## **CPH Chemie + Papier Holding AG**

Switzerland | Industrial Goods & Services

#### 1H 2018 earnings update

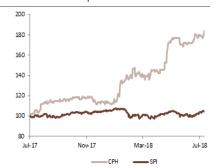
24 July 2018

#### **Company Data**

CHF 88.50 Price: Market Cap: CHF 531.0mn Free Float: 41.7% No. of shares: 6.0mn Avg. traded volume (30 day): 798 Bloombera: CPHN SW Reuters: CPHN-FR CH0001624717 ISIN:

Source: SIX Swiss Exchange and Bloomberg

#### Share Price Development



Source: Bloomberg

#### **Key Financial Data**

	2016	2017	2018E	2019E
Sales	434.8	469.8	527.4	524.7
EBITDA %	8.5%	7.2%	14.5%	12.7%
EBIT %	1.4%	0.6%	8.7%	7.0%
Net Margin %	(1.8%)	3.4%	6.5%	5.0%
Basic EPS	(1.32)	2.66	5.73	4.36
Diluted EPS	(1.32)	2.66	5.73	4.36
DPS	0.65	0.65	2.86	2.18
Equity Ratio %	56.2%	56.4%	56.7%	59.6%
Capex	(1.5)	(19.3)	(19.7)	(21.4)
P/Sales	1.2x	1.3x	1.0x	1.0x
P/E	NM	32.1x	14.9	19.6
EV/EBITDA	15.9x	17.4x	7.7x	8.8x

Source: Research Dynamics, Company data

#### **Next Events**

Investor's Meeting in Perlen	13 Sep 2018
Annual Results 2018	26 Feb 2019

#### **Analysts**

Doris Rudischhauser dru@researchdynamics.ch

Alexandre Müller amu@researchdynamics.ch

Tel: +41 43 268 3232 www.researchdynamics.ch

# Profitability soared on turnaround in the Paper division and strong results in Packaging

#### Robust 1H2018 results, with top line growing in double digits

CPH reported a healthy set of numbers with top line increasing by 14.0% YoY to CHF 264.1mn, driven by higher capacity utilisation and stable fixed cost across the divisions. This resulted in a significantly higher operating leverage which was coupled with favourable business trends and good market conditions. Group EBIT improved noticeably to CHF 27.8mn from CHF 1.1mn in 1H2017, and thus the EBIT margin was considerably higher at 10.5% compared to 0.5% in the same period last year. Although all divisions reported a positive EBIT for the period, the primary reason for the overall growth in profitability was the robust performance at the Paper division, which could finally capitalize on the long-lasting consolidation of the paper industry. The Paper division reported a strong EBIT of CHF 14.8mn compared to CHF -6.0mn in 1H2017 and thus the margin improved to 10.0% from a negative 4.7% during the same period last year. The company overall reported a net profit of CHF 22.6mn against a negative result of CHF 2.2mn, corresponding to a margin of 8.6% compared to -1.0% in 1H2017.

#### Segmental performance

**Paper:** The continuous capacity reductions over the past years have brought down the supply-demand imbalance in the paper industry to a great extent, and thus paper prices witnessed a recovery for the first time during the first half of 2018. The recovery translated into higher sales for the Paper division. The reported top line amounted to CHF148.1mn, up 15.6% YoY, also benefiting from FX tailwinds as around 80% of sales are exported to the adjacent Eurozone. However, the paper industry is still challenging as the demand for newsprint paper further declined by around 8% in 1H2018, compared to a decrease of 6% in 1H2017. The divisional EBIT increased significantly to CHF 14.8mn from a negative CHF 6.0mn in 1H2017 and the corresponding margin amounted to 10.0% compared to -4.7%. The primary reason of the improved profitability was the successful integration of the paper recovery activities of Papierfabrik Utzenstorf, thanks to which more recycled paper can be sourced from Switzerland itself, directly reducing overall transportation costs of the division.

**Packaging:** Net sales at the Packaging division increased by 20.1% YoY to a record high of CHF 78.6mn from CHF 65.5mn in 1H2017. The rise in sales was primarily attributable to the further growth of the pharmaceuticals market in Europe ( $\sim$ 3%), which ultimately translated into higher demand for high-barrier film products and mono-films during the period. Divisional EBIT significantly improved to CHF 9.6mn from CHF 5.5 and thus the EBIT margin also improved encouragingly to 12.3% from 8.4% in 1H2017. The improved profitability was attributable to the higher utilization of the existing facility and further capacity expansion at the Suzhow plant in China coupled with benefits arising out of operating leverage. During the first quarter, the company acquired a 60% holding in Sekoya Indústria e Comércio Ltda. of Brazil and renamed it to Perlen Packaging Ltd. Management believes that the step will strengthen the local distribution channel further.

**Chemistry:** The Chemistry division reported a slight drop of 1.9% YoY in net sales to CHF 38.3mn in 1H2018. The drop was primarily attributable to the termination of the fertilizer production business in mid-2017 and the production shift from Uetikon to the new facility in Zvornik in Bosnia-Herzegovina during the second half of 2017, where production was getting ramped up during the first half of 2018. The segment reported an increase of 85.3% at the EBIT level to CHF 3.4mn with a corresponding margin improvement to 9.2% from 4.9% in 1H2017. The margin expansion was primarily due to the closure of the Uetikon site which had a positive effect on the division's overall cost structure. During the period, the company acquired the molecular sieve distribution activities of Shanghai Yusheng Chemical Co. Itd retroactively as of 31 March 2018.

#### **Increase of full-year guidance**

On the basis of the very good first half-year results, the group expects to report significantly higher net sales and consolidated earnings for the full year 2018, assuming a benign currency environment. According to management, the newly acquired businesses of Armar and Yusheng in the Chemistry division, APS (former Papierfabrik Utzenstorf) in the Paper and Sekoya in the Packaging will have a positive impact on overall sales volume of the company.

**Paper:** The company expects paper prices to remain at the current level during 2H2018 for newsprint and magazine paper despite weakness in the demand. While the division's revenues should also increase for FY2018 overall, EBIT is expected to remain in-line with the first-half. Management is determined to keep up the efforts to enhance efficiencies further.

**Packaging:** The transfer of new orders to the Chinese production facility (from Switzerland) will drive sales growth in the Asia-Pacific region and is expected to result in margin improvements. For FY2018, the group expects to report higher net sales and an EBIT well above the prior-year level.

**Chemistry:** The newly integrated businesses (acquisition of the molecular sieve distribution activities of Shanghai Yusheng Chemical Co. Ltd) and internal restructuring efforts are expected to drive revenue growth further. For FY2018, the division expects to report higher sales and a substantial improvement in EBIT compared to the previous year assuming the margin remains stable.

#### **Estimate change**

We have revised our estimates based on the performance in 1H2018 and positive guidance given by the company. We estimate the full year revenue to be at CHF 527.4mn, an increase of 8.1% from our earlier forecast. Operating profit revised upwards to CHF 45.7mn from CHF 15mn. Consequently, the net earnings is expected to be around CHF 34.3mn compared to CHF 7.0mn estimated previously. However, we expect paper prices to again come under pressure in 2H18 and forward. Accordingly, we have adjusted our estimates for the future periods.

#### Valuation and conclusion

We value CPH using DCF and relative valuation techniques. In the DCF analysis, we have used a market risk premium (MRP) of 8.2% and a beta of 0.9. Being conservative, we have considered a higher risk-free rate of 0.5% compared to the current 10 year government bond yield of 0.04% as we believe it is not sustainable in the long term. Based on our assumptions, we arrive at an intrinsic value of CHF 101.2 per share (vs. previous target of CHF 80.5), giving it an upside potential of 14.3% compared to current levels.

We have used three parameters – EV/EBITDA, P/S and P/E – to analyze the relative valuation of the Group. Initially, we have calculated the peer average of CPH's individual divisions, and then taken a weighted average of these based on the sales contribution of the respective division. Given its diversified business model, this consolidated peer average is most comparable to CPH's valuation multiples.

CPH currently trades at a P/S multiple of 1.0x (FY2018E), a significant 51% discount over the weighted average of division peers.

We believe in the medium-term, the stock could trade at higher multiples on account of an increased contribution of sales and operating profits expected out of the Asia-Pacific region and higher operating efficiencies from the new production facilities, as well as from the positive momentum the company is experiencing after years of restructuring processes. The Paper division is finally bearing fruits from its perseverant strategy, outpacing competitors with a lead in technology and operational excellence.

Company		EV/EBITDA			P/S		P/E			
Company	3 year			3 year			3 year			
	average	CY2018E	CY2019E	average	CY2018E	CY2019E	average	CY2018E	CY2019E	
CPH Chemie & Paper	9.4x	7.7x	8.8x	0.6x	1.0x	1.0x	24.6x	14.9x	19.6x	
Paper peers:	7.8x	40.5	40.4	1.0x	4.0		45.3	46.3	46.0	
Holmen		10.5x	10.4x		1.9x	1.9x	15.2x	16.2x	16.9x	
Stora Enso	6.3x	7.1x	7.0x	0.4x	1.0x	1.0x	11.6x	11.2x	11.3x	
Altri	7.9x	7.7x	7.5x	0.7x	2.4x	2.3x	10.4x	10.9x	10.7x	
Metsa Board	5.8x	9.3x	8.6x	0.4x	1.5x	1.4x	15.2x	15.0x	13.3x	
UPM-Kymmene	6.1x	8.2x	8.3x	0.5x	1.5x	1.5x	11.3x	13.2x	13.3x	
Norkse Scogindustrier	NA	NA	NA	NA	NA	NA	88.6x	NA	NA	
James Cropper	2.6x	0.2x	0.1x	0.3x	0.0x	0.0x	9.1x	30.8x	22.9x	
OJI Holdings	NA	NA	NA	NA	0.4x	0.4x	11.6x	11.8x	12.1x	
Chemistry peers:										
Honeywell Int.	8.4x	12.9x	12.0x	1.4x	2.6x	2.5x	14.2x	18.7x	17.2x	
Clariant	6.6x	NA	NA	0.6x	NA	NA	11.1x	NA	NA	
Arkema	5.4x	6.3x	6.0x	0.7x	0.9x	0.9x	9.8x	11.8x	11.3x	
WR Grace & Co.	7.8x	11.1x	10.3x	1.7x	2.6x	2.4x	15.9x	18.6x	16.7x	
Packaging peers:										
Meadvestwaco	6.0x	NA	NA	0.7x	NA	NA	13.7x	NA	NA	
MacFarlane Group	5.8x	0.1x	0.1x	0.2x	0.0x	0.0x	7.7x	15.2x	14.4x	
Gerresheimer	7.0x	10.3x	9.8x	1.0x	1.7x	1.6x	14.2x	16.3x	16.8x	
West Pharmaceutical Services	9.9x	19.6x	17.0x	1.7x	4.2x	3.9x	20.1x	35.0x	30.4x	
Convertidora Industrial	8.4x	NA	NA	0.4x	NA	NA	NA	NA	NA	
PSB Industries	4.6x	6.5x	6.0x	0.4x	0.5x	0.5x	8.1x	5.5x	10.4x	
Astrapak Ltd	4.5x	NA	NA	0.3x	NA	NA	9.4x	NA	NA	
Bilcare Ltd	3.3x	NA	NA	0.2x	NA	NA	2.7x	NA	NA	
Median	6.2x	8.2x	8.3x	0.6x	1.5x	1.5x	11.6x	15.1x	13.8x	
High	9.9x	19.6x	17.0x	1.7x	4.2x	3.9x	88.6x	35.0x	30.4x	
Low	2.6x	0.1x	0.1x	0.2x	0.0x	0.0x	2.7x	5.5x	10.4x	
Premium (disc) to peers	52%	(6%)	6%	(1%)	(35%)	(33%)	NA	(1%)	42%	
riemium (disc) to peers	52%	(6%)	0%	(1%)	(35%)	(33%)	IVA	(1%)	42%	

Source: Thomson Eikon (as on 23 July 2018)

## Exhibit 2: CPH – Comparison with weighted average of division peers

		EV/EBITDA			P/S		P/E		
	3 year			3 year			3 year		
	average	CY2018E	CY2019E	average	CY2018E	CY2019E	average	CY2018E	CY2019E
Weighted peer multiples	6.7x	9.9x	9.2x	0.8x	2.0x	1.9x	11.6x	17.0x	15.8x
СРН	9.4x	7.7x	8.8x	0.6x	1.0x	1.0x	24.6x	14.9x	19.6x
Premium (disc) to peers	41%	(22%)	(4%)	(28%)	(51%)	(49%)	NM	(12%)	24%

Source: Thomson Eikon (as on 23 July 2018)

## **DETAILED FINANCIAL STATEMENTS**

## **Income Statement**

Income Statement							
CHF mn (except per share)	FY13	FY14	FY15	FY16	FY17	FY18E	FY9E
Chemistry sales	59	60	63	69	75	79	83
Paper sales	306	314	248	246	264	301	285
Packaging sales	116	118	110	119	130	147	157
Net Sales	481	492	420	435	470	527	525
Cost of Sales	(323)	(313)	(285)	(267)	(309)	(317)	(318)
Gross profit	158	180	135	168	161	210	207
Personnel cost	(86)	(88)	(86)	(89)	(84)	(91)	(93)
Outsourced maintenance/repairs	(19)	(18)	(16)	(18)	(17)	(16)	(18)
Other operating expense	(22)	(23)	(21)	(25)	(26)	(27)	(29)
Total operating costs	(127)	(129)	(123)	(131)	(127)	(133)	(140)
EBITDA	31	51	12	37	34	77	67
Depreciation on tangible fixed assets	(57)	(34)	(34)	(31)	(30)	(30)	(29)
Depreciation on intangible assets	(1)	(1)	(0)	(1)	(1)	(0)	(0)
Operating profit (EBIT) before impairment	(27)	16	(22)	6	3	46	37
Impairment	(251)	0	0	0	0	0	0
Operating profit (EBIT)	(278)	16	(22)	6	3	46	37
Finance costs	(5)	(7)	(13)	(6)	(8)	(6)	(5)
Finance income	1	2	1	1	2	0	0
Total financial income (expenses)	(4)	(6)	(12)	(5)	(7)	(6)	(5)
Profit before taxes (before exceptional items)	(281)	10	(34)	1	(4)	40	32
Non-operating items	2	1	2	(4)	23	1	1
Income taxes	8	(1)	(1)	(4)	(3)	(6)	(6)
Profit attributable to the parent	(271)	11	(33)	(8)	16	34	26
Basic EPS	(45.2)	1.8	(5.5)	(1.3)	2.7	5.7	4.4
Diluted EPS	(45.2)	1.8	(5.5)	(1.3)	2.7	5.7	4.4
DPS	0.7	0.7	0.6	0.7	0.7	2.9	2.2

Source: Research Dynamics, Company data

## **Balance Sheet**

CHF mn	FY13	FY14	FY15	FY16	FY17	FY18E	FY19E
Assets							
Non-current assets							
PPE	433.7	419.1	404.3	384.6	384.1	376.0	365.6
Intangible assets	1.2	1.3	2.4	3.1	4.8	4.8	6.8
Long-term financial assets	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Long-term financial receivables	0.0	2.8	0.0	0.0	0.0	0.0	0.0
Other non-current assets	22.4	22.7	20.2	52.6	56.4	56.4	56.4
Total non-current assets	467.3	456.0	436.9	450.3	455.3	447.3	438.8
Current assets							
Inventories	56.9	63.4	54.5	68.9	59.2	65.0	63.5
Trade accounts receivable	70.8	79.5	66.4	69.1	77.8	82.5	82.0
Other receivables	7.3	7.7	8.0	8.9	18.0	21.5	21.5
Prepaid expenses and accrued income	5.3	6.6	4.9	4.8	7.0	7.0	7.0
Short-term financial receivables	0.0	0.1	0.0	0.1	0.0	0.0	0.0
Liquid funds and Securities	74.2	75.1	53.2	70.4	80.2	85.6	98.2
Total assets	681.8	688.4	624.0	672.4	697.6	708.8	711.0
Shareholders' Equity and Liab	ilities						
Share capital	30.0	30.0	30.0	30.0	30.0	12.0	12.0
Capital reserves	16.2	12.3	8.4	4.8	0.8	18.8	18.8
Profit reserves	659.5	389.2	397.4	351.2	346.4	336.5	367.0
Net result for the year	(271.5)	10.5	(33.1)	(7.9)	16.0	34.3	26.2
Non-current liabilities							
Long-term financial liabilities	117.9	128.0	126.5	145.6	143.5	126.4	109.5
Pension scheme liabilities	0.7	0.6	1.0	1.1	0.6	0.6	0.6
Other long-term liabilities	2.5	2.4	2.3	0.1	0.0	0.2	0.2
Long-term provisions	21.3	20.8	20.0	52.5	51.8	51.8	51.8
Current liabilities							
Trade accounts payable	59.4	53.8	46.7	53.1	69.5	72.3	72.2
Other payables	4.4	3.9	2.6	8.3	3.3	6.7	6.7
Accrued liabilities and deferred income	11.0	9.1	13.6	16.5	17.2	17.2	17.2
Short-term financial liabilities	23.0	22.6	6.8	7.0	9.8	22.8	19.8
Short-term provisions	7.2	5.1	1.5	7.6	5.6	5.6	5.6
Total liabilities	247.5	246.4	221.2	291.6	301.3	303.7	283.6
Total equity and liab.	681.8	688.4	624.0	672.4	697.6	708.8	711.0
Course Decearsh Dunamics Comp							

Source: Research Dynamics, Company data

Cash Flow Statement							
CHF mn	FY13	FY14	FY15	FY16	FY17	FY18E	FY19E
Net profit for the period	(271.5)	10.5	(33.1)	(7.7)	16.2	34.3	26.2
Non-cash adjustments:	298.8	30.3	35.3	33.9	(1.5)	30.8	29.9
Change in current assets and liabilities:							
(Increase)/ decrease in inventories	(2.6)	(5.5)	8.4	(13.1)	13.6	(5.8)	1.5
Decrease in trade accounts receivable	3.4	(11.2)	8.1	(0.5)	(7.7)	(4.6)	0.4
Increase/ (decrease) in trade accounts payable	6.4	(5.8)	(6.8)	1.6	15.8	2.8	(0.1)
Other changes in working capital	(3.0)	1.5	11.5	7.7	(4.2)	(3.5)	-
Cash flows from operating activities	31.4	19.8	23.3	21.9	32.2	54.0	57.9
Investments in tangible fixed assets	(18.2)	(19.2)	(21.9)	(20.7)	(32.3)	(19.2)	(19.0)
Disposals of tangible fixed assets	0.9	0.4	1.6	20.5	15.4	-	-
Investments in intangible assets	(0.5)	(0.6)	(1.6)	(1.2)	(2.4)	(0.5)	(2.4)
Investments in business activities	-	-	-	(18.5)	-	(21.0)	-
Repayment of long-term financial receivables	0.0	-	-	-	-	-	-
Cash flow generated (used)	(17.8)	(19.4)	(22.0)	(19.9)	(19.3)	(40.7)	(21.4)
in investment act.	(17.0)	(15.7)	(22.0)	(19.9)	(19.5)	(40.7)	(21.7)
Increase/ (Decrease) in short- term financial liabilities and receivables	(2.0)	(0.4)	(15.3)	0.1	1.0	13.0	(3.1)
Increase/ (Decrease) in long- term financial liabilities	(10.8)	9.8	(1.1)	19.0	(0.6)	(17.0)	(16.9)
Increase in other long-term liabilities	2.5	(0.2)	(0.1)	(0.4)	0.2	-	-
Minority interests and changes resulting from minorities	-	-	-	-	-	-	-
Dividends to shareholders	(3.9)	(3.9)	(3.9)	(3.6)	(3.9)	(3.9)	(3.9)
Cash flow generated (used) in financing act.	(14.2)	5.3	(20.4)	15.2	(3.3)	(7.9)	(23.9)
Exchange (losses)/gains	(0.2)	0.2	2.3	0.1	0.2	-	-
Net change in cash	(0.7)	6.0	(16.7)	17.2	9.8	5.4	12.6
Opening cash balance Closing cash balance	64.7 <b>63.9</b>	63.9 <b>69.9</b>	69.9 <b>53.1</b>	53.1 <b>70.3</b>	70.3 <b>80.1</b>	80.1 <b>85.5</b>	85.5 <b>98.1</b>

Source: Research Dynamics, Company data

**Key Ratios** 

	FY13	FY14	FY15	FY16	FY17	FY18E	FY19E
<b>Growth Ratios</b>							
Sales Growth	(2%)	2%	(15%)	4%	8%	12%	(1%)
Chemistry division	(13%)	2%	4%	11%	9%	5%	5%
Paper division	(3%)	3%	(21%)	(1%)	7%	14%	(5%)
Packaging division	9%	1%	(7%)	9%	9%	13%	7%
Operating Profit Growth	NM	NM	NM	NM	(51%)	NM	(20%)
Net Income Growth	NM	NM	NM	NM	NM	115%	(24%)
Profitability Ratios (%)							
Operating margin (before impairment) (%)	(6%)	3%	(5%)	1%	1%	9%	7%
Chemistry division	(9%)	(4%)	(3%)	2%	5%	7%	7%
Paper division	(10%)	4%	(11%)	(2%)	(5%)	9%	7%
Packaging division	6%	4%	5%	8%	7%	8%	8%
EBITDA Margin %	6%	10%	3%	8%	7%	15%	13%
Net Margin (%)	(56%)	2%	(8%)	(2%)	3%	7%	5%
Return Ratios							
Profit Margin	(56%)	2%	(8%)	(2%)	3%	7%	5%
Asset Turnover	0.6x	0.7x	0.6x	0.7x	0.7x	0.8x	0.7x
Financial Leverage	1.4x	1.6x	1.6x	1.7x	1.8x	1.8x	1.7x
Dupont ROE (%)	(47%)	2%	(8%)	(2%)	4%	9%	6%
ROCE (%)	(5%)	3%	(4%)	1%	1%	9%	7%
ROA (%)	(33%)	2%	(5%)	(1%)	2%	5%	4%
Leverage Ratios							
Debt - Equity Ratio	0.3x	0.3x	0.3x	0.4x	0.4x	0.4x	0.3x
Net Debt - Equity Ratio	0.2x	0.2x	0.2x	0.2x	0.2x	0.2x	0.1x
Interest Coverage	(6.0x)	5.2x	(5.5x)	1.4x	0.7x	8.0x	7.0x
Liquidity Ratios							
Current Ratio	2.0x	2.5x	2.6x	2.4x	2.3x	2.1x	2.2x
Quick Ratio	1.5x	1.8x	1.9x	1.7x	1.7x	1.6x	1.7x
Valuation Ratios							
EV/EBITDA	13.7x	6.2x	25.8x	15.9x	17.4x	7.7x	8.8x
P/E	NM	22.9x	NM	NM	32.1x	14.9x	19.6x
P/BV	0.8x	0.5x	0.6x	1.4x	1.3x	1.3x	1.2x

Source: Research Dynamics, Bloomberg, Company data

#### **DISCLAIMER**

CPH Chemie + Papier Holding AG ("CPH") is a client of Research Dynamics. The equity research report(s) are prepared for informational purposes only and are paid for by the company portrayed in the report. Research Dynamics is a division of Dynamics Group AG. Dynamics Group is an independent consultancy firm focused on strategic advisory, communication management and research and analysis.

This report (henceforth known as "document") has been drafted by the authors concerned as a non-binding opinion on the market situation and on the instruments of investment in question and compiled by Dynamics Group in order to provide background information about the companies. It is intended exclusively for the purpose of information.

Dynamics Group has not individually verified the information and data on which this document is based. All information and data in this document originate from generally available sources which the author concerned or Dynamics Group viewed as reliable at the time of drafting this document. However, no liability can be assumed for their correctness, accuracy, completeness and appropriateness – neither expressly nor tacitly. The contents of this document do not represent an assurance or guarantee by the authors concerned or Dynamics Group. Forward-looking information or statements in this document contain information that is based on assumptions, forecasts of future results, estimates of amounts not yet determinable, and therefore involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of their subject matter to be materially different from current expectations

Dynamics Group shall not be liable for any consequential damage to properties – on whatever legal grounds it may be. Liability of Dynamics Group on account of premeditation or gross negligence shall remain unaffected by this.

Dynamics Group has no permission to provide assurances or assume guarantees on behalf of the companies or a third party mentioned in this document. Neither the companies mentioned in this document nor any other individual assumes liability for any loss, damage or detriment that may result from the use of this document, especially when taking decisions on investments, or from other reasons. Dynamics Group cannot be held responsible for detrimental consequences that occur or may occur due to the use or its omission based on the views and inferences contained in this document. Past performance trends of value, price or rates do not provide any indications to the future trends for an investment. Dynamics Group does not provide any guarantees for the suggested yield or the achievement of referred targets.

This document does neither represent an offer of purchase, holding or sale of any securities, money market instruments or of derivatives, nor does it contain the basis for a contract or a commitment of any kind. Every investment, for example, in debentures, shares and options, is associated with enormous risks. A decision on investment with regard to any security may not be based on this document. This document is neither an advice on investment, nor a recommendation or invitation for purchasing, holding or selling any securities, money market instruments or derivatives.

Dynamics Group does not conduct any investment business and, accordingly, does not itself hold any positions in the securities mentioned in this document. However, the respective directors, employees and contractors of Dynamics Group may hold positions in the described securities and/or options, futures and other derivatives that are based on these securities.

This document has been provided to you for information only. It may not be reproduced or distributed to others or published in any other form partially or fully.

The distribution of this document and the information contained therein may be restricted in other jurisdictions by law and persons who may come into possession of this document must be aware of possible restrictions and adhere to the same. Failure to comply with such restrictions may constitute an infringement of the laws in USA or Canada governing the securities or of the laws of any other jurisdiction.

This study is protected by the copyright laws. It may be used only for the purpose as defined in this disclaimer. Portions of the study, if quoted, must be acknowledged by indicating the source. Any use other than this shall require prior written permission by Dynamics Group. Reproduction, circulation, publication and provision of online access to the document shall be regarded as its use and the same shall require permission. Circulation of this document, especially in a foreign country, may be permitted only under the provisions of the disclaimer and the applicable regulations. Unauthorized use of the study or omission of details of the source or the acknowledgement of copyright may lead to initiation of a civil suit for damages and be liable for prosecution.

If any part or individual formulations of this disclaimer are found to be unsustainable or become unsustainable at a future date, the rest of the contents and their validity shall not be affected by it.

#### **Dynamics Group AG**

Utoquai 43 CH-8008 Zürich Tel. +41 43 268 32 32 Fax +41 43 268 32 39

contact@dynamicsgroup.ch

www.dynamicsgroup.ch

Zeughausgasse 22 CH-3011 Bern Tel. +41 31 312 28 41 Fax +41 31 312 28 49 21, rue des Caroubiers CH-1227 Carouge/GE Tel. +41 22 308 62 20 Fax +41 22 308 62 36