### ABO Wind (AB9 GY) | Utilities

We apply our new valuation approach for developers

The large utilities, but also oil companies like BP, are pushing into the business with renewables. The willingness to invest is enormous. The demand for electricity generated with renewables is also huge. So capital seems to be less of a bottleneck. Rather, it is time. And competence. The time and competence it takes to develop renewable projects. The development of large-scale projects can last 7 years or more. Against this background, we continue to see value in ABO Wind, and all the more so. ABO Wind is a developer pure play, has been in business for 24 years and is active in 16 countries. ABO Wind does not operate own Renewables Parks, the advantage is a low capital commitment. The company recognized early on that it can only compensate for the volatility of the project business through project diversification. ABO Wind has succeeded in this very well; the company has been able to report consistent profits since its inception. And has been able to build up a lush pipeline of now over 12 GW. To account for the acceleration on the demand side but also to reflect the enormous value already created by the development of the project pipeline, we adapt our valuation method. We now calculate a mean value from a profit (multiple) valuation and a pipeline approach.

Taking the pipeline value into account can have a significant impact on the company value. We use a transaction multiplier. However, pipelines are only comparable to a limited extent. Therefore we deliberately weight the pipeline approach low. Nevertheless, our price target increases noticeably

Fundamentals (in EUR m)	лу. 2017	2018	2019	2020e	2021e	2022e
Sales	147	150	126	161	192	202
EBITDA	38	32	27	32	45	45
EBIT	25	22	19	20	33	32
EPS adj. (EUR)	2.22	1.67	1.41	1.60	2.65	2.64
DPS (EUR)	0.40	0.42	0.40	0.40	0.50	0.55
BVPS (EUR)	10.40	11.63	12.83	14.03	16.28	18.17
Net Debt incl. Provisions	1	48	69	65	54	50
Ratios	2017	2018	2019	2020e	2021e	2022e
EV/EBITDA	2.5	4.8	7.6	8.1	5.7	5.5
EV/EBIT	3.7	7.0	10.7	12.9	7.8	7.8
P/E adj.	5.4	8.3	12.2	15.4	9.3	9.3
Dividend yield (%)	3.3	3.0	2.3	1.6	2.0	2.2
EBITDA margin (%)	25.7	21.4	21.7	20.1	23.2	22.2
EBIT margin (%)	17.0	14.6	15.4	12.7	16.9	15.8
Net debt/EBITDA	0.0	1.5	2.5	2.0	1.2	1.1
ROE (%)	23.2	15.1	11.9	11.9	17.5	15.3
PBV	1.1	1.2	1.3	1.8	1.5	1.4

Sources: Refinitiv, Metzler Research

September 21, 2020

Capital Markets

#### Buy unchanged EUR 24.60 EUR 40.00 (29) Price target

\* XETRA trading price at the close of the previous day unless stated otherwise in the Disclosures

Market Cap (EUR m)	199
Enterprise Value (EUR m)	264
Free Float (%)	25.0

Price (in EUR)

Price\*



#### Sources: Refinitiv, Metzler Research

Changes in estimates (in %)	2020e	2021e	2022e
Sales	0.0	0.0	0.0
EBIT	0.0	0.0	0.0
EPS	0.0	0.0	0.0

#### Sponsored Research



Author: Guido Hoymann

**Financial Analyst Equities** 

+49 - 69 21 04 - 3 98 GHoymann@metzler.com

#### Investment case

Project developers play a key role in implementing the energy transition from conventional power generation to renewables. The planning and construction of projects require a very high degree of expertise, the lead time of the projects from around three to around seven years a high degree of entrepreneurial competence and foresight. The project developer ABO Wind, founded in 1996 and now active in 16 countries, has its roots in wind power, but in recent years has also expanded its wind farm management activities through services such as maintenance and expert reports (since 2014) and the construction of solar parks (since 2016). With a project pipeline of over 12 GW, ABO Wind is one of the largest developers in Europe.

METZLER

Capital Markets

Unlike practically all its large competitors, ABO Wind does not operate own wind or solar farms. The disadvantage of this strategy is a lower calculability of earnings and a higher (theoretical) earnings volatility. The advantage is the focus as well as a relatively low capital commitment.

Since its foundation ABO Wind has reported profits. The stabilization of the annual results, a big challenge in the project or developer industry with projects whose execution extends over many years, is achieved by ABO Wind through a good regional diversification and also through diversification into services and solar technology.

### Robust profit development with positive trend in EURm

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020e	2021e	2022e
EBITDA	4	5	14	22	12	20	20	34	38	32	28	32	45	45
Sources: ABO Wind, Metzler Research														

As one of the most experienced and largest developers in Europe, we consider ABO Wind to be very well positioned to participate in the expected growth opportunities offered by the renewable energy business.

We see the following structural growth drivers for renewables for the coming years:

- Grid parity: In regions with above-average wind or sunshine, such as Finland, Spain, Argentina, Ireland or the UK, ABO Wind can already conclude electricity supply contracts without subsidies. For the important (continental) European market, we expect grid parity around 2020/21. Rising CO2 prices as part of Phase 4 of the European Emissions Trading Scheme (ETS) play a relevant role here.
- Phase-out of conventional generation: Countries such as Germany are pushing ahead with the phase-out of conventional power generation, particularly against the background of increasingly strict CO2 regulations. At the same time, the trend towards electrification (e.g. e-mobility) is likely to lead to rising demand for electricity. The loss of conventional generation capacity must be offset by the addition of renewables to a significant extent. In Germany, for ex-

ample, around 100 GW of renewable capacity will be needed by 2038 to replace coal and nuclear power, i.e. an average of around 5 GW per year. Here we do not take into account the need for replacement of old plants.

Capital Markets

Against the background of a foreseeable shortage of conventional electricity and competitive prices for 'green' electricity, we see very good growth opportunities for ABO Wind in the coming years. A wealth of experience and a good geographic positioning should enable the company to turn these opportunities into attractive sales and profit growth.

#### Valuation

To account for the acceleration on the demand side but also to reflect the enormous value already created by the development of the project pipeline, we adapt our valuation method. We calculate a (weighted) mean value of profit valuation and substance (pipeline) valuation.

Since the comparability of pipelines is naturally very limited, we weight the pipeline approach only with one tenth. And the profit-multiplier valuation with nine tenths. It goes without saying that the values of individual projects differ to a great extent, be it due to different site-related wind or solar yields, the cost of development or the development stage of the respective project.

We can adjust the weighting factor in the course of time and with further concretization of the projects. We also include a sensitivity analysis in this note.

For the pipeline evaluation we refer to the pipeline sale from Nordex (Metzler recommendation: BUY/ pt. EUR 15.60) to RWE (Metzler recommendation: BUY/ pt. EUR 45) in early August. RWE pays EUR 402 million for Nordex's 2.7 GW development pipeline or c. EUR 150m per (pipeline) GW. Of the 2.7 GW, 1.9 GW is attributable to France (1.8 GW onshore wind, 0.1 GW solar), 0.4 GW to Spain and 0.4 GW to Sweden. About 0.5 GW of the pipeline should be ready for commissioning by 2025, the rest later. Tariffs have been secured for around 0.23 GW.

We apply the transaction multiple only to the European part of the ABO Wind pipeline (around 7 GW) and derive a theoretical value of around EUR 1 billion.

....

ABO Wind - a well filled pipeline (June 2020)								
		Phase II						
	Phase I	(Approval achieved,	Phase III					
	(Areas secured,	building maturity in	(In					
Country	approval in progress)	progress)	implementation)					
Germany	1060	30	50					
France	1200	50	50					
Finland	1900	160						
Ireland	180	45						
Spain	800	600						
Greece	700		38					
Poland		40						
Hungary								
UK	200	20						
Argentine	800	800						
Columbia	400							
Canada	500							
Southafrica	1400	600						
Tansania	300							
Tunesia	80	50						
Total	9520	2395	138					
TOTAL		12053						
Source: ABO Wind, Metzler Research								

The value of the non-European projects (per MW) is presumably lower due to higher execution risks and the larger project sizes (the developer value added does not correlate with the project size). We do not take into account the value of the non-European pipeline at this point.

Based on conventional earnings multiples we derive a fair value of EUR 32 per ABO Wind share. ABO Wind is trading at 5.4x EV/EBITDA 2021e; its developerpeers at 7x on average.

ABO Wind - p	eer group valuation	Share price in local currency (18. September	Metzler Recom-	EV/EBITDA
	Bloomberg Ric	2020)	mendation	20210
Instone	INS GY	22		7.0
Nordex	NDX GY	12	BUY/pt. EUR 15.6	6.9
Average				7.0
ABO Wind	AB9 GY	24.6	BUY/pt. EUR 40	5.4
Sources: Bloom	berg, Metzler Research			

If we also take the value of the pipeline into account in our valuation, we calculate a fair value of EUR 40 for the ABO Wind share.

Capital Markets

We now also consider the value of the pipeline in our valuation								
	Fair value per sha	re						
	(EUR)	Weighting (%)						
Peer group valuation (EV/EBITDA 2021e)	32	90						
Transaction Multiple (RWE/Nordex)	116	10						
Fair value (weighted average)	40							
Sources: Bloomberg, Metzler Research								

In the following table we show the sensitivity of the fair value of the share depending on the weighting of the pipeline approach.

#### Sensitivity Analysis

Weighting factor (%) Fair value (EUR per share) Source: Metzler Research

The fair value depending on the weight given to the pipeline approach

## Key Data

#### Company profile

CEO: Andreas Höllinger, Dr. Jochen Ahn, Matthias Bockholt, Dr. Karsten Schlageter (all equal rights) CFO: Wiesbaden The renewables project developer ABO Wind, founded in 1996 and now active in 16 countries, has its roots in wind power, but in recent years has also expanded its wind farm management activities through services such as maintenance and expert reports (since 2014) and the construction of solar parks (since 2016).

#### Major shareholders

Family Ahn (30%), Family Bockholt (30%), Mainova AG (10%), Baden-Württembergische Versorgungskasse der Ärzte (5%)

#### Key figures

Key figures												
P&L (in EUR m)	2017	%	2018	%	2019	%	2020e	%	2021e	%	2022e	%
Sales	147	20.0	150	2.4	126	-16.0	161	27.8	192	18.9	202	5.4
EBITDA	38	9.6	32	-14.8	27	-14.9	32	18.5	45	37.1	45	1.0
EBITDA margin (%)	25.7	-8.7	21.4	-16.7	21.7	1.3	20.1	-7.3	23.2	15.3	22.2	-4.2
EBIT	25	4.5	22	-12.0	19	-11.6	20	5.4	33	58.9	32	-1.7
EBIT margin (%)	17.0	-12.9	14.6	-14.0	15.4	5.1	12.7	-17.5	16.9	33.7	15.8	-6.7
Financial result	-1	1.6	-1	38.7	-2	-71.3	-2	-27.3	-2	0.0	-2	25.0
EBT	23	4.9	21	-10.3	18	-15.3	18	3.5	31	65.3	30	-0.1
Taxes	6	9.4	9	32.3	7	-21.9	6	-17.0	9	65.3	9	-0.1
Tax rate (%)	27.5	n.a.	40.6	n.a.	37.4	n.a.	30.0	n.a.	30.0	n.a.	30.0	n.a.
Net income	17	3.3	13	-24.9	11	-10.7	13	13.3	21	65.3	21	-0.1
Minority interests	0	-55.0	0	88.9	0	-97.6	0	-100.0	0	n.a.	0	n.a.
Net Income after minorities	17	3.4	13	-25.0	11	-10.6	13	13.3	21	65.3	21	-0.1
Number of shares outstanding (m)	8	0.0	8	0.0	8	5.6	8	0.0	8	0.0	8	0.0
EPS adj. (EUR)	2.22	3.4	1.67	-25.0	1.41	-15.3	1.60	13.3	2.65	65.3	2.64	-0.1
DPS (EUR)	0.40	-20.0	0.42	5.0	0.40	-4.8	0.40	0.0	0.50	25.0	0.55	10.0
Dividend yield (%)	3.3	n.a.	3.0	n.a.	2.3	n.a.	1.6	n.a.	2.0	n.a.	2.2	n.a.
Cash Flow (in EUR m)	2017	%	2018	%	2019	%	2020e	%	2021e	%	2022e	%
Gross Cash Flow	30	10.9	22	-25.4	19	-13.5	25	30.5	33	33.9	34	2.9
Increase in working capital	3	n.a.	-39	n.a.	-15	n.a.	-15	n.a.	-15	n.a.	-20	n.a.
Capital expenditures	1	-47.2	3	149.2	3	-7.4	3	0.0	4	33.3	4	0.0
D+A/Capex (%)	982.8	n.a.	314.8	n.a.	266.0	n.a.	400.0	n.a.	300.0	n.a.	325.0	n.a.
Free cash flow (Metzler definition)	25	889.5	-20	-179.2	1	105.4	7	530.7	14	107.5	10	-28.0
Free cash flow yield (%)	27.9	n.a.	-19.1	n.a.	0.8	n.a.	3.5	n.a.	7.2	n.a.	5.2	n.a.
Dividend paid	4	100.0	3	-20.0	3	10.8	3	-4.8	3	0.0	6	87.5
Free cash flow (post dividend)	22	521.4	-23	-207.4	-2	90.1	4	261.0	11	201.5	4	-61.6
Balance sheet (in EUR m)	2017	%	2018	%	2019	%	2020ө	%	2021e	%	2022ө	%
Assets	174	18.7	194	11.6	243	25.0	205	-15.4	229	11.4	245	7.1
Goodwill	0	n.a.	0	n.a.	0	n.a.	0	n.a.	0	n.a.	0	n.a.
Shareholders' equity	80	18.7	89	11.8	104	16.4	113	9.4	131	16.0	147	11.6
Equity/total assets (%)	45.7	n.a.	45.9	n.a.	43.2	n.a.	53.6	n.a.	56.0	n.a.	58.2	n.a.
Net Debt incl. Provisions	1	-95.3	48	n.m.	69	42.5	65	-5.3	54	-17.0	50	-7.9
thereof pension provisions	0	n.a.	0	n.a.	0	n.a.	0	n.a.	0	n.a.	0	n.a.
Gearing (%)	1.5	n.a.	54.4	n.a.	66.6	n.a.	57.7	n.a.	41.2	n.a.	34.0	n.a.
Net debt/EBITDA	0.0	n.a.	1.5	n.a.	2.5	n.a.	2.0	n.a.	1.2	n.a.	1.1	n.a.

#### Structure

#### Sales by area of activity 2019

Planning services and rights sales	47%
Construction of projects	479%
Services 6%	

Sources: Refinitiv, Metzler Research

METZLER

### Disclosures

#### **Recommendation history**

Recommendations for each financial instrument or issuer - mentioned in this document - published by Metzler in the past twelve months

**METZLER** 

Date of dissemi- nation	Metzler re Previous	ecommendation * Current	Current price **	Price target *	Author ***
Issuer/Financial I		(ISIN): ABO Wind (DE	0005760029)		
07.09.2020	Buy	Buy	26.80 EUR	29.00 EUR	Hoymann, Guido
19.08.2020	Buy	Buy	21.20 EUR	29.00 EUR	Hoymann, Guido
10.06.2020	Buy	Buy	21.40 EUR	29.00 EUR	Hoymann, Guido
24.04.2020	Buy	Buy	16.90 EUR	29.00 EUR	Hoymann, Guido
17.03.2020	Buy	Buy	13.80 EUR	29.00 EUR	Hoymann, Guido
21.02.2020	Buy	Buy	20.40 EUR	29.00 EUR	Hoymann, Guido
01.10.2019	Buy	Buy	15.20 EUR	23.70 EUR	Hoymann, Guido
Issuer/Financial I	Instrument	(ISIN): Nordex (DE000	)A0D6554)		
07.09.2020	Buy	Buy	10.99 EUR	15.60 EUR	Hoymann, Guido
14.08.2020	Buy	Buy	10.53 EUR	15.60 EUR	Hoymann, Guido
03.08.2020	Buy	Buy	8.78 EUR	15.60 EUR	Hoymann, Guido
06.05.2020	Buy	Buy	7.69 EUR	15.10 EUR	Hoymann, Guido
24.03.2020	Buy	Buy	5.66 EUR	16.30 EUR	Hoymann, Guido
26.02.2020	Buy	Buy	11.23 EUR	16.30 EUR	Hoymann, Guido
09.01.2020	Buy	Buy	11.60 EUR	16.30 EUR	Hoymann, Guido
13.11.2019	Buy	Buy	12.53 EUR	15.90 EUR	Hoymann, Guido
15.10.2019	Buy	Buy	11.09 EUR	15.90 EUR	Hoymann, Guido
Issuer/Financial I	Instrument	(ISIN): RWE (DE00070	037129)		
07.09.2020	Buy	Buy	31.29 EUR	45.00 EUR	Hoymann, Guido
26.08.2020	Buy	Buy	33.18 EUR	45.00 EUR	Hoymann, Guido
19.08.2020	Buy	Buy	34.24 EUR	42.30 EUR	Hoymann, Guido
13.08.2020	Buy	Buy	33.65 EUR	42.30 EUR	Hoymann, Guido
27.07.2020	Buy	Buy	32.79 EUR	42.30 EUR	Hoymann, Guido
14.05.2020	Buy	Buy	27.10 EUR	42.30 EUR	Hoymann, Guido
23.04.2020	Buy	Buy	24.39 EUR	42.30 EUR	Hoymann, Guido
31.03.2020	Buy	Buy	23.09 EUR	42.00 EUR	Hoymann, Guido
13.03.2020	Buy	Buy	22.95 EUR	42.00 EUR	Hoymann, Guido
28.02.2020	Buy	Buy	32.55 EUR	42.00 EUR	Hoymann, Guido
17.01.2020	Buy	Buy	30.04 EUR	42.00 EUR	Hoymann, Guido
10.01.2020	Buy	Buy	27.50 EUR	34.70 EUR	Hoymann, Guido
14.11.2019	Buy	Buy	26.44 EUR	34.70 EUR	Hoymann, Guido

× Effective until the price target and/or investment recommendation is updated (FI/FX recommendations are valid solely at the time of publication)

Capital Markets

- \*\* XETRA trading price at the close of the previous day unless stated otherwise herein
- \*\*\* All authors are financial analysts

#### ABO Wind

17. Metzler and/or a company affiliated with Metzler had reached an agreement on the compilation of the investment analysis with the analysed company. Prior to publication of the financial analysis, the provider gives the issuer a one-off opportunity to comment (comparison of facts in accordance with the DVFA Code) within the regulatory framework to avoid quality defects.

Compiled: September 21, 2020 07:57 AM CEST Initial release: September 21, 2020 07:57 AM CEST

## Disclaimer

This document has been prepared by B. Metzler seel. Sohn & Co. KGaA (Metzler) and is addressed exclusively to eligible counterparties and professional clients. It is thus not suitable for retail clients.

This document is based on information which is generally available and which Metzler believes to be fundamentally reliable. Metzler has not verified the accuracy or completeness of the information, however, and thus provides no warranty or representation in respect of the accuracy or completeness of the information, opinions, estimates, recommendations and forecasts contained in this document. Neither Metzler nor any of its shareholders or employees are liable for damage or any other disadvantage suffered due to inaccurate or incomplete information, opinions, estimates, recommendations or forecasts as a result of the distribution or use of or in connection to this document.

This document does not constitute or form part of any offer to buy or solicitation of any offer to buy securities, other financial instruments or other investment instruments. Neither does it take account of the particular investment objectives, financial situation or needs of individual recipients nor does it constitute personal investment advice. Metzler does not act as investment advisor or portfolio manager in preparing and publishing this document. Recipients must make their own investment decisions in accordance with their specific financial situation and investment objectives, based on independent processes and analyses, taking sales or other prospectuses, information memoranda and other investor information into account, and consult with an independent financial advisor where necessary. Recipients should note that any information regarding past performance should not be relied upon as an indication of future performance and should therefore not form the basis of any decision whether or not to invest in any financial instruments.

The information, opinions, estimates, recommendations and forecasts contained in this document reflect the personal views of the author at the time of publication on the financial instruments or issuers that form the subject of this document and do not necessarily reflect the opinions of Metzler, the issuer or third parties. They may also be subject to change on account of future events and developments. Metzler has no obligation to amend, supplement or update this document or to otherwise notify recipients in the event that any information, opinions, estimates, recommendations or forecasts stated herein should change or subsequently become inaccurate, incomplete or misleading. The model calculations contained in this document, if any, are examples showing the possible performance and are based on various assumptions (e.g. regarding earnings and volatility). The actual performance may be higher or lower, depending on market trends and on the correctness of assumptions underlying the model calculations. Accordingly, actual performance cannot be guaranteed, warranted or assured.

Recipients should assume that (a) Metzler is entitled to acquire orders for investment banking, securities or other services from or with companies which form the subject of research publications and that (b) analysts who were involved in preparing research publications may, within the scope of regulatory laws, be indirectly involved in the acquisition of such orders.

Metzler and its employees may hold positions in securities of the companies analysed or in other investment objects or may conduct transactions with such securities or investment objects.

This document is provided for information purposes only and may not be copied, duplicated, forwarded to third parties or otherwise published, in whole or in part, without Metzler's written consent. Metzler reserves all copyrights and rights of use, including those relating to electronic media. Insofar as Metzler provides hyperlinks to websites of the companies cited in research publications, this does not mean that Metzler confirms, recommends or warrants any data contained on the linked sites or data which can be accessed from such sites. Metzler accepts no liability for links or data, nor for any consequences which may arise as a result of following the links and/or using the data.

This document is subject to the laws of the Federal Republic of Germany. Venue of jurisdiction for any disputes shall be Frankfurt am Main, Germany.

By accepting this document the recipient declares his/her agreement with the above provisions.

### Information in accordance with Regulation (EU) No. 596/2014, Delegated Regulation (EU) No. 2016/958 and section 85 (1) of the German Securities Trading Act (Wertpapier-handelsgesetz)

#### Persons responsible for this document

The company responsible for preparing this document is B. Metzler seel. Sohn & Co. KGaA, Untermainanlage 1, 60329 Frankfurt am Main, Germany, which is subject to supervision by the German Federal Financial Supervisory Authority (*Bundesanstalt für Finanzdienstleistungsaufsicht*; BaFin), Marie-Curie-Straße 24–28, 60439 Frankfurt/Main, Germany, and by the European Central Bank (ECB), Sonnemannstraße 20, 60314 Frankfurt/Main, Germany.

#### Key information sources

The sources of information referred to when preparing research publications include publications by national and international media, the European Central Bank and other public authorities, information services (such as Reuters and Bloomberg), the financial press, published statistics, information published by rating agencies, annual reports and other information provided by the issuers.

#### Valuation criteria and methods

Valuations are based on standard and acknowledged methods of fundamental and technical analysis (e.g. DCF model, peer-group analysis, sum-of-the-parts model, relativevalue analysis). The valuation models are affected by macro-economic values such as interest rates, exchange rates, commodities prices and economic performance, as well as by market sentiments. Detailed information on the valuation principles and methods used by Metzler and the assumptions on which they are based is available at: www.metzler.com/disclaimer-capital-markets-en.

#### Sensitivity of valuation parameters; risks

The figures on which the company valuations are based are date-specific estimates and thus carry inherent risks. They may be adjusted at any time without prior notice.

METZLER Capital Markets

Irrespective of the valuation principles and methods used and the assumptions on which they are based, there is always a risk that a particular price target is not achieved or that the assumptions and forecasts prove inaccurate. This can, for instance, be the result of unexpected changes in demand, management, technology, economic or political developments, interest rates, costs, the competitive situation, the legal situation and other factors. Investments in foreign markets and instruments are subject to additional risks, as a result of changes in exchange rates or in the economic, political or social situation, for instance. This outline of risks makes no claim to be exhaustive.

#### Definition of categories for investment recommendations

The categories for investment recommendations in research publications by Metzler have the following meanings:

#### Shares:

BUY	The price of the analysed financial instrument is expected to rise in the next 12 months.
HOLD	The price of the analysed financial instrument is expected to largely remain stable in the next 12 months.
SELL	The price of the analysed financial instrument is expected to fall in the next 12 months.
Bonds:	
BUY	The analysed financial instrument is expected to perform better than similar financial instruments.
HOLD	The analysed financial instrument is not expected to perform significantly better or worse than similar financial instruments.
SELL	The analysed financial instrument is expected to perform worse than similar financial instruments.

#### Summary of investment recommendations

A list of all investment recommendations for each financial instrument or issuer published by Metzler in the past twelve months can be found at www.metzler.com/disclaimercapital-markets-en.

The quarterly quotation of the number of all investment recommendations given as "buy", "hold", "sell" or similar for the past 12 months as a proportion of the total number of investment recommendations made by Metzler and the quotation of the proportion of these categories relating to issuers to whom Metzler has provided services within the meaning of Annex I sections A and B of Regulation 2014/65/EU within the past 12 months can be accessed and downloaded at www.metzler.com/disclaimer-capital-marketsen

#### Planned updates of this document

This document reflects the opinion of the respective author at the time of its preparation. Any changes of factors can cause information, opinions, estimates, recommendations and forecasts contained in this document to cease to be accurate. No decision has as yet been taken as to whether, and if so when, this document will be updated. If an investment recommendation is updated, the updated investment recommendation replaces the previous investment recommendation upon publication.

#### Compliance arrangements; conflicts of interest

All analysts are bound by Metzler's internal compliance regulations which ensure that the research publications are prepared in accordance with statutory and regulatory provisions. The analysts are classified as working in a confidential sector and are thus required to observe the resulting statutory and regulatory provisions. This is monitored on a regular basis by the Compliance department and external auditors. The Compliance department ensures that potential conflicts of interest do not affect the original result of the analysis. Metzler has a binding Conflicts of Interest Policy in place which ensures that relevant conflicts of interest within Metzler, the Metzler Group, the analysts and staff of Metzler's Capital Markets division and persons associated with them are avoided or, if they cannot be avoided, are appropriately identified, managed, disclosed and monitored. A detailed description of Metzler's policy for avoiding conflicts of interest is available at www.metzler.com/disclaimer-capital-markets-en.

Details of the conflicts of interests to be disclosed under regulatory requirements are published at www.metzler.com/disclosures-en.

#### **Remuneration**

The remuneration of the Metzler staff members and other persons involved in preparing this document is in no way, either in whole or in any variable part, directly or materially linked to transactions in securities services or other transactions processed by Metzler.

#### Prices

All prices for financial instruments stated in this document are, unless otherwise stated, closing prices for the trading day preceding the respective stated publication date on the market which we regard as the most liquid market for the respective financial instrument.

#### Scope of application

This document was prepared in the Federal Republic of Germany in line with the legal provisions valid there. It may therefore be possible that this document does not comply with all provisions relating to the preparation of such documents in other countries.

Metzler Capital Markets B. Metzler seel. Sohn & Co. Kommanditgesellschaft auf Aktien Untermainanlage 1 60329 Frankfurt/Main, Germany Phone (+49 - 69) 21 04 - extension Fax (+49 - 69) 21 04 - 6 79 www.metzler.com		Mario Mattera	Head of Capital Marke	ets
	5 10			40.05
Research Fax (+49 - 69) 28 31 59	Pascal Spano	Head of Research		43 65
Tax (++3 00/200100	Guido Hoymann	Head of Equity Resear	ch, Transport, Utilities	3 98
	, Stephan Bauer	Industrial Technology	, , ,	43 63
	Stephan Bonhage	Small/Mid Caps, Const	truction	5 25
	Tom Diedrich	Media, Retail		2 39
	Alexander Neuberger	Industrial Technology,	Small/Mid Caps	43 66
	Holger Schmidt	Software, Technology,	Telecommunications	43 60
	Jochen Schmitt	Financials, Real Estate		43 59
	David Varga	Basic Resources		43 62
	Jürgen Pieper	Automobiles, Senior A	dvisor	5 29
	Hendrik König	Strategy / Quantitative	Research	43 71
	Sergii Piskun	Quantitative Research		2 37
	Eugen Keller	Head of FI/FX Researc	h	3 29
	Juliane Rack	FI/FX Strategy		17 48
	Sebastian Sachs	FI/FX Strategy		5 26
	Thomas Weber	FI/FX Strategy		5 27
	Daniel Winkler	FI/FX Strategy		5 28
Equities	Werner Litzinger	Head of Equities		41 78
Sales	Mustafa Ansary	Head of Equity Sales		3 51
	Eugenia Buchmüller			2 38
	Uwe Hohmann			3 66
	Hugues Jaouen			41 73
	Alexander Kravkov			41 72
	Jasmina Schul			17 66
Trading	Sven Knauer	Head of Equity Trading	I	2 45
	Kirsten Fleer			2 46
	Stephan Schmelzle			2 47
	Thomas Seibert			2 28

6 87

6 89

METZLER

	Sebastian Luther Claudia Ruiu Gloria Traidl		6 88 6 83 2 80
FI Trading/ALM	Sven Klein Bettina Koch Susanne Kraus Andreas Tanneberger Silke Amelung Christian Bernhard	Head of ALM Head of Fixed Income Trading	6 86 2 91 6 58 6 85 2 89 2 66
FX Sales	Thomas Rost Tobias Martin Gideon Tjoe Steffen Völker	Head of FX	2 92 6 14 2 82 2 93
FX Trading	Rainer Jäger Andreas Zellmann		2 76 6 10
Currency Management CM Advisory	Özgür Atasever Georgios Tsiourvas Achim Walde Harwig Wild	Head of Currency Management	2 81 6 82 2 75 2 79
CM Operations	Dominik Müller Christopher Haase Florian Konz Simon Wesch	Head of Operations	2 74 16 17 17 73 3 50

METZLER Capital Markets