

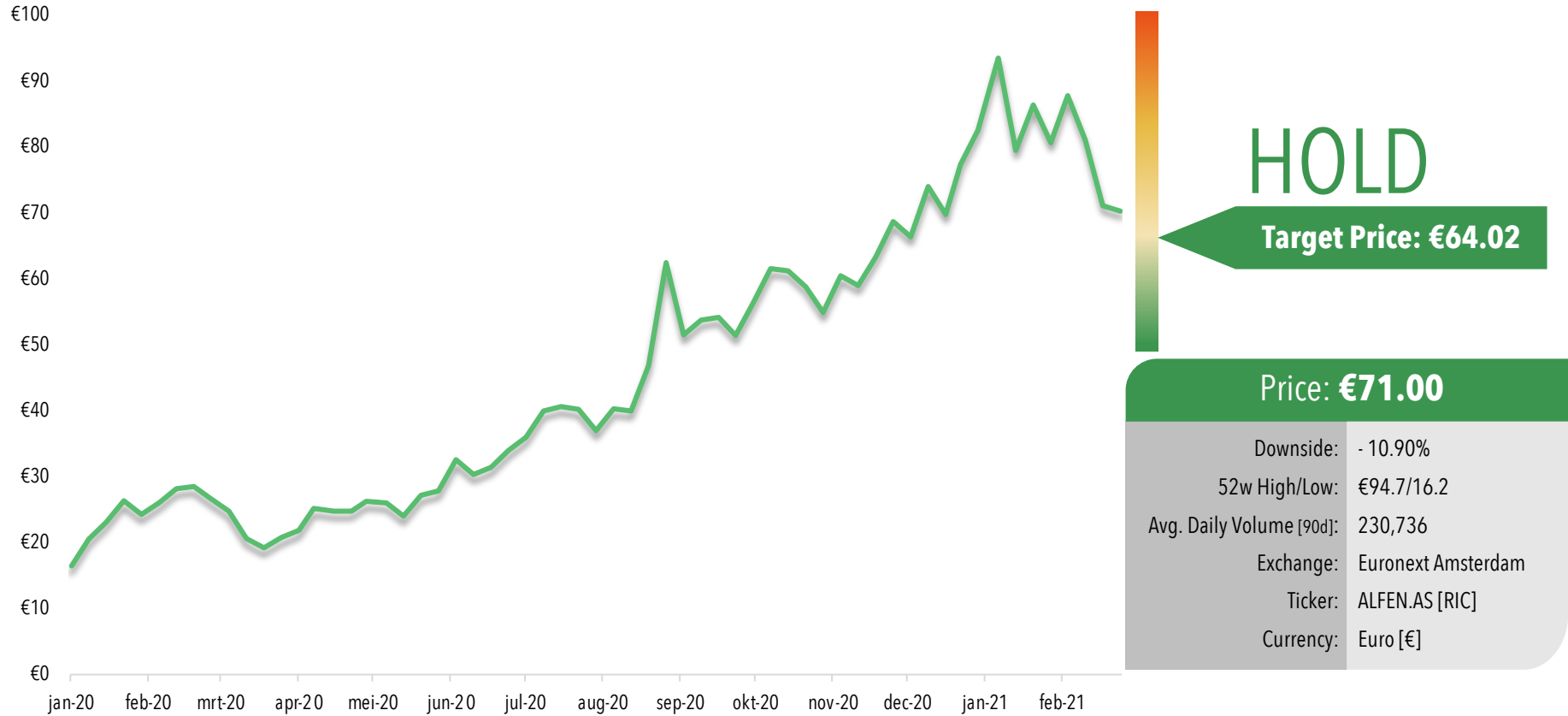


ALFEN
POWER TO ADAPT





Our recommendation (1)



HOLD

Target Price: €64.02

Price: €71.00

Downside: - 10.90%

52w High/Low: €94.7/16.2

Avg. Daily Volume [90d]: 230,736

Exchange: Euronext Amsterdam

Ticker: ALFEN.AS [RIC]

Currency: Euro [€]

Our recommendation (2)



Business model

Unique cross-selling proposition.

Strong growth

Profitable growth and resilience to business fluctuations.

Innovation skills

First-mover advantage and established relations.



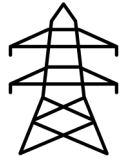
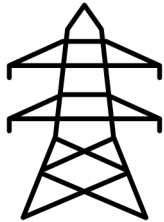
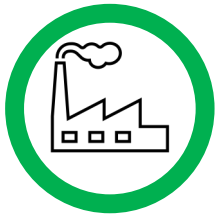
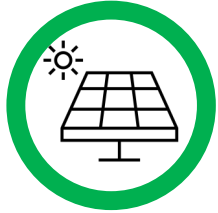
The Beating Heart of the Grid

Power generation

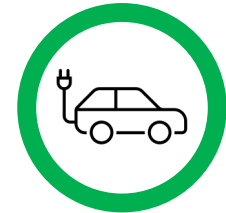
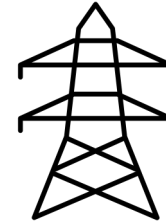
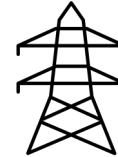
Transmission grid

Distribution grid

Consumption



ALFEN
POWER TO ADAPT





A Unique Cross-Selling Proposition

73%

Smart grids

Alfen's first business and cash cow. Supply of devices for grid automation and software.

18%

EV Charging

Supply of smart and connected EV charge point, especially with AC technology.

9%

Energy storage

Alfen's latest business and current question mark. Supply of modular energy storage systems.

VATTENFALL



EV charging contract + 12 MW energy storage + 5.7 MW solar PV farm

fluvius.

Public EV charging + energy storage project + grid automation



A Key Player in Europe

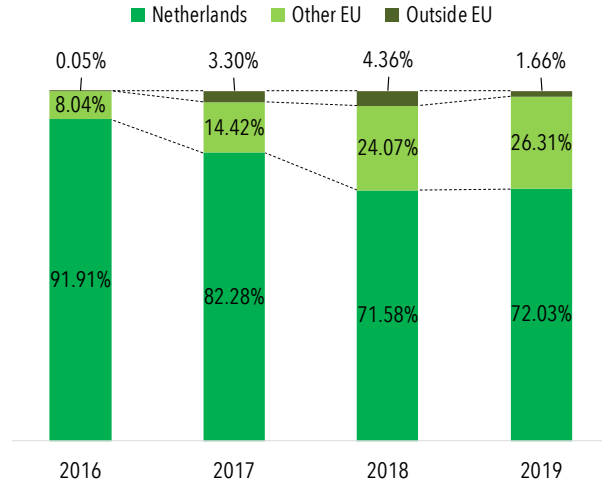


10 countries with employed staff



25+ countries with sold products

Alfen's revenues by geography [%]



Alfen's geographical presence

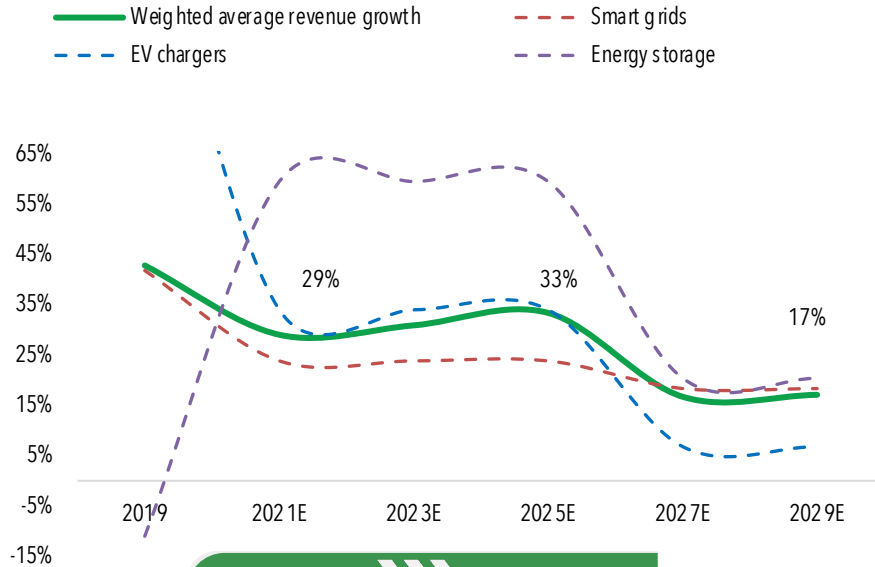


Source: team estimates, company website



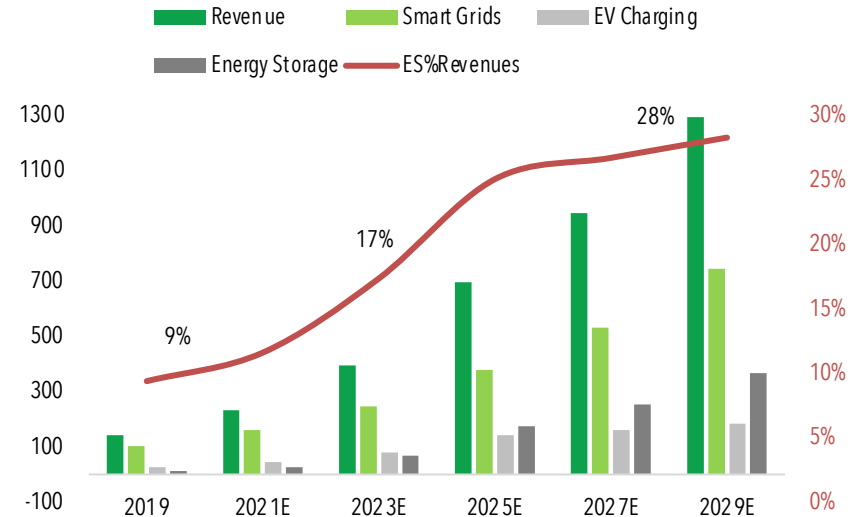
Outstanding Revenue Growth

Revenue Growth by Business Line



Margin expansion

Revenue Decomposition



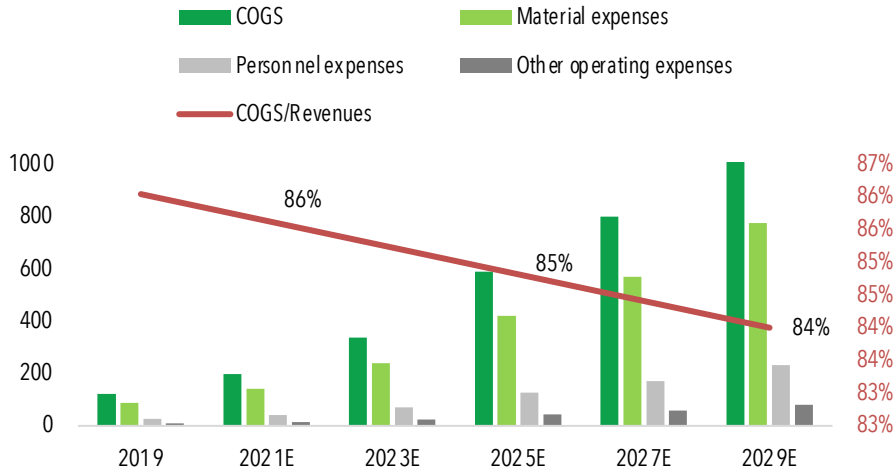
Increasing incidence of Energy storages on Sales

Source: team estimates

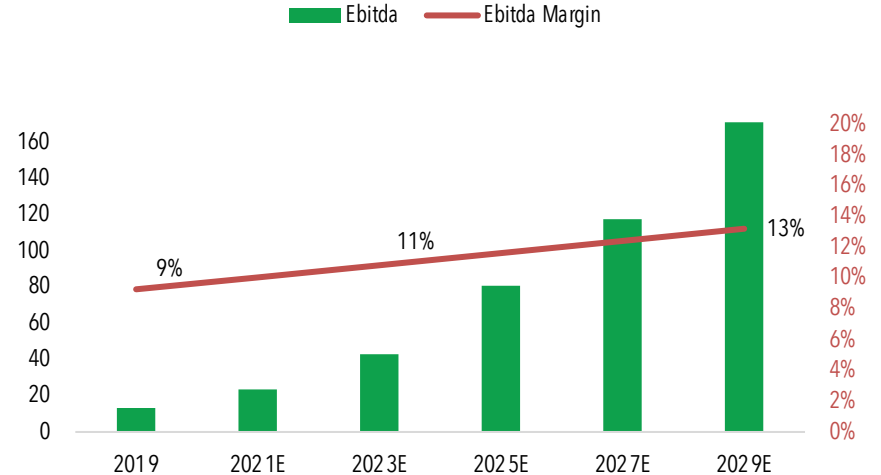


Margin Expansion Leading to Higher Operational Efficiency

COGS Decomposition



EBITDA Margin



COGS & SG&A

- Economies of scale
- Reduction in cost of Raw materials

EBITDA

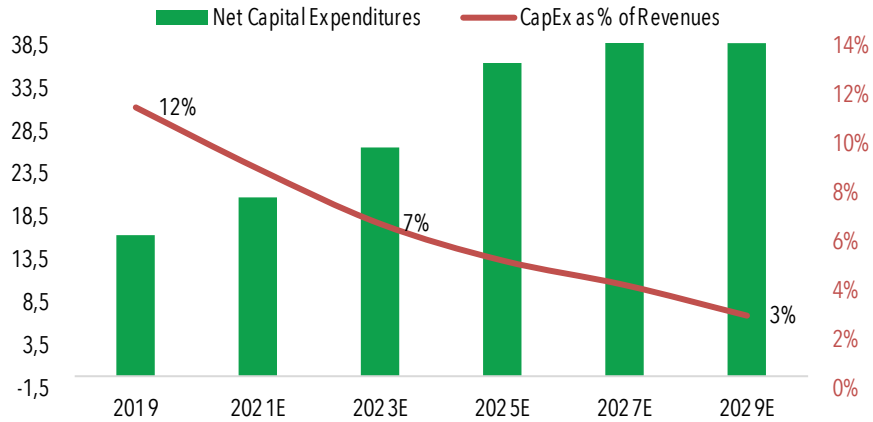
- Convergence in profitability
- Not high enough to meet IPO goal.

Source: team estimates



Capital Expenditure Normalization

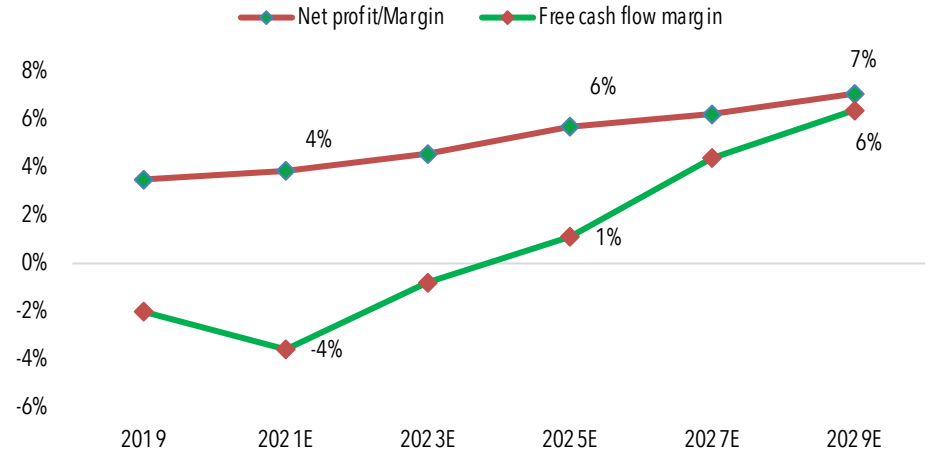
Capex Evolution



Reduction of Capital Intensity

Asset light model sustained by exceptional CAGR

Net profit and Free cash flow Margin



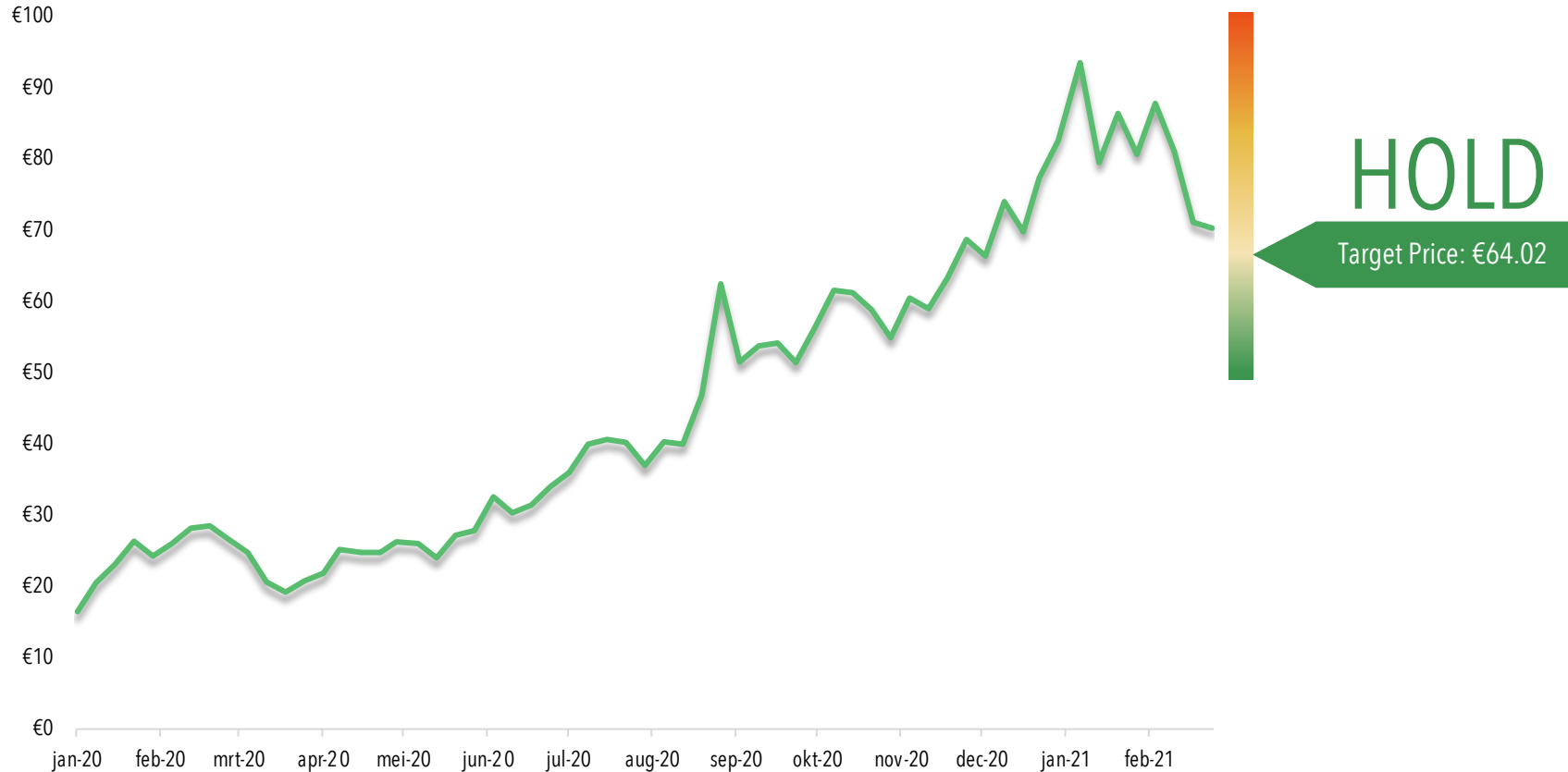
High Net Profit Margin

Strengthening FCF generation

Source: team estimates



Target Price



Growth drivers



Smart Grids

Sustained Capital Expenditures of Distributed Service Operators (DSO)



Electronic Vehicle Charging

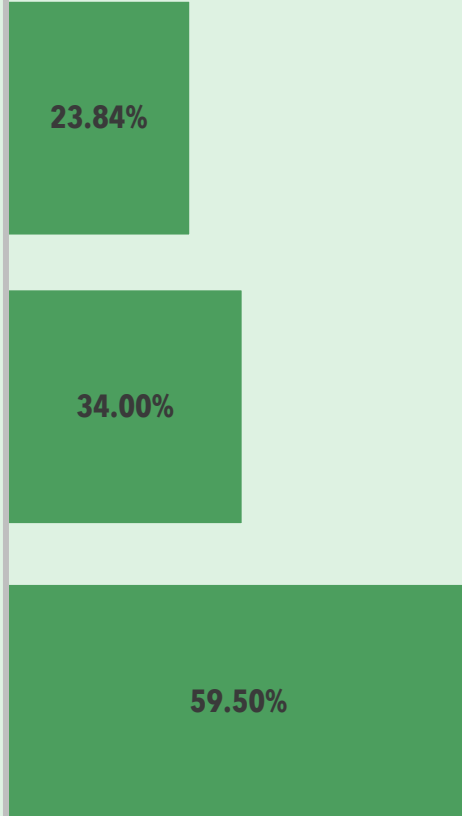
Favourable Government Incentives for EV's until '25



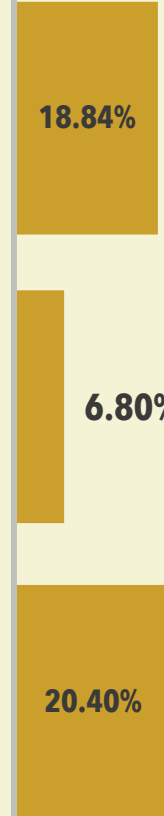
Energy Storage Systems

Rise in Renewable Energy Sources

CAGR 2020 - 2025



CAGR 2025 - 2030





Three-stage DCF Valuation Model

Leveraged capital structure could improve efficiency...

Assumptions

r_f	-0.49%
r_m	6.25%
β_m	1.18
r_e	6.89%
r_d	3.10%

Stage 1

CAGR	31.00%
WACC	6.15%
Debt ratio	16.00%
Terminal Growth	2.00%

Stage 2

... but only in the long run

CAGR	16.90%	
Debt ratio	16.00%	Constant Leverage
WACC	6.34%	
Debt ratio	35.00%	Increased Leverage
WACC	5.29%	

Company & Industry

Financial Analysis

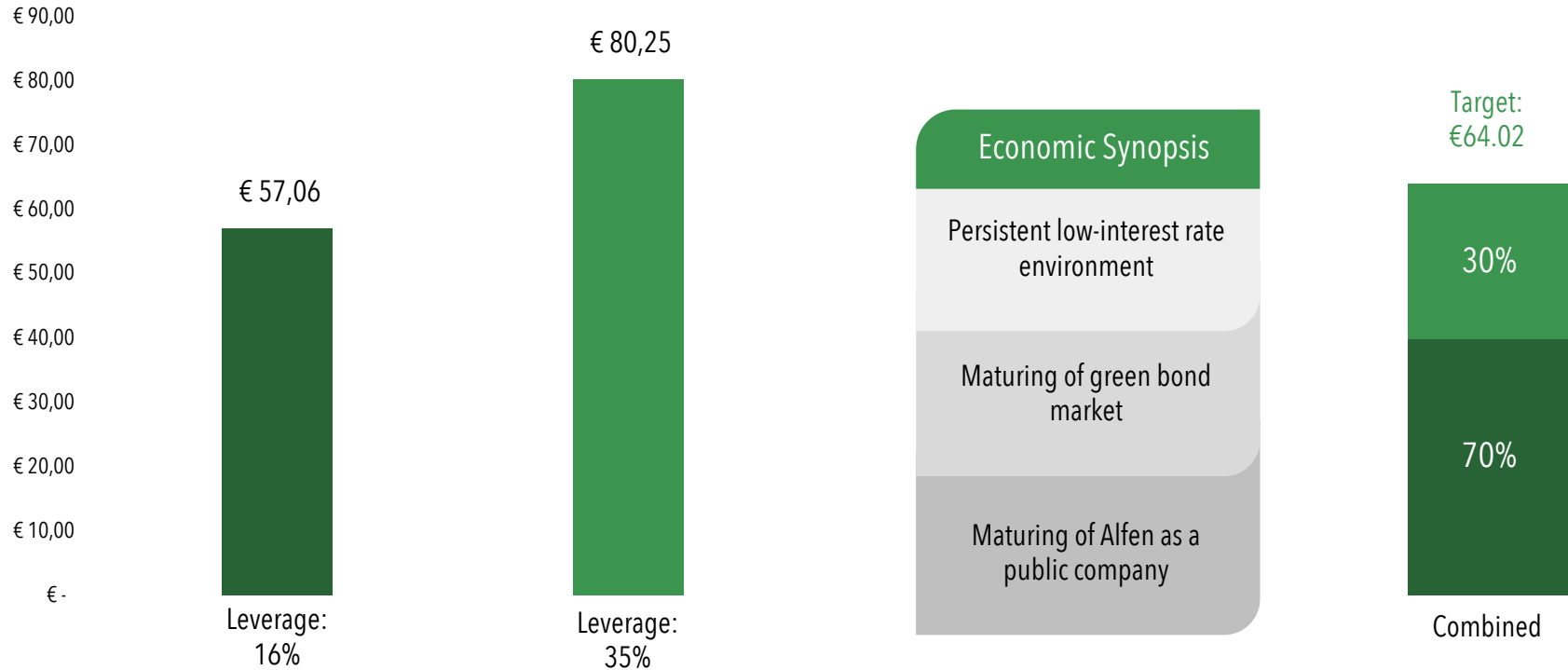
Valuation

ESG

Source: team estimates
Investment risks



Target price decomposition



Source: team estimates



Sensitivity Analysis



Smart Grids	Stage 1	Stage 2
Mean	23.84%	18.34%
SD	2.00%	4.00%

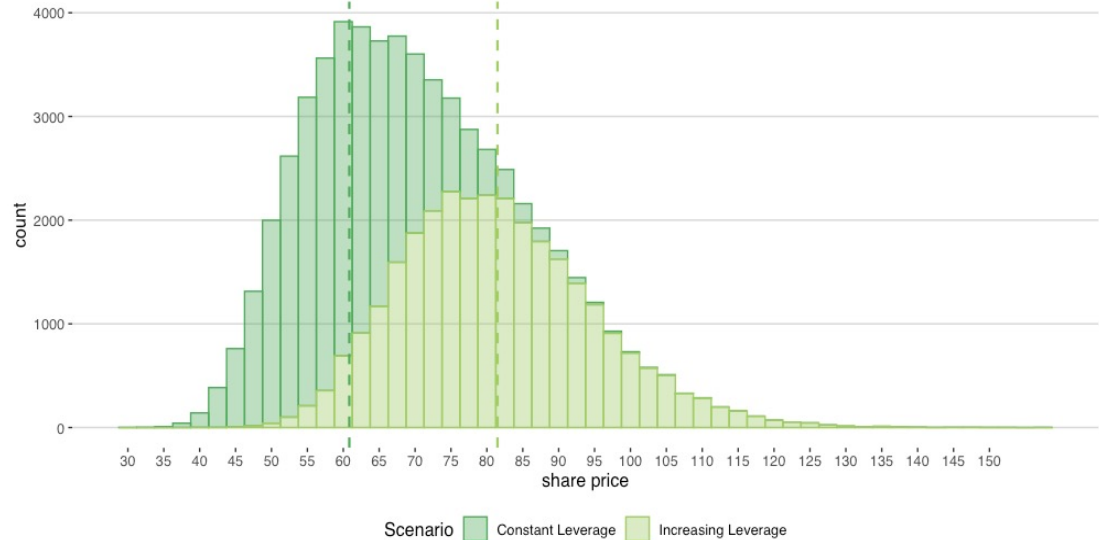


EV Charging	Stage 1	Stage 2
Mean	59.50%	20.40%
SD	2.00%	4.00%



ES Solutions	Stage 1	Stage 2
Mean	34.00%	6.80%
SD	4.00%	8.00%

Monte Carlo Simulation



Source: team estimates

Managed by a Motivated Team with Years of Experience



Marco Roeleveld
CEO



Jeroen van Rossen
CFO



Richard Jongsma*
CCO (until mid-2021)

+ Independent Supervisory Board



Leader in ESG Performance



Environmental

- + Energy sources
- + Waste streams



Social

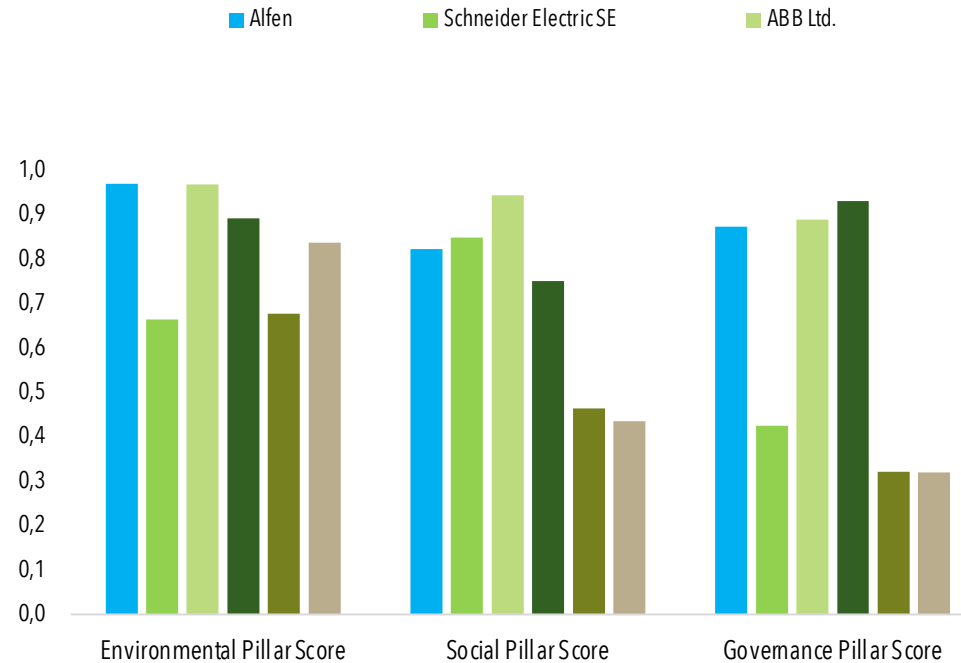
- + Educational efforts for workforce
- Community



Governance

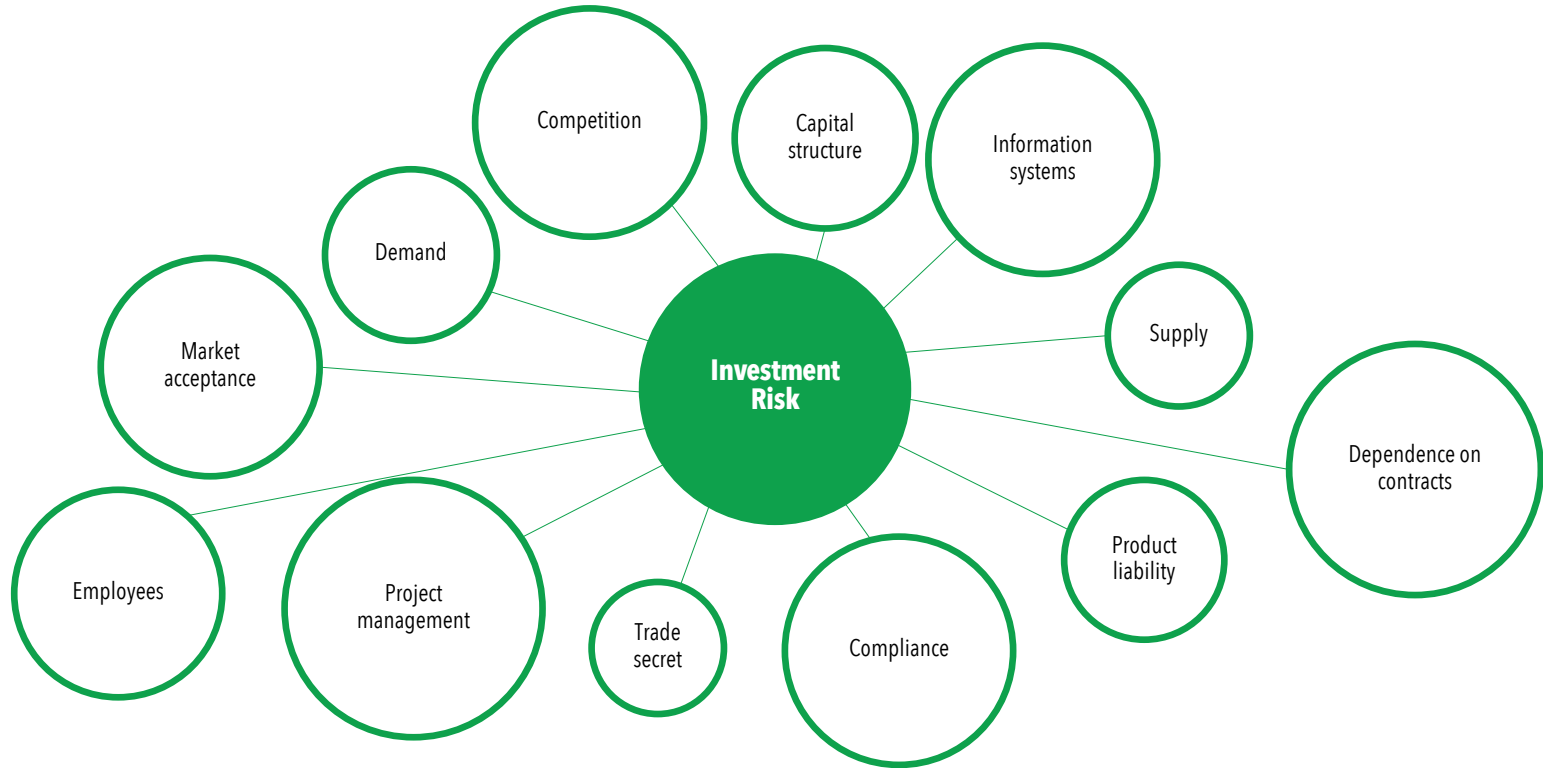
- + Independence & diversity issues
- Tax transparency

ESG Score Comparison



Source: team estimates, Refinitiv

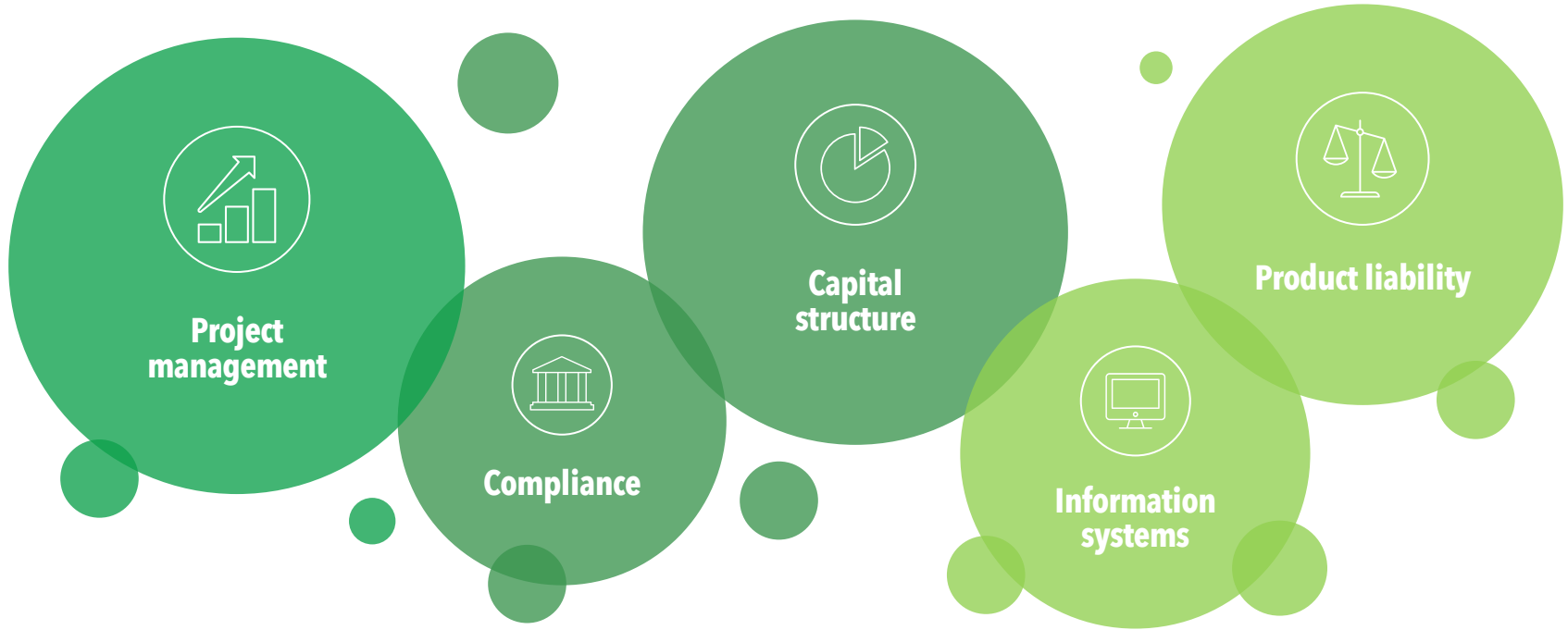
Investment Risk (1/3)



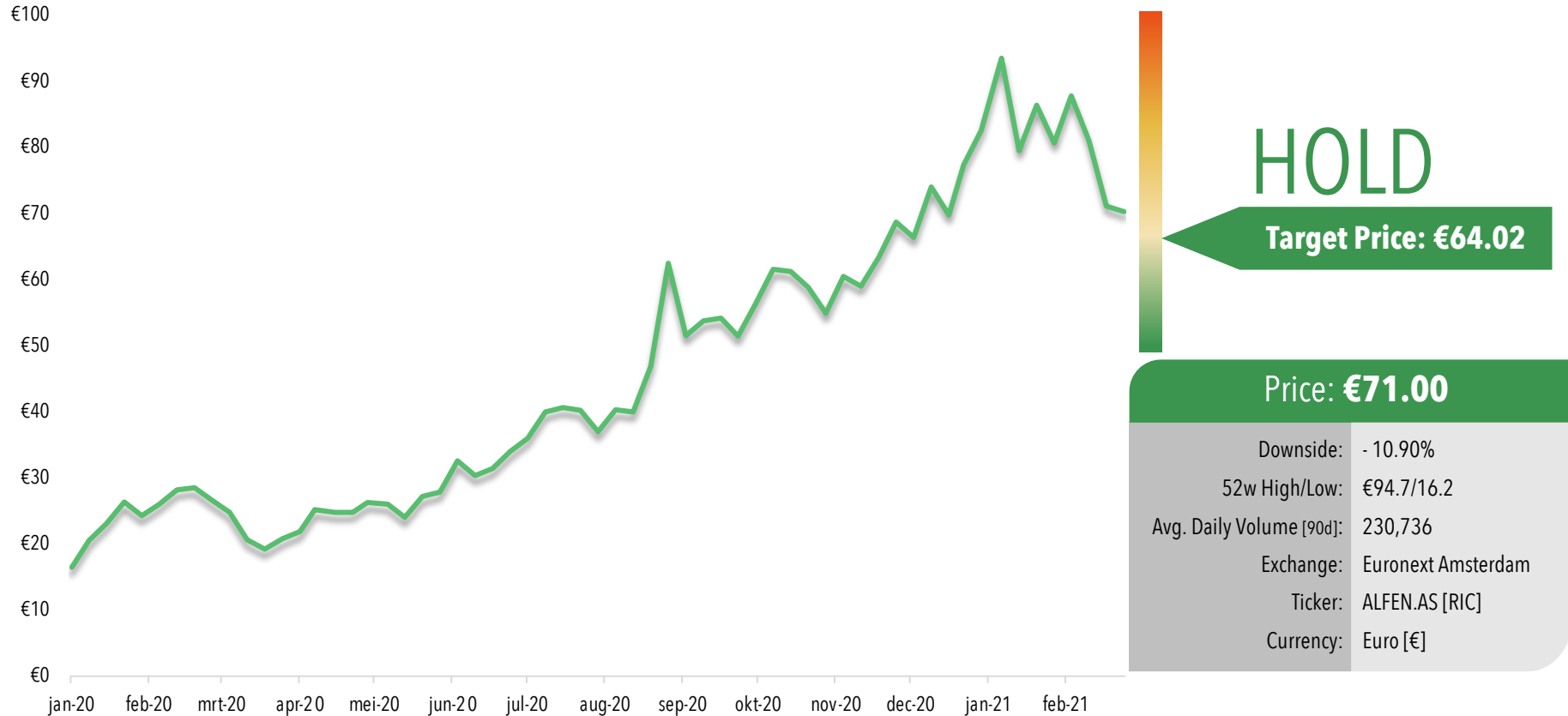
Investment Risk (2/3)



Investment Risk (3/3)



Final remarks



HOLD

Target Price: €64.02

Price: €71.00

Downside: - 10.90%

52w High/Low: €94.7/16.2

Avg. Daily Volume [90d]: 230,736

Exchange: Euronext Amsterdam

Ticker: ALFEN.AS [RIC]

Currency: Euro [€]

THANK YOU FOR YOUR ATTENTION!



Federico Ciaraffoni



Binta Steinröx



Alessio El Ghorayeb



Gaspard Tafforeau



Symyion Promt

 **ALFEN**
THE BATTERY

Appendix

Company & Industry

- [Timeline](#)
- [Supply chain](#)
- [Porter: Smart grids](#)
- [Porter: EV charger](#)
- [Porter: ES](#)
- [Cross-selling](#)
- [SWOT](#)

Financial Analysis

- [Profitability analysis](#)
- [Capital structure](#)
- [Liquidity analysis](#)
- [Cost of lithium](#)

Valuation

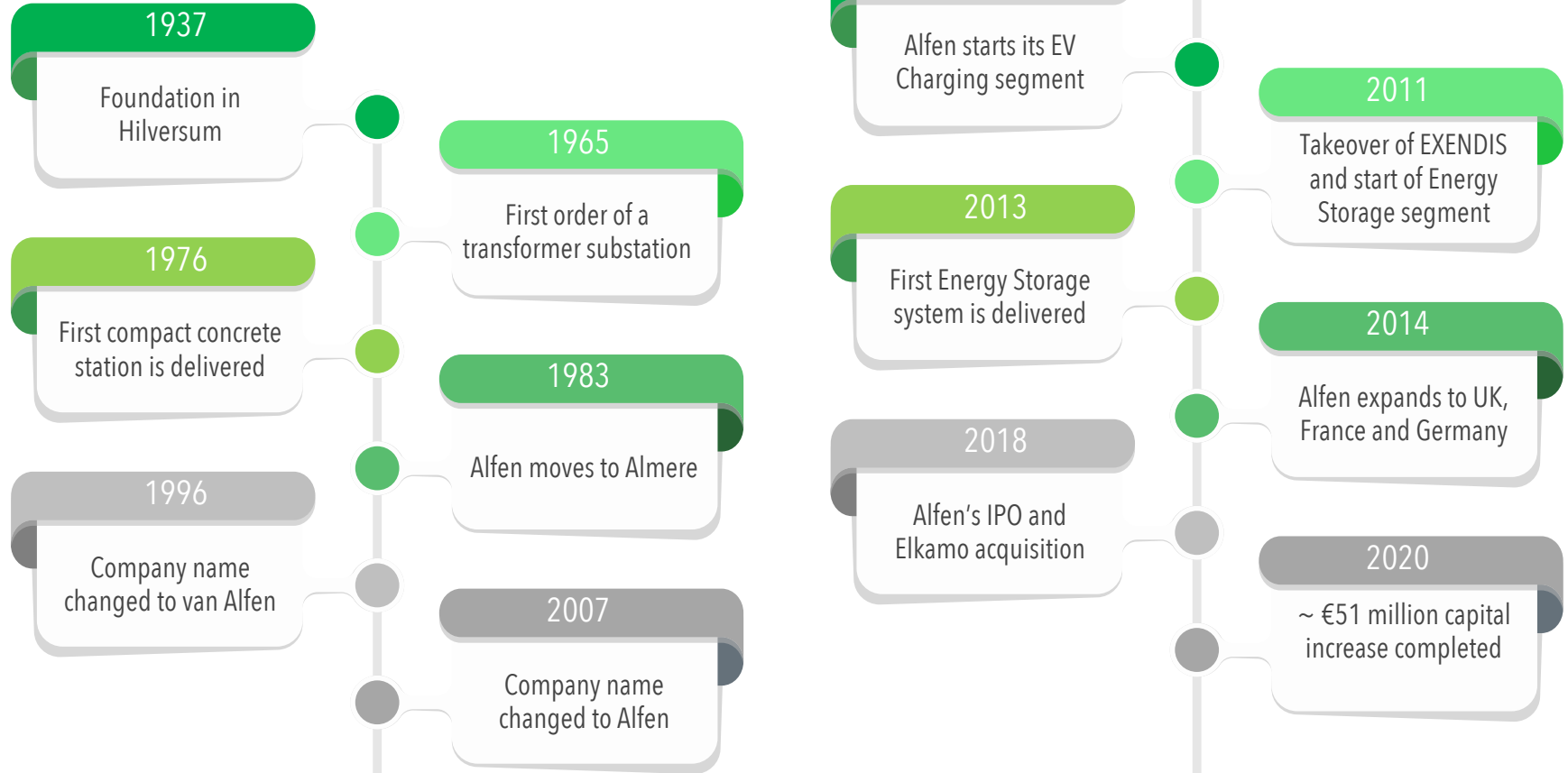
- [Comparables: classic](#)
- [Comparables: SOTP](#)
- [Comparables: summary](#)

ESG

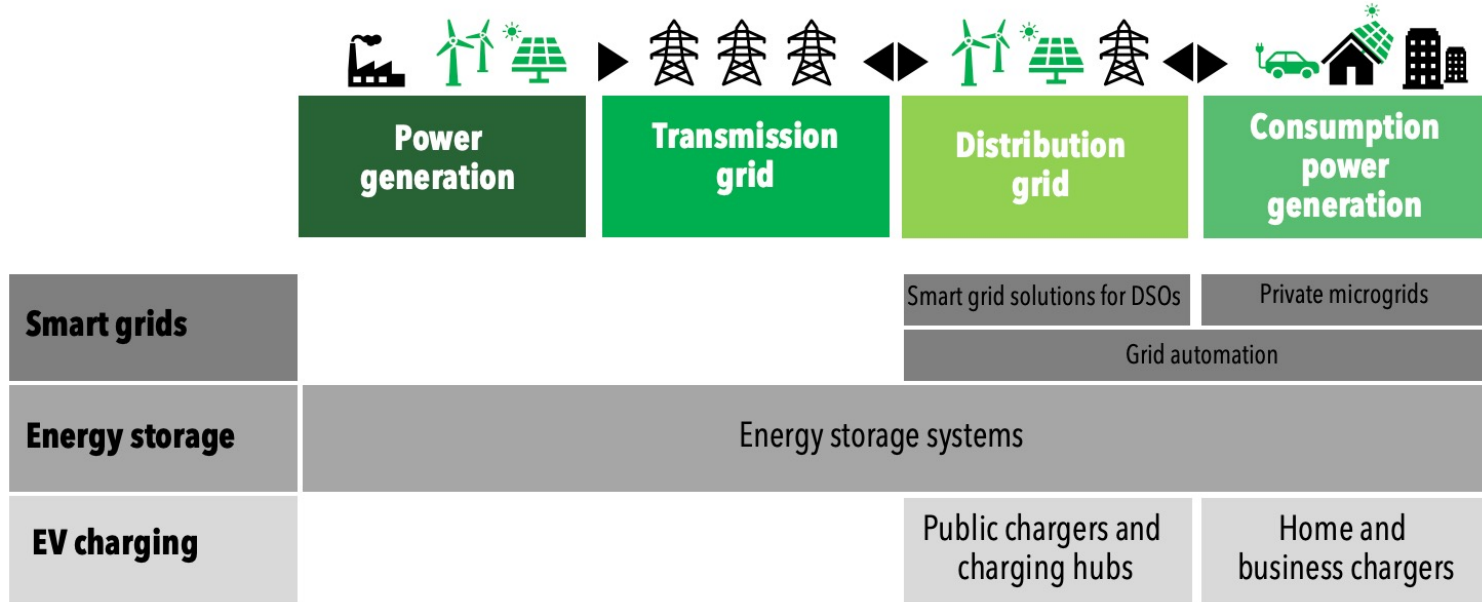
- [Shadow rating](#)



Timeline of key events in Alfen's history

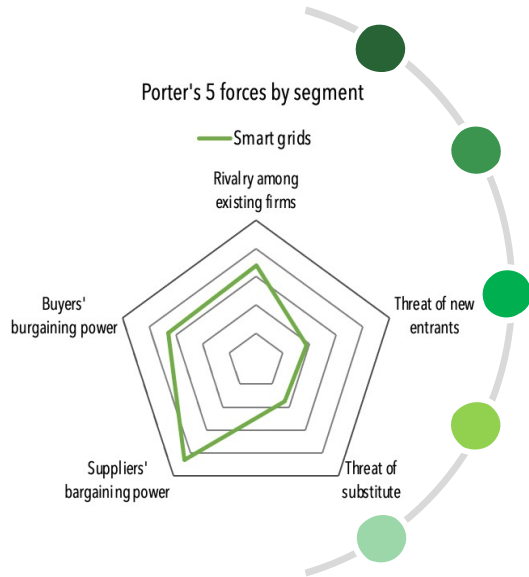


The decentralization of the energy industry





Porter's 5 forces: smart grids



Rivalry among existing firms : medium/high

Threat of new entrants: medium/low

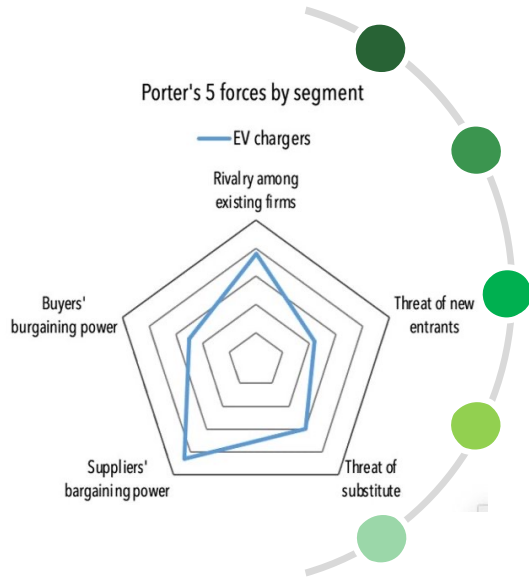
Threat of substitute: medium/low

Bargaining power of suppliers : high

Bargaining power of buyers: medium/high



Porter's 5 forces: EV charging equipment



Rivalry among existing firms : medium/high

Threat of new entrants: medium

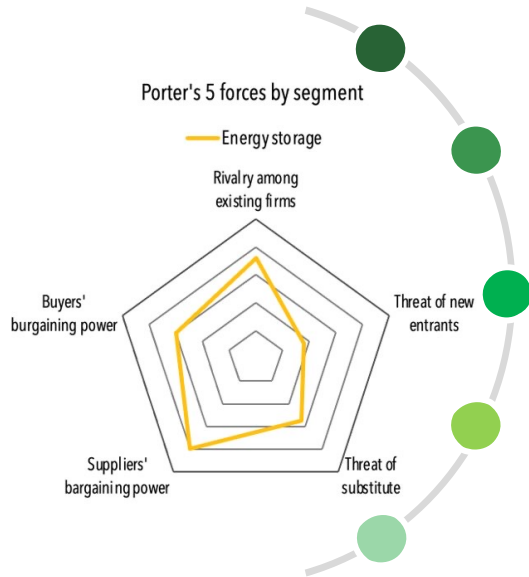
Threat of substitute: medium

Bargaining power of suppliers : high

Bargaining power of buyers: medium



Porter's 5 forces: energy storage



Rivalry among existing firms : medium/high

Threat of new entrants: medium/low

Threat of substitute: medium

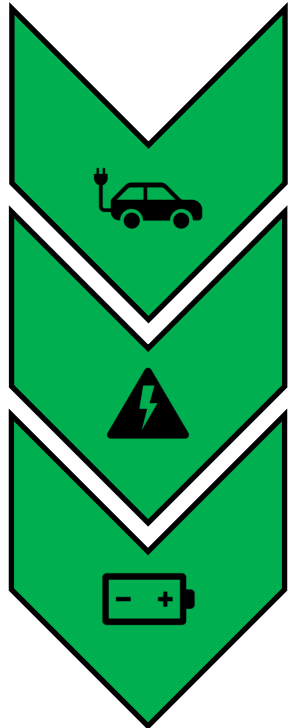
Bargaining power of suppliers : high

Bargaining power of buyers: medium

Cross-selling examples



VATTENFALL 

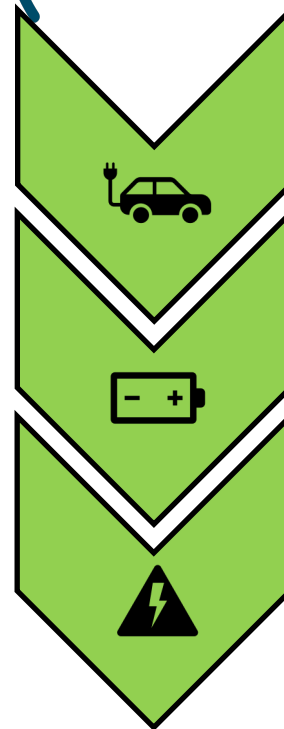


In 2017 EV
Charging contracts

In 2018 5.7 MW of solar
PV farm

In 2019 12 MW of energy
storage

fluvius.



In 2017 public EV
Charging points

In 2018 an energy storage
project

In 2019 a grid automation
project

SWOT analysis



Strengths

- Compatibility & Independence Alfen's clients benefit from their ability to provide unique integrated solutions independent of component affiliation.
- Cross-selling Alfen has positioned itself in a valuable market position for maximising cross-sales.
- Economies of scale Alfen is now able to leverage its capital base in supporting its increasing demand against lower marginal costs.
- First-mover advantage Alfen has built strong partnerships with various grid operators in its geographic markets, including Enexis, Alliander and Stedin.
- Environmental equity The increased political involvement in this transition allows for a substantial number of subsidies or tax-breaks to Alfen.
- Shareholding structure Alfen benefits from the recent IPO in terms of shareholding structure.
- Market development Alfen rides market development by manufacturing and providing equipment that aids the sustainable energy transition.

Weaknesses

- International position Although its sales teams are present in many European countries, it only holds the market leading position within the Netherlands.
- Compatibility The company's smart-grid solutions are "universal".

Opportunities

- Acquisition of other actors Even if Alfen seems to be focused on an organic growth strategy, the firm has already been active regarding M&A operations.

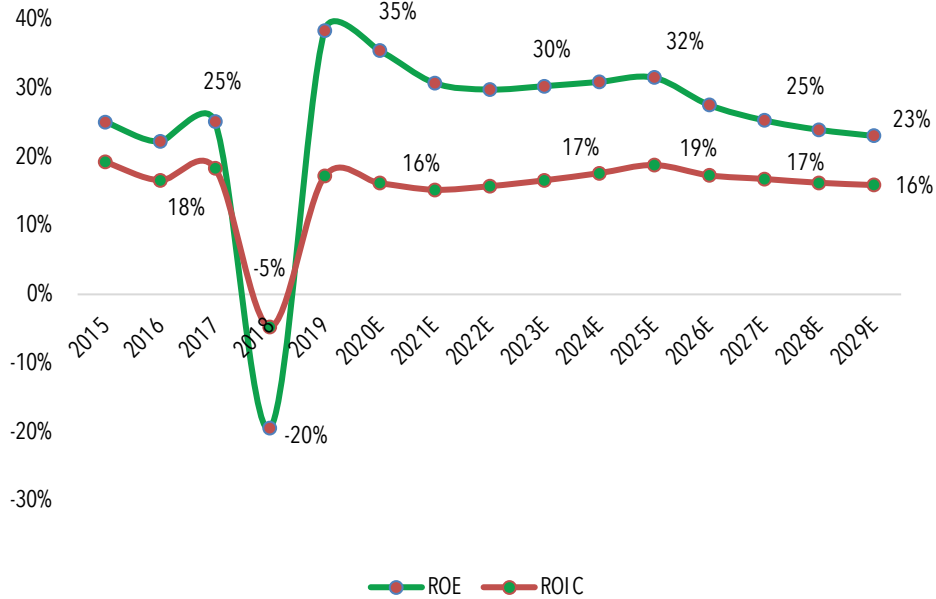
Threats

- Lack of exclusivity This point allows large clients to develop solutions in-house or switch to lower-cost alternatives once the market matures.
- Market saturation The one-off nature of investment in smart grids poses a threat of saturation within a given market.

Profitability



ROE & ROIC



Net Income vs EQT

— BV of Equity — Net Income [Normalized]

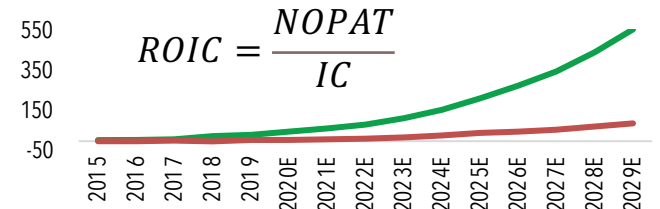
$$ROE = \frac{NI}{EQT}$$



NOPAT vs Invested Capital

— Invested Capital — NOPAT

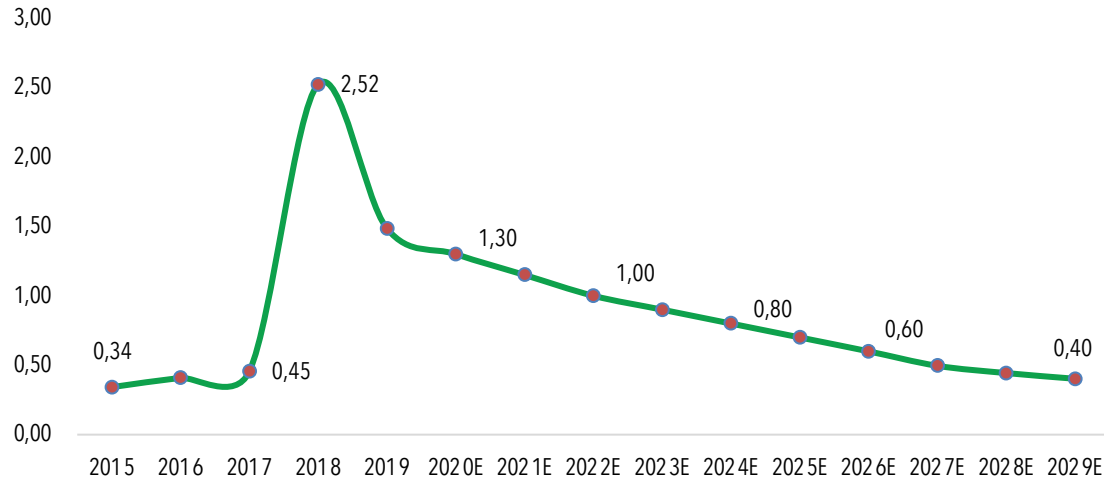
$$ROIC = \frac{NOPAT}{IC}$$



Capital Structure



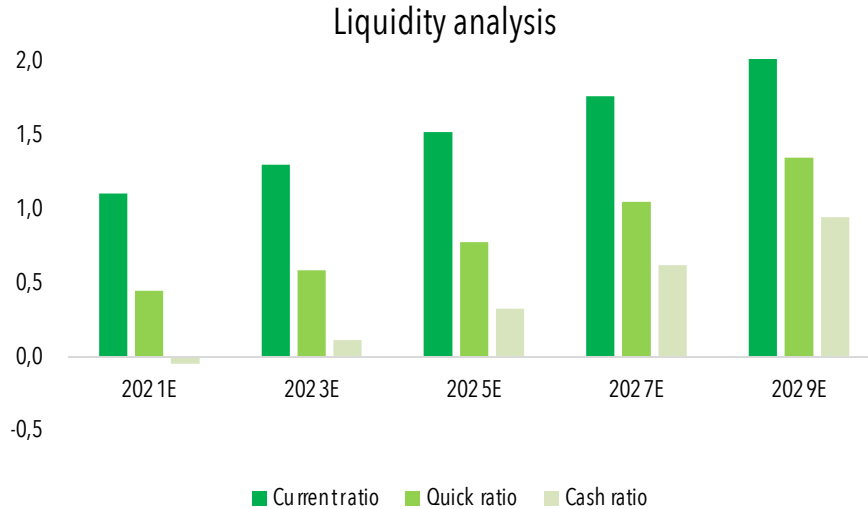
Financial leverage



Decreasing Debt/Equity

Reverts to pre Elkamo's acquisition level and Industry average

Liquidity Analysis



Negative Cash Ratio till 2022

- Expansion process
- Debt repayment

From 2022 strong CF from operations

Compensates negative CF from Investing activities



Cost of Lithium

The fall is not over yet... Possible further decrease by another 50-60% by 2030

Lithium-ion battery pack costs worldwide



Economies of Scale

Growth in the scale of global manufacturing capacity

Technology Improvement

Less material needs and standardisation

Further cost Decrease

Across manufacturing value chain

Shadow Rating



	Environmental Pillar Score			Social Pillar Scores				Governance Pillar Scores		
	Emission	Innovation	Resource Use	Human Rights	Product Responsibility	Workforce	Community	Management	Shareholders	CSR Strategy
PILLAR WEIGHTS	0.33	0.28	0.38	0.31	0.12	0.26	0.31	0.67	0.20	0.13
Electronic Equipment & Parts Industry	0.13	0.11	0.15	0.10	0.04	0.08	0.10	0.20	0.06	0.04
Alfen	0.98	0.99	0.97	0.88	0.95	0.90	0.65	0.85	0.90	0.95
PILLAR SCORE	0.97			0.82				0.87		

	Alfen	Schneider Electric SE	ABB Ltd.	Siemens AG	Contemporary Amperex Technology Co Ltd	GS Yuasa Corp
ESG Combined Score	0.9068	0.6643	0.9361	0.4641	0.4961	0.5394
ESG Score	0.9068	0.6643	0.9361	0.8448	0.4961	0.5394
Environmental Pillar Score	0.9692	0.6634	0.9677	0.8909	0.6767	0.8371
Social Pillar Score	0.8223	0.8475	0.9437	0.7505	0.4642	0.4349
Governance Pillar Score	0.8730	0.4252	0.8881	0.9306	0.3210	0.3192
ESG Controversies Score	100.00	100.00	100.00	8.33	100.00	100.00
Rating	A	B	A+	C+	C+	B-

Score range	Grade	Description
0.000 - 0.083	D-	D indicates poor ESG performance
0.083 - 0.166	D	and insufficient transparency in reporting
0.166 - 0.250	D+	
0.250 - 0.333	C-	C indicates satisfactory ESG
0.333 - 0.416	C	performance and moderate
0.416 - 0.500	C+	transparency in reporting
0.500 - 0.583	B-	B indicates good ESG performance
0.583 - 0.666	B	and above average transparency in
0.666 - 0.750	B+	reporting
0.750 - 0.833	A-	A indicates excellent ESG
0.833 - 0.916	A	performance and high transparency
0.916 - 1.000	A+	in reporting

Source: team estimates, Refinitiv

Relative valuation – Classic approach



Company name	Currency	Market data				Financial data 2019				Multiples			
		Stock price(1)	EqV(1)	Net debt	EV	Sales	EBITDA	EBIT	Net income	EV/Sales	EV/EBITDA	EV/EBIT	P/E
Jinlei Technology	YENm	37.9	9,622	-241	9,381	1,115	277	226	205.20	8.42x	33.92x	41.57x	46.89x
Allis Electric	T\$m	25.8	5,741	180	5,921	4,819	323	277	296	1.23x	18.32x	21.37x	19.42x
Koncar-Distributivni	HRKm	1,420.0	723	-36	688	1,069	74	52	47.80	0.64x	9.31x	13.13x	15.14x
Harju Elekter	€m	5.5	97	14	112	143	7	3	2	0.78x	16.33x	33.70x	39.52x
Ilijin Power	SKWbn	5,500.0	82	-32	51	183	17	14	11.77	0.28x	3.04x	3.54x	6.99x
Average multiple										2.27x	16.18x	22.66x	25.59x
Alfen's aggregate										143,169	14,460	9,260	5,625
Implied valuation										324,788	234,017	209,837	143,954

From EV multiples (€k)	From EV/EBIT	
Enterprise Value	256,214	209,837
Net debt (2019)	19,254	19,254
Equity value	236,960	190,583
Share price	11.3	9.1

From EqV multiples (€k)	
Equity value	143,954
Share price	6.9



Relative valuation – Sum-of-the-parts approach

Company	Revenue breakdown				
	Smart grids	Storage	EV charging	Other	Total
Leclanché	48.79%	37.76%	0.00%	13.46%	100.00%
Revenue	7,803	6,039	0	2,152	15,994
EBITDA	-25,385	-5,615	0	-8,086	-39,086
EBIT	-27,823	-5,935	0	-8,293	-42,051
Net income	-40,667	-31,474	0	-11,216	-83,357
Schneider Electric	76.76%	0.00%	0.00%	23.24%	100.00%
Revenue	20,847	0	0	6,311	27,158
EBITDA	3,981	0	0	1,205	5,186
EBIT	3,079	0	0	932	4,011
Net income	1,855	0	0	0	2,416
Siemens	0.00%	0.00%	20.34%	79.66%	100.00%
Revenue	0	0	17,663	69,186	86,849
EBITDA	0	0	2,116	8,290	10,406
EBIT	0	0	1,406	5,506	6,912
Net income	0	0	1,052	4,120	5,172
Silicon Laboratories	0.00%	0.00%	21.87%	78.13%	100.00%
Revenue	0	0	183	654	838
EBITDA	0	0	25	89	114
EBIT	0	0	13	45	58
Net income	0	0	4	15	19
Alfen	72.35%	9.39%	18.26%	0.00%	100.00%
Revenue	103,584	13,449	26,136	0	143,169
EBITDA	10,462	1,358	2,640	0	14,460
EBIT	6,700	870	1,690	0	9,260
Net income	4,070	528	1,027	0	5,625

From EV multiples (€k)		From EV/EBIT	
Enterprise Value	339,151	225,928.1	
Net debt (2019)	19,254	19,254.0	
Implied EqV	319,897	206,674	
Share price	15.2	9.8	
From P/E multiples (€k)			
Implied EqV	224,579		
Share price	10.7		

Source: team estimates, Refinitiv



Company name	Currency	Market data				Financial data 2019				Multiples			
		Stock price(1)	EqW(1)	Net debt	EV	Sales	EBITDA	EBIT	Net income	EV/Sales	EV/EBITDA	EV/EBIT	P/E
Leclanché	CHF	1.1	142,107	20,664	162,771	7,803	-25,385	-27,823	-40,667	20.86x	N/A	N/A	N/A
Schneider Electric	€m	127.2	55,652	3,732	59,384	20,847	3,981	3,079	1,855	2.85x	14.92x	19.29x	30.01x
Gomero Group AB	KRk	9.7	43,360	-5,226	38,134	33,914	41	-753	-616	1.12x	N/A	N/A	N/A
Landis+Gyr Group AG	CHFm	69.5	2,177	102	2,279	1,676	229	144	112	1.36x	9.95x	15.85x	19.40x
Gersan Elektrik Ticaret ve Sanayi AS	TLm	6.2	493	91	583	218	-51	-55	-36	2.68x	N/A	N/A	N/A
Zpue SA	PLNm	188.0	252	93	345	688	83	59	47	0.50x	4.15x	5.88x	5.36x
Dalekovod dd	HRKm	6.2	151	377	528	1,227	26	-10	3	0.43x	20.24x	N/A	45.84x
Harju Elekteer AS	€m	5.5	97	14	112	143	7	3	2	0.78x	16.33x	33.70x	39.52x
APS Energia SA	PLNm	2.1	59	16	75	135	16	13	11	0.56x	4.76x	5.90x	5.54x
Average multiple										3.46x	11.73x	16.12x	24.28x
Alfen's aggregate										103,584	10,462	6,700	4,070
Implied valuation										358,430	122,669	108,025	98,804

Company name	Currency	Market data				Financial data 2019				Multiples			
		Stock price(1)	EqW(1)	Net debt	EV	Sales	EBITDA	EBIT	Net income	EV/Sales	EV/EBITDA	EV/EBIT	P/E
Contemporary Amperex Technology	YENm	419.0	942,272	-5,029	937,243	45,516	9,485	5,076	4,560	20.59x	98.81x	184.64x	206.64x
Leclanché	CHFk	1.1	109,981	15,993	125,974	6,039	5,615	-5,935	-31,474	20.86x	N/A	N/A	N/A
VARTA AG	€m	128.0	6,130	-212.8	5,917	363	85	64	50	16.31x	69.60x	92.23x	121.64x
GS Yuasa Corporation	YENbn	3,170.0	268	46	314	396	41	22	14	0.79x	7.71x	14.48x	19.56x
Seri Industrial SpA	€m	4.4	199	73.9	273	143	12	0	2	1.90x	22.41x	N/A	125.72x
Monbat AD	LVm	4.0	156	174.1	330	330.1	36	17	10	1.00x	9.29x	19.34x	15.29x
LG Chem Ltd	SKWbn	989,000.0	74	6,493	6,567	28,625	2,752	896	313	0.23x	2.39x	7.33x	0.24x
Samsung SDI Co. Ltd	SKWbn	710,000.0	52	2,313	2,365	10,097	1,318	462	357	0.23x	1.79x	5.12x	0.14x
Average multiple										7.74x	30.29x	53.86x	69.89x
Alfen's aggregate										13,449	1,358	870	528
Implied valuation										104,105	41,141	46,848	36,930

Company name	Currency	Market data				Financial data 2019				Multiples			
		Stock price(1)	EqW(1)	Net debt	EV	Sales	EBITDA	EBIT	Net income	EV/Sales	EV/EBITDA	EV/EBIT	P/E
Chroma ATE	Ntm	172.5	72,428	1,534	73,962	13,910	2,506	2,059	1,854	5.32x	29.51x	35.92x	39.07x
ABB	CHFm	26.8	57,976	5,782	63,758	27,794	3,481	2,526	1,037	2.29x	18.32x	25.24x	55.91x
Siemens	€m	124.6	21,436	6,208	27,644	17,663	2,116	1,406	1,052	1.57x	13.06x	19.67x	20.38x
GARO AB	KRm	670.0	6720	46	6,766	1,008	137	114	86	6.71x	49.56x	59.24x	78.41x
Silicon Laboratories	\$m	136.5	1,297	-74	1,223	183	25	13	4	6.67x	49.08x	97.22x	307.25x
Schaffner Holdings	CHFm	204.0	130	16	146	197	15	10	7	0.74x	10.05x	14.91x	18.11x
Paragon GmbH & Co. KGaA	€m	9.6	44.27	140	184	192	-67	-89	-83	0.96x	N/A	N/A	N/A
Average multiple										3.47x	28.26x	42.03x	86.52x
Alfen's aggregate										26,136	2,640	1,690	1,027
Implied valuation										90,572	74,609	71,055	88,844

(1) Stock price as of 10/01/2021

Source: team estimates, Refinitiv