Healthcare IT	Merger	\$950m
<i>d&b audiotechnik GmbH</i>		Electronics	Merger	\$312m
<i>Inexio KGaA</i>		IT Services	Buyout	\$279m

Source: Preqin, Mergermarket

In February 2016, US private equity firm Apollo acquired ADT Security Services to merge it with its existing portfolio company Protection 1 in a deal valued at \$15bn. Apollo has taken several companies private this year; the ADT deal might remain the year's largest leveraged buyout. Although high-tech PE investments in Germany lag behind US investments they're not negligible. Private equity firm KKR has agreed to buy the Ulm based defense











electronics business of the Airbus Group for \$1.2 billion. Europe's largest aerospace group is selling businesses to focus its defense division on warplanes, missiles, launchers and satellites due the low defense spending in Europe. The defense electronics division includes around 4,000 employees worldwide, with annual revenues of around \$1.1 billion. The business comprises military sensors, electronic warfare, avionics and optonics.

PE spurs cleantech – especially in Germany

Investors participated in the rapid growth of several German cleantech companies achieving attractive above average returns. Other than in US and throughout Europe, specialized cleantech funds are rare in Germany. Yet a lot of private equity funds have adapted experience in tech financing, IT or life science and transferred it to greentech sector specifics – regarding technology know how, financing particularities, investment duration and industry network. This explains the sustainable attraction of German companies for local and foreign PE investors. The German greentech scene does not only have emerging companies to offer, the SME sector is highly innovative in the field and marked by lower risk and average growth potentials. Intense investment experience and broad network in greentech established German PE firms as gatekeepers and popular cooperation partners for international investors. Early financing rounds are often done by German PE firms due to direct contacts into the sector and the capability to generate attractive investment

opportunities and develop emerging enterprises. International PE firms participate in the follow-up financing as soon as further development requires higher capital. Examples for impressive growth history are Schmack Biogas, Conergy und Ersol Solar achieving double-digit multiples for their equity partners. Greentech has become a key technology for private equity firms along with software and biotech and its growth potential hasn't been exhausted yet. Green energy technology has become a key industry due to decreasing resources; increasing environmental standards and market deregulation. Germany is the leading-edge country in environmental technology; 16% of the global trade with environment protective goods is done by German companies. Private equity investments in greentech show quite a long history and internationally known companies in the sector as Q-Cells had been financed with German equity capital in the turn of the millennium.

TOP VC/PE CLEAN ENERGY TRANSACTIONS Q2 2016 | GLOBAL

ORGANIZATION	COUNTRY	SECTOR	TYPE OF TRANSACTION	DEAL VALUE
		Wind	PE Expansion Capital	\$230m
		Solar	VC Late Stage	\$175m
		Electrified Transport	VC Early Stage	\$120m
		Solar	PE Expansion Capital	\$100m
		Solar	PE Expansion Capital	\$75m

Source: Bloomberg New Energy Finance

The largest deals in the cleantech sector from 2014 to date were conducted by portfolio companies based in Asia, e.g. Singapore's sovereign wealth fund GICs' and Abu Dhabi's investment arms' investment in Greenko Energy Holdings – the leading owner and operator of renewable energy assets in India, operating a diversified portfolio of more than 1,000 MW of wind and small hydro assets. GIC,

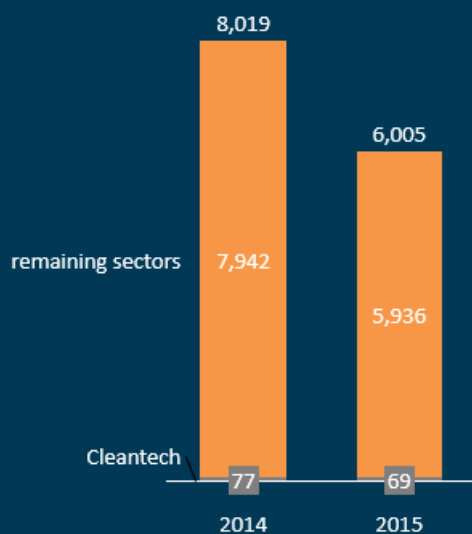
already owning the majority of the firm's stock, is contributing an additional \$80 million to Greenko Energy Holdings while the Abu Dhabi Investment Authority is injecting the remaining \$150 million. With the development of new renewable energy projects, including low-risk expansions of existing wind farms, the funds will contribute to the continued growth of Greenko's platform. The largest deal outside

Asia was US residential PV system installer Sunnova Energy Corp. securing a \$175 million financing round from Goldman Sachs. The company said it will use the funds for its expansion plans in the US residential PV sector.

Sunnova has raised approximately \$1.5 billion in funds over the past three years. Nevertheless the largest clean tech investment could eventually not make it in the top high tech investments of the year.

PE IN CLEANTECH

PE INVESTMENTS IN GERMANY BY SECTOR | \$M



The cleantech venture capital market has recovered after several years of decline that have made it difficult for start-ups to access finance necessary to go to market. Venture capitalists shifted their attention from early-stage companies towards more established firms planning their expansion. Despite the decline of almost \$2 billion in PE investments in Germany greentech could nearly hold its position. Among cleantech companies with the largest valuations is Novinda with a valuation of \$65,9M. The US-based company has developed a silicates platform helping power generation companies remove mercury from combustion gases, helping reduce the environmental impacts of coal-burning power plants and boilers. One of the biggest cleantech deals in 2015 was the \$76M late stage VC in green biologics, a renewable chemicals company that developed a fermentation platform converting sustainable feedstock into green chemicals such as acetone.

Major challenges and key success factors

Aside from critical success factors as a fair entry price, motivation in management team, proper deal structure and proactive monitoring the exit strategy is crucial. Time horizons in tech are heterogeneous and product life cycles of innovative software applications are hard to predict. Deep market expertise is also one of the criteria that is essential but not easy to master when investing in leading edge

technology solutions. Internet tech companies are along with E-commerce, medical services and logistics among the undeveloped sectors promising high growth potentials due to the investment rationale of an underdeveloped service infrastructure, still high internet growth rates and limited modern private medical services.

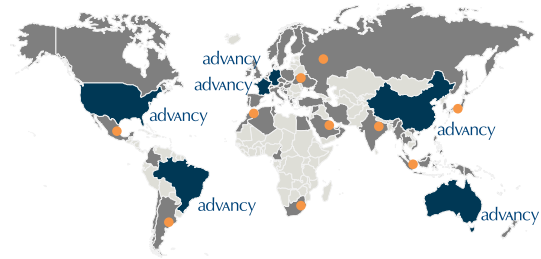
Julia Wittemann, Selcuk Vural

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

KEY FACTS

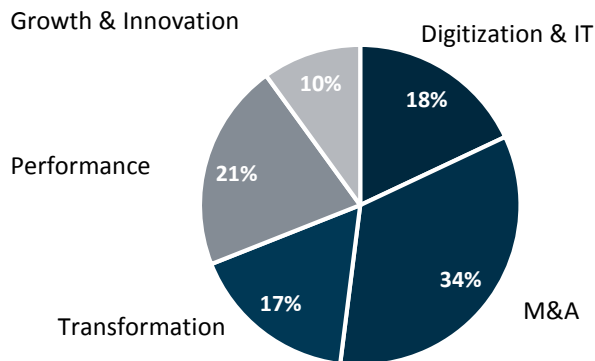
- ▶ A team of more than **150 professionals**
- ▶ Over **1,500 assignments** since 1999
- ▶ **Düsseldorf, Munich, Paris, Chicago, São Paulo, Shanghai, Sydney**
- ▶ An additional network of 10 partners around the world
- ▶ **100% loyalty rate** and one key client per sector
- ▶ **Focused teams:** on average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

INTERNATIONAL FOOTPRINT

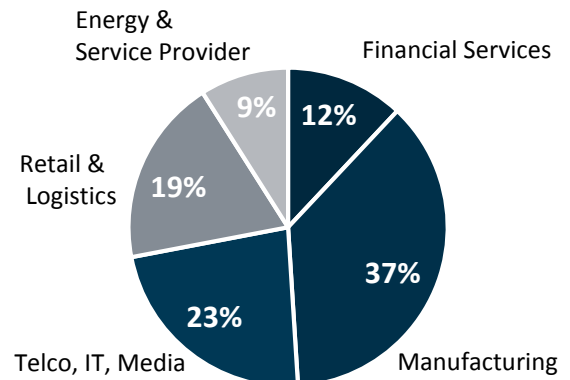


■ Advancy offices ■ Advancy projects
● Network of partners

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.*



Julia Wittemann
Consultant
Advancy GmbH
Königsallee 33
D-40212 Düsseldorf
Tel: +49 (0) 211 86 93 69 80
Mobil: +49 (0) 151 150 052 31
www.advancy.de

Burkhard Wagner
Geschäftsführer, Senior Partner
Advancy GmbH
Königsallee 33
D-40212 Düsseldorf
Tel: +49 (0) 211 86 93 69 80
Mobil: +49 (0) 174 208 309 5
www.advancy.de

Paris – Chicago – **Düsseldorf** – **Munich** – São Paulo – Shanghai – Sydney