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Equity Research Division

Ecolab Inc.

Specialist in water treatment and hygiene

Target Price: \$ 121.02

Current Price: \$ 169.82

Downside Potential 28.7%

Recommendation: SELL

Vienna, 10th of June 2022

Team Overview

Equity Research



Valentin Horak

Head of Equity Research

- Task distribution
- Story guideline



▪ BSc. (WU) – 4th Sem.



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- Operating Model
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- Risk Analysis
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▪ M.A. (LBS) – 2nd Sem.
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- Financial Analysis
- Strategy

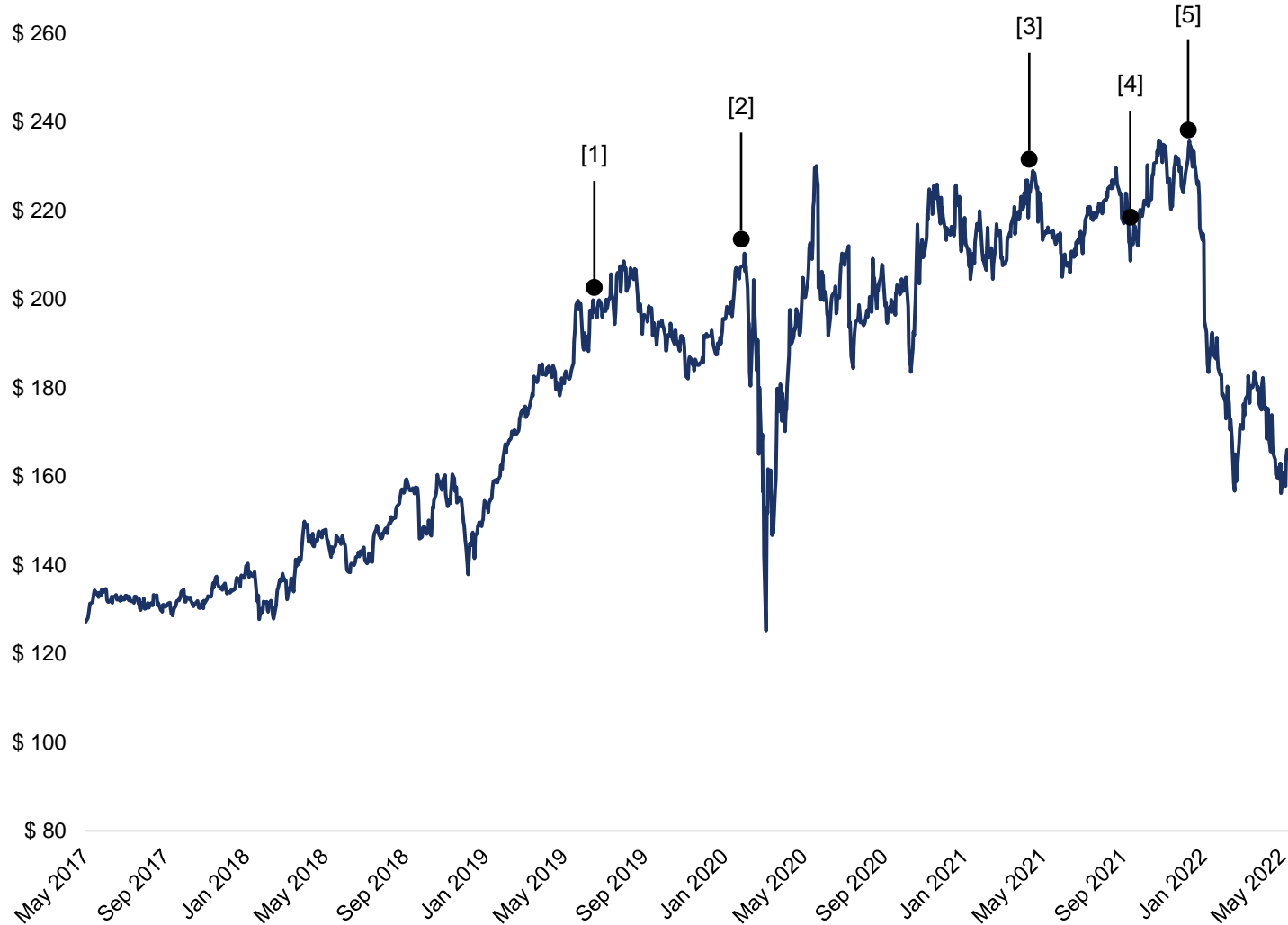


▪ MSc. (UW) – 4th Sem.

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4	Financial Analysis and Valuation	21
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Share Price Performance

The share price development shows constant investor expectations, recently severely harmed by crisis



Share Price – Major Events

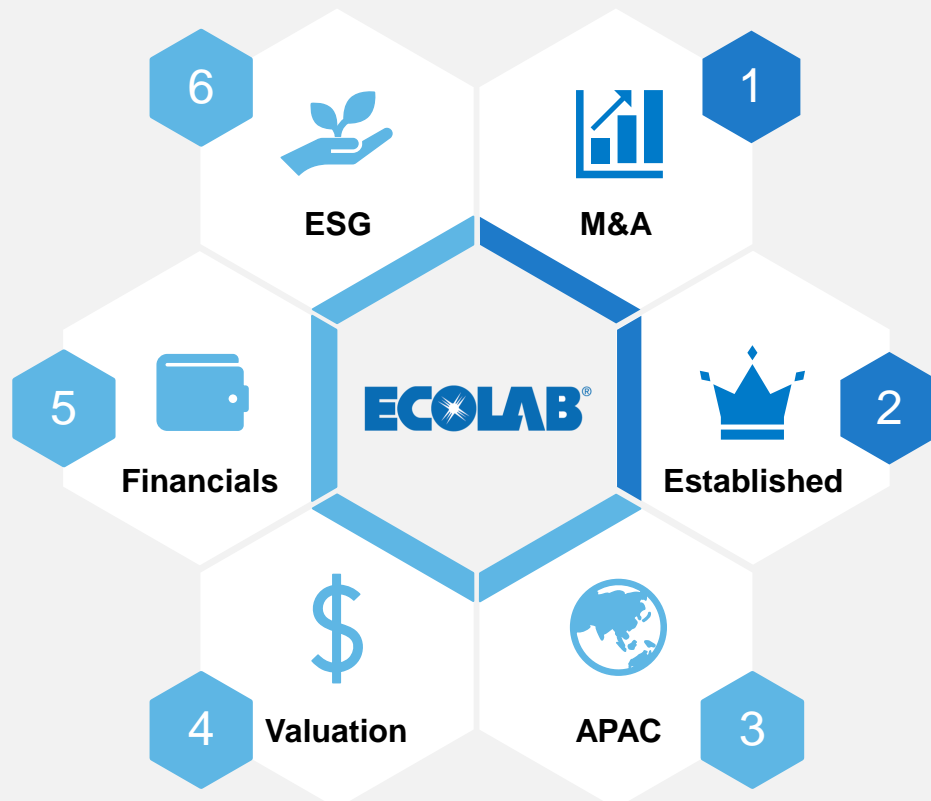
- [1] Jul 2019 (-11.5%) – **Dropped from Russell Value-Defensive Index**, leading to Index-tracking funds excluding Ecolab from their portfolios
- [2] Feb 2020 (-40.5%) – **COVID-19** shutdowns cause **instability** and shock the **global economy** which leads to massive drops in the stock market
- [3] Apr 2021 (-9.5%) – Ecolab announces the **closing of several facilities** (e.g., Mississippi)
- [4] Oct 2021 (+6.6%) – **Acquisition of Purolite** to boost life sciences exposure in the purification industry and enlarge the market presence
- [5] Jan 2021 – Jun 2022 (-27.7%) – Downward economy due to **Russia/Ukraine war** and all-time **high inflation**

Key Stats

- **52 week range:** \$ 154.31 – \$ 238.93
- **IPO:** Jan 1957 at \$ 15
- **Market Cap:** \$ 48.62 bn
- **Shares Outstanding:** 286 mn

A supposed global leader failing to fulfill ESG hopes and stuck with a lofty valuation

Key investment highlights



- 1 Strong track-record of successful **acquisitions** that have enabled Ecolab to stay in a **competitive position** against its main rivals in the past
- 2 Ecolab is an **established player** in the field of industrial chemical applications and water management solutions offering a **wide range** of different **products**
- 3 Ecolab has **no** sophisticated expansion **strategy** into **APAC** region, which is the **fastest growing market** for chemicals and wastewater treatment
- 4 Based on the historical performance and no obvious catalyst for change, Ecolab is **highly overvalued** in our perspective with a **PE-ratio** of **44x**
- 5 Despite **optimistically forecasted revenue** growth estimates by the company, Ecolab has been experiencing **stagnation** over the past 10 years
- 6 Although being awarded with multiple sustainability awards, **ESG-related** activities show **inconsistencies**



ECOLAB

INFORMA

Infiniti

Business Overview & Business Model


Company Overview


A global player with \$ 12.7 bn revenue in the water treatment and purification industry


Company Description

Ecolab is a **chemical company**, offering products and solutions ranging from **chemicals** with an industrial application to **water management solutions**

 Founded in 1923

 Headquarters in St. Paul, MN, USA

 47 000 employees

 Operations in more than 170 countries

Financials

USD mn	2018	2019	2020	2021
Revenue	14 668	12 562	11 790	12 733
<i>Revenue Growth (%)</i>	6.02%	-14.36%	-6.14%	8%
EBITDA	1 947	1 845	1 395	1 598
<i>EBITDA Margin (%)</i>	13.27%	14.69%	11.84%	12.55%
Net Income	1 429	1 558	-1 205	1 129
<i>Net income Margin (%)</i>	9.74%	12.41%	-10.22%	8.87%

Management



Christophe Beck
Chairman, President & CEO
Since 2007



Scott Kirkland
CFO
Since 2005

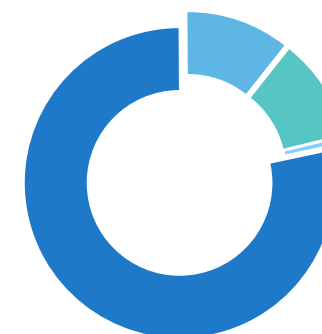


Nicholas Alfano
Executive VP & GM
Since 1996



Dr. Larry Berger
Executive VP & CTO
Since 2008

Shareholder Structure

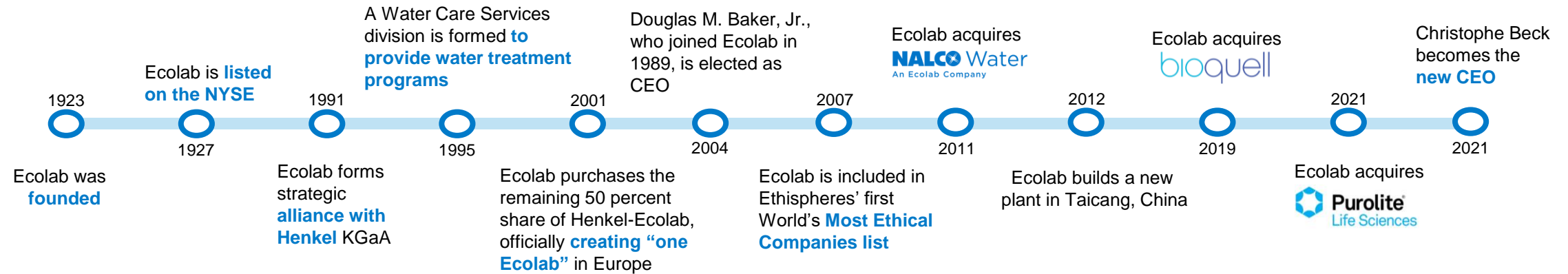


- Cascade Investment LLC (10.74%)
- Vanguard Group (7.62%)
- BlackRock (7.11%)
- State Street Corp. (3.99%)
- Wellington Management LLP (3.24%)

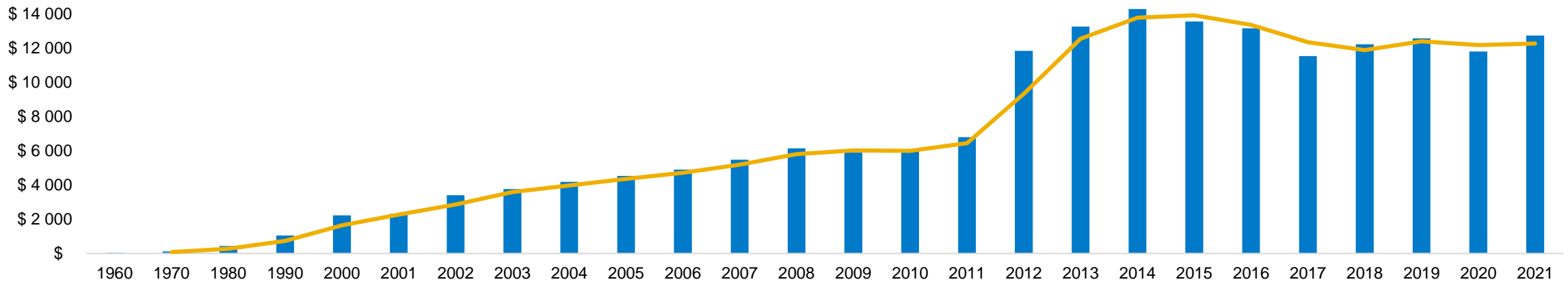
Company Timeline

An established player in a niche market with a rich history, struggling with stagnating growth recently

Ecolab's history

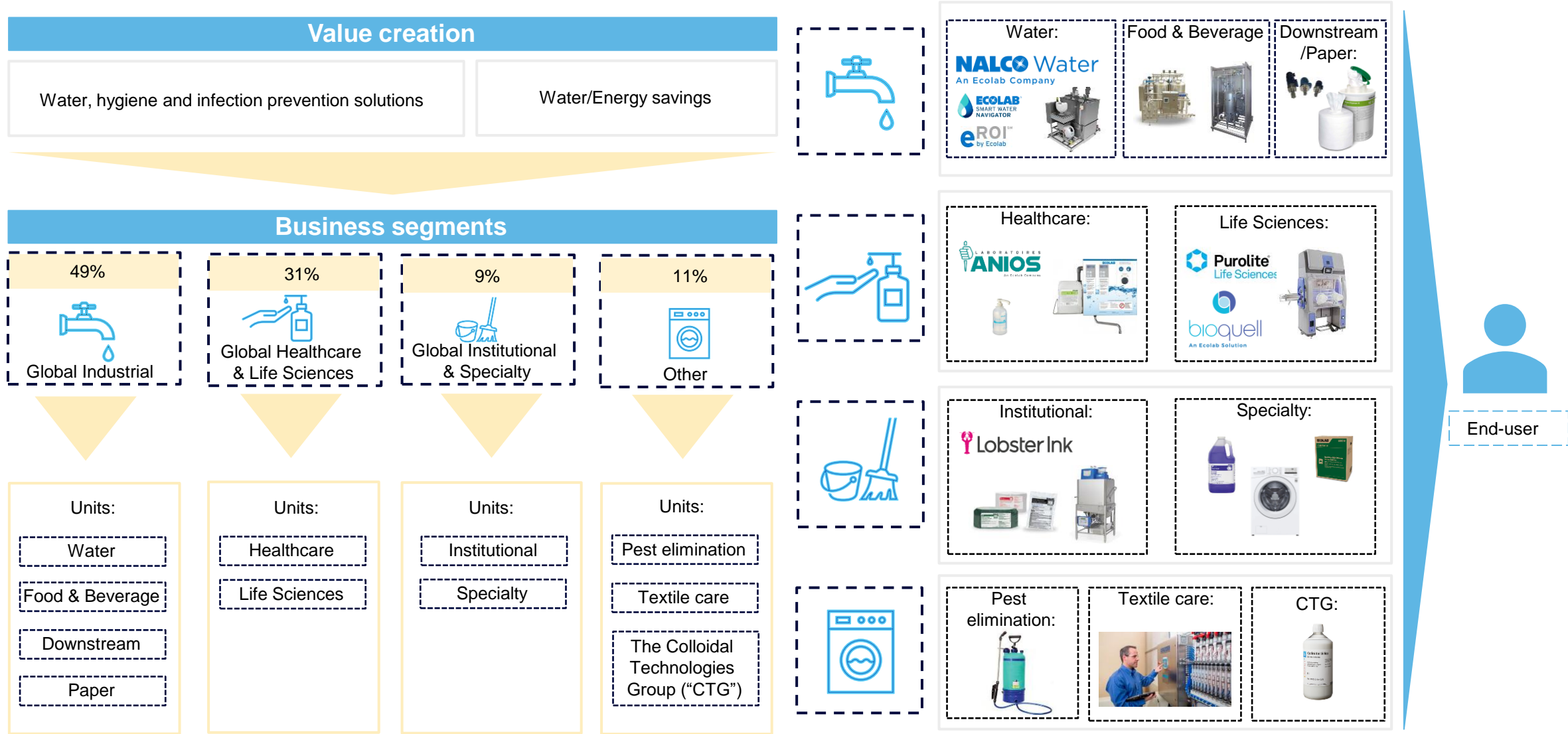


Revenue growth throughout history (in mn)



Value Creation

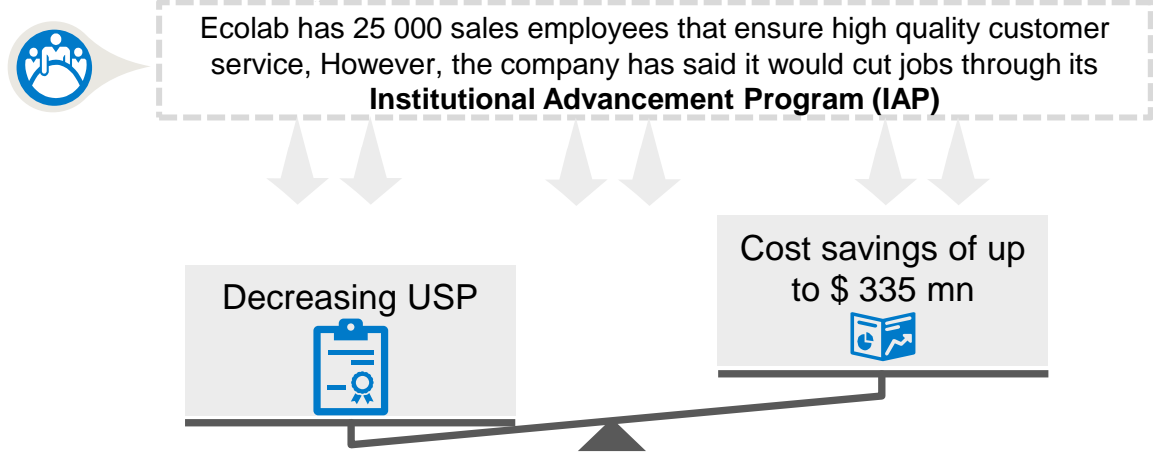
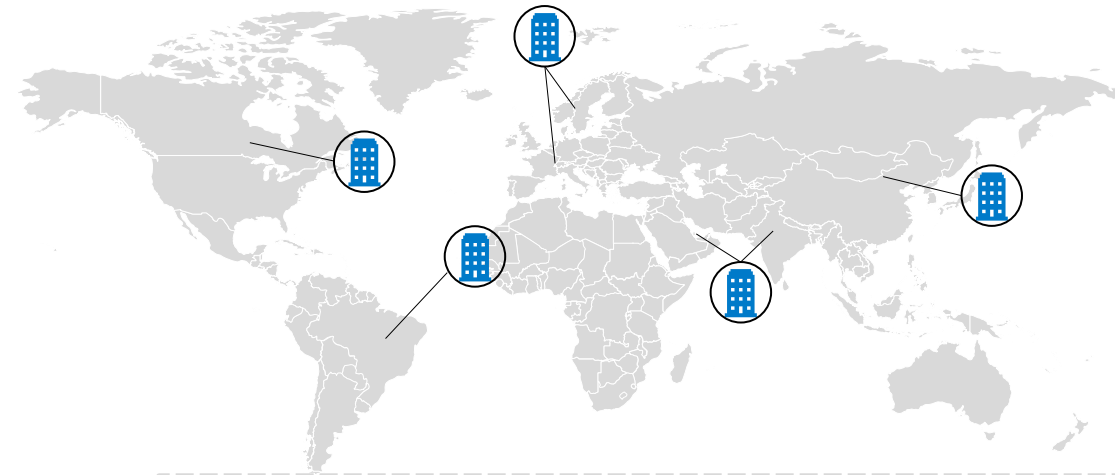
Providing water, hygiene and infection prevention solutions and services for a variety of customers



Customer Relations & Investment Strategy

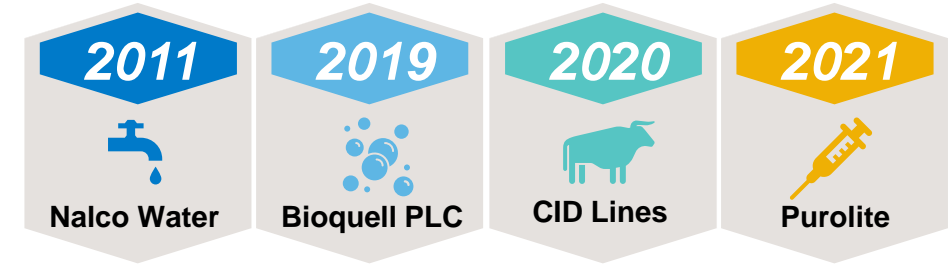
Strategic inconsistencies make it hard for Ecolab to follow through with its business model's potential

Customer Relations & IAP



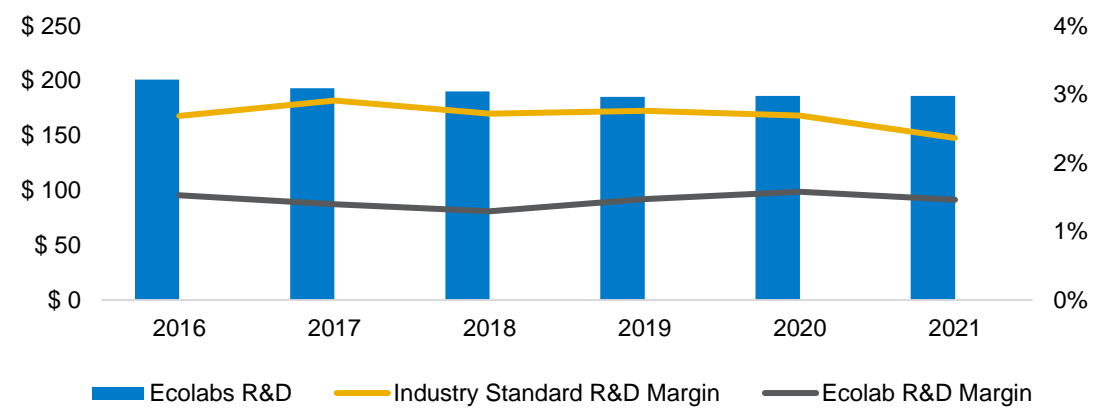
Innovation through M&A

Ecolab **added the most innovative products** in its portfolio such as Water Treatment Solutions (TRASAR) and Resin Technology **via M&A activity**



In order to remain competitive, Ecolab **relies on significant funds to fuel M&A activity**

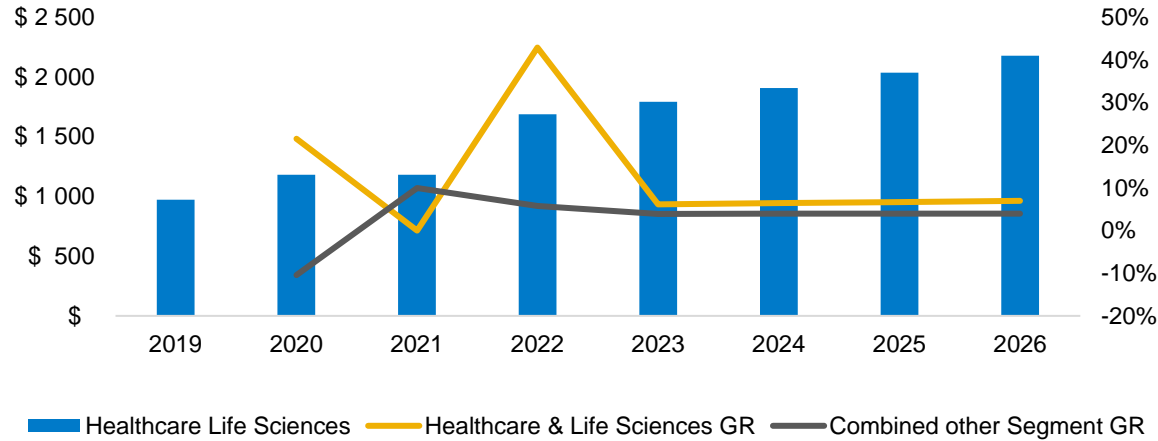
Ecolab's Research & Development – Industry Comparison (in mn)



Segment Focus & Expansion

Ecolab is looking to set a strong focus on the development on its Healthcare & Life Science segment

Focus on Life Sciences (in mn)

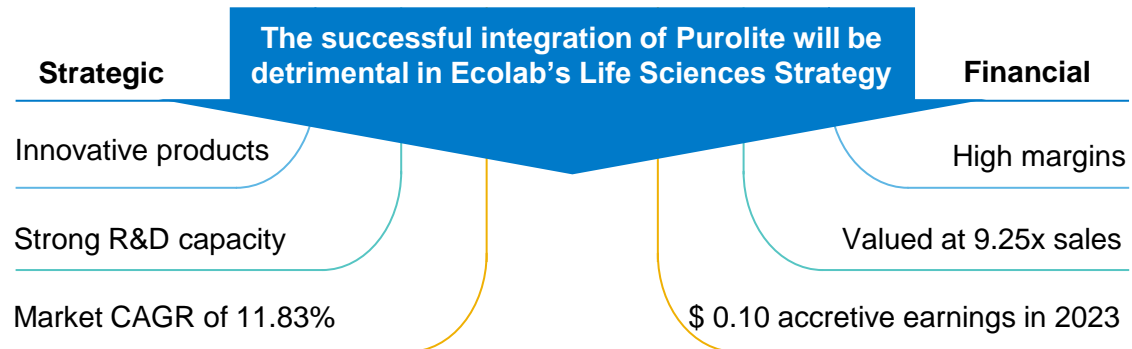


Ecolab Science Certified

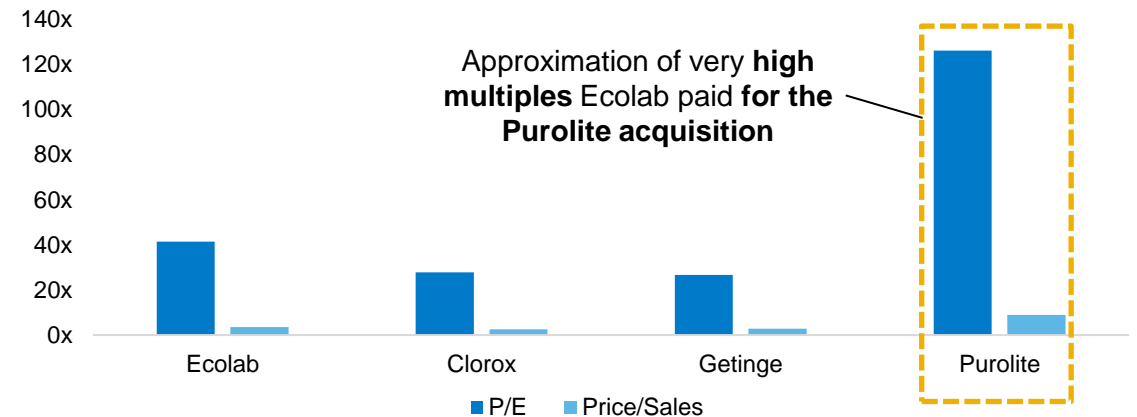


Integration of Purolite

Purolite is a **medical company** focusing on clinical applications of resin technology in areas such as mRNA and will **add to Ecolab's Life Science Business**



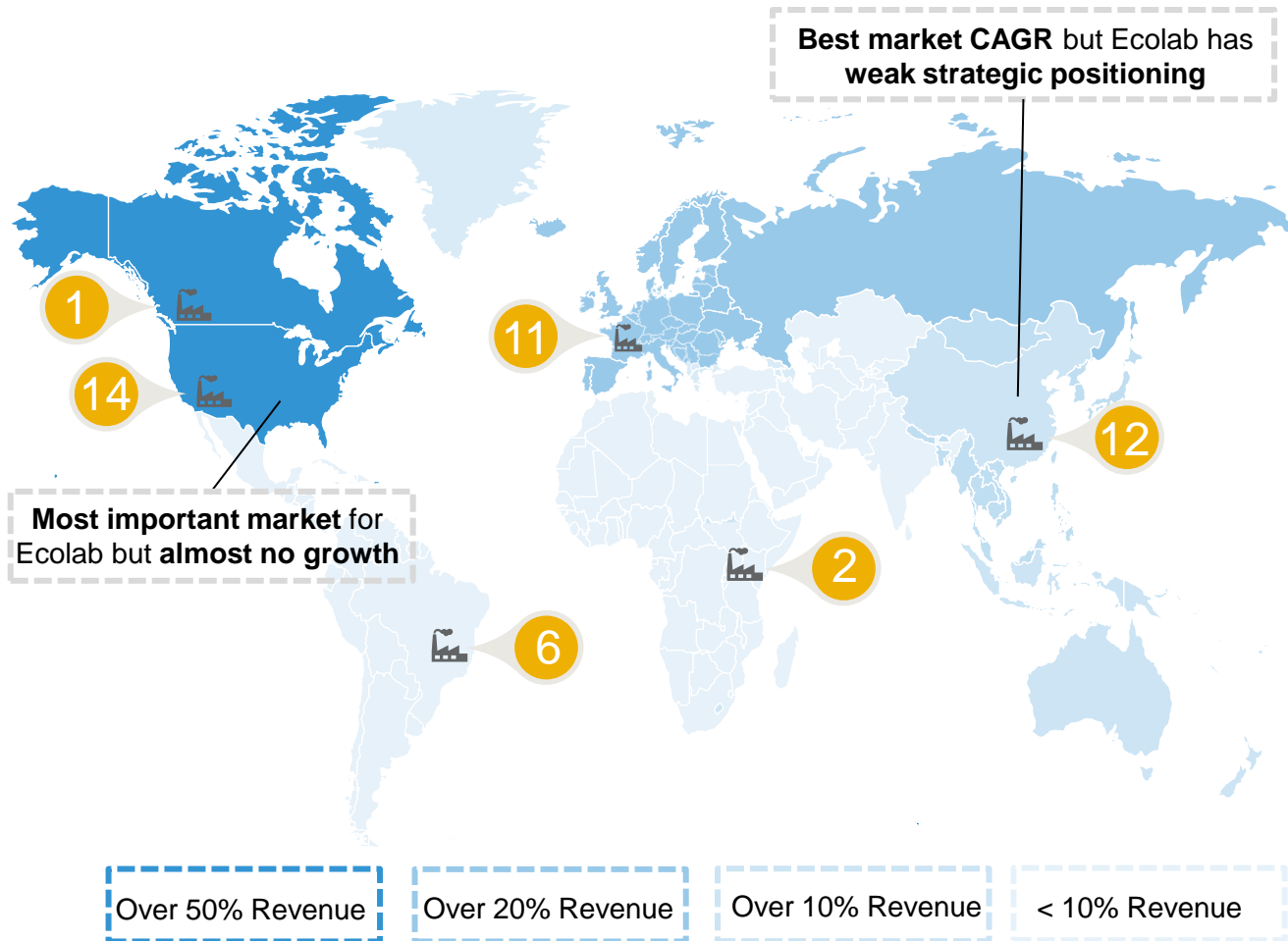
Purolite acquisition – a closer look



Geographies & Strategy Overview

Ecolab is lacking diversification in terms of its geographic distribution amongst other shortfalls

Key Markets



Strategy Overview & Business Needs

Segments

Focus on the high margin segment Healthcare & Life Sciences

- Through the integration of Purolite



Cost Restructuring

Focus on improving financial performance

- Through Institutional Advancement Program



Customer Relations

Focus on improving the customer relations

- Through Ecolab Science Certified



Geography

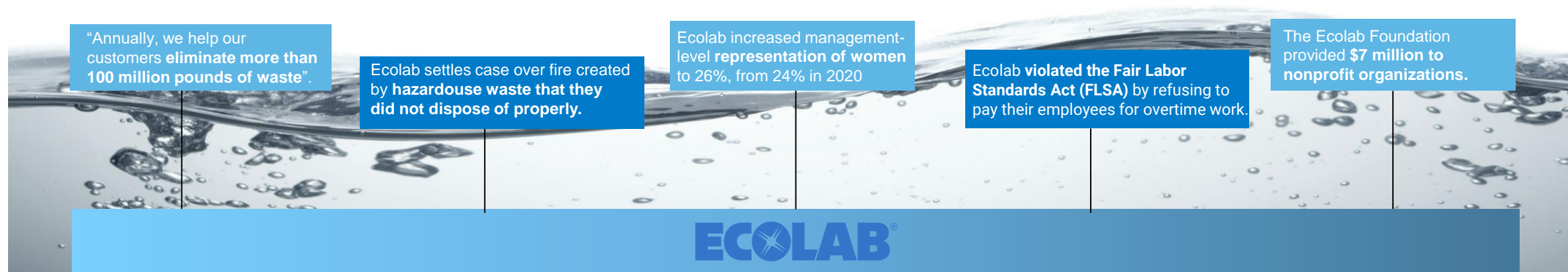
Focus on market entry in fast growing APAC markets

- Through aggressive entry Strategy






Despite proclamations for ESG importance, Ecolab repeatedly fails to keep up with expected standards

Ecolab's ESG Journey



Awards & Recognitions

Organization	Description
	The World's Most Ethical Company For the 15th consecutive year, Ecolab was named one of the World's Most Ethical Companies by the Ethisphere Institute.
	The World's Most Admired Company For the seventh consecutive year, Ecolab was named to Fortune's list of the World's Most Admired Companies.
	The Most Just Company Ecolab was named one of America's Most Just Companies by Forbes, ranking 22nd on the 2021 list.

News & Reality

Year	News
2019	Ecolab pays \$ 214K penalty for hazardous waste, pesticides violations and 2019 Tacoma Tideflats fire.
2020	A California law firm has filed a class action lawsuit against Ecolab on behalf of three plaintiffs alleging they sustained personal injuries through use of OxyCide.
2021	Ecolab settled a case where it was accused of violating the Fair Labor Standards Act (FLSA) and state wage and hour laws by withholding overtime pay.
2022	Ecolab accused of firing whistleblower employees

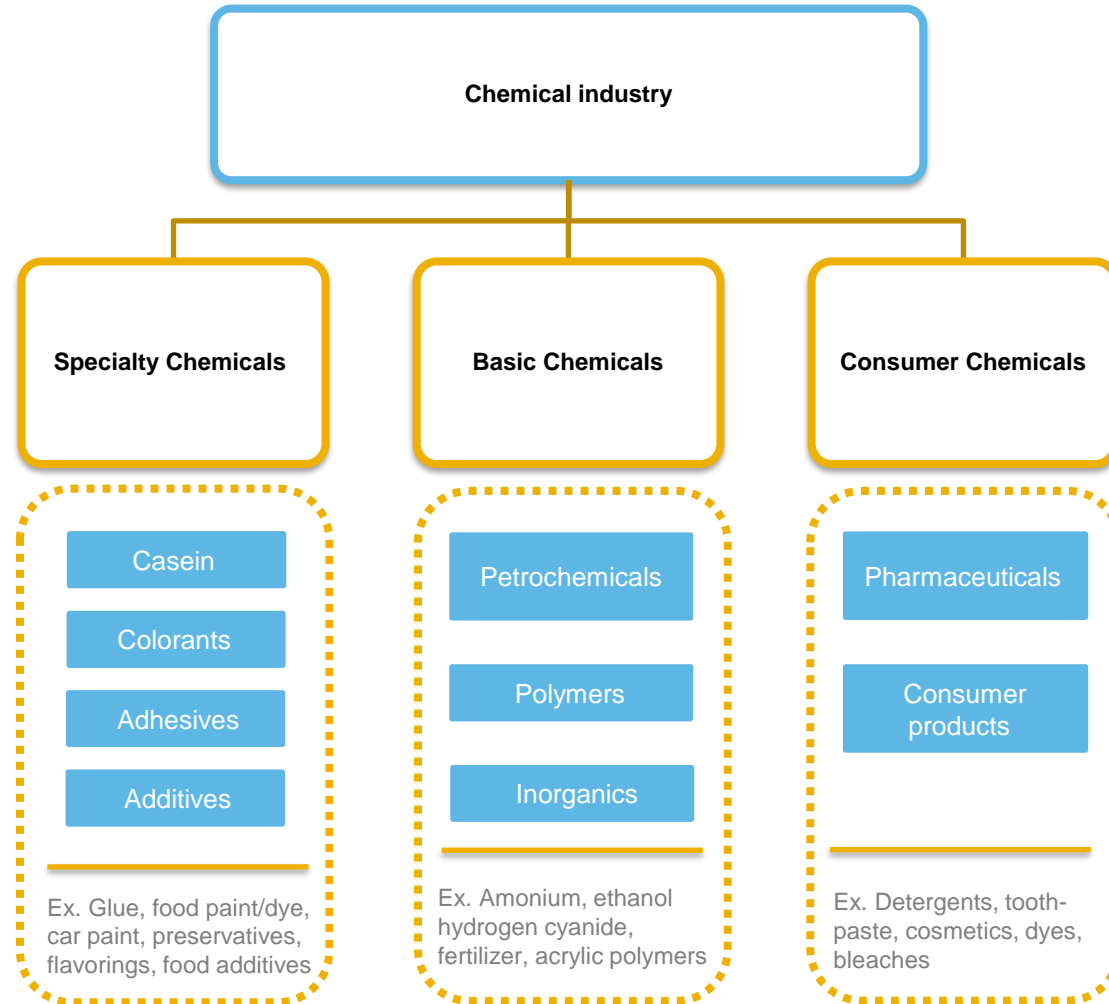


Market and Industry Overview

Chemical industry - Market Drivers & Trends

Expected margin pressure in the chemicals industry might prove to be an obstacle

Overview of the chemical industry



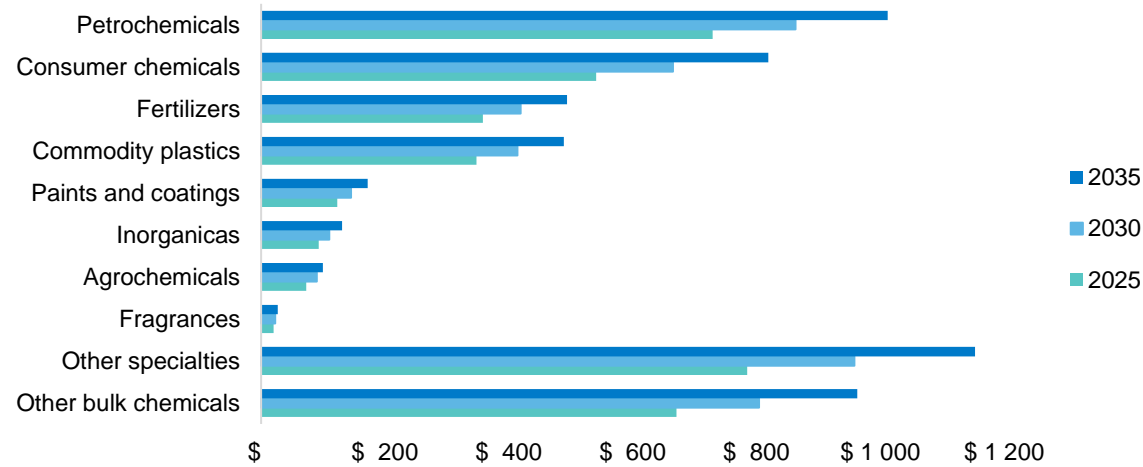
Key industry facts

- 
Basic chemicals dominate the industry
 Base chemicals represented 58% of total EU27 chemical sales in 2020. The rise in adoption of basic chemicals in the food & beverage industry drive the growth of the global basic chemicals market.
- 
Chemical industry as a slow adapter
 Historically, the chemical industry has been a slow adopter of new digital or analytics technologies. However, leading chemicals players have already begun implementing AI and are thus benefiting from resulting productivity gains.
- 
The US is one of the world's largest chemical producers
 The US chemical industry is responsible for more than a quarter of the US GDP and it supports the production of 96% of all commercial and household goods. The chemical industry in the US is worth \$ 768 billion.
- 
China is the largest chemical producer globally
 The chemical market in China accounts for half of the global chemical market in terms of both, volume and revenue. This major growth of the industry is attributed to continuous and high investment, intense competition, and easy availability of raw materials.
- 
Asia as the fastest growing market
 The Western European and North American markets are surpassed by the Asia/Pacific region, with the domestic chemical sales in the region reaching 2.79 trillion US dollars in the year 2016.
- 
Troubling 2022 outlook
 The industry could face margin pressures amid raw material cost inflation in 2022, which it is highly reliant on.

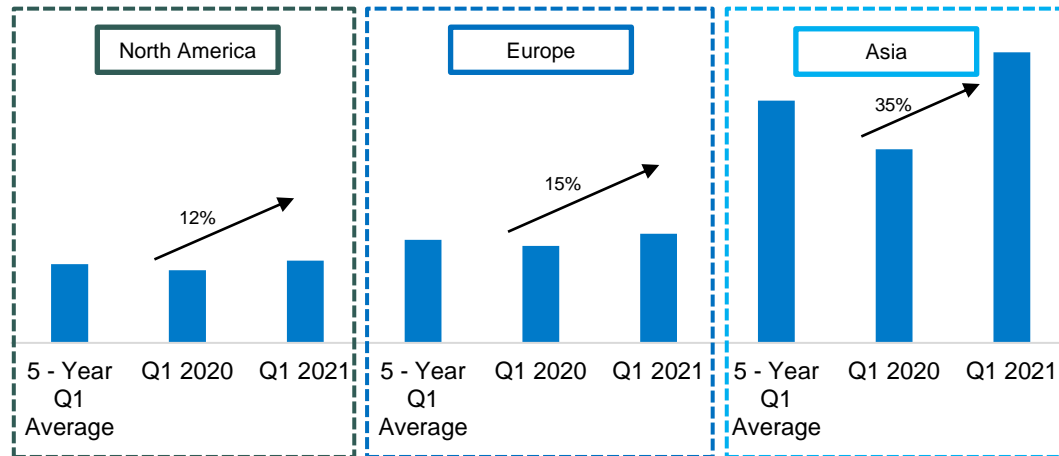
Chemical industry - Market Drivers & Trends

Despite market growth, Ecolab might fail to exploit the right market trends within chemicals

Forecast of chemical market value worldwide by segment (in mn)



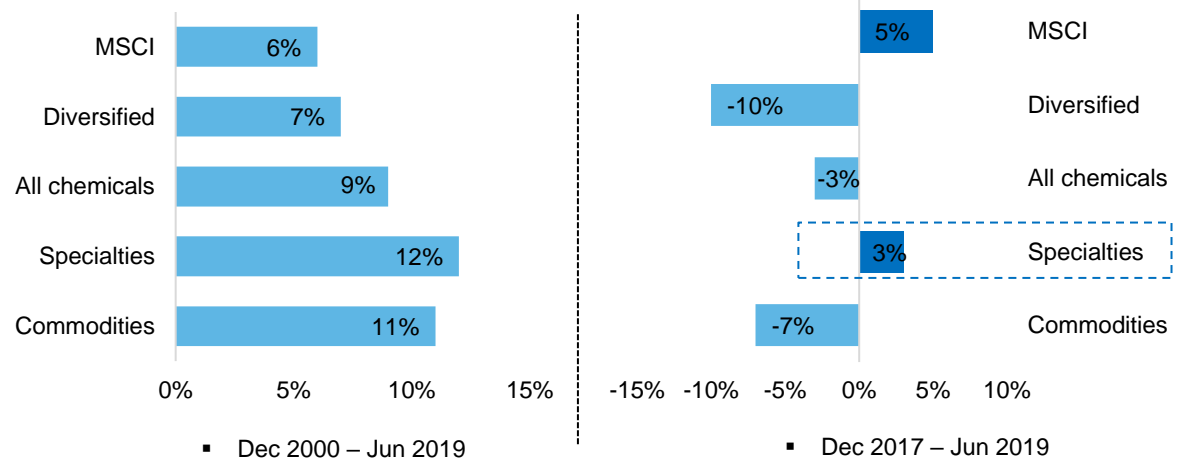
Uplift of the chemical market revenue, by geographies



Key trends within the chemical industry

- Sustainability**
 Climate change, water shortage and the reduction of biodiversity are factors that are nudging players within the industry to adapt.
- Changing consumer preferences**
 Consumers are starting to focus more on sustainability and purchasing bio products. Also, a rise in cleanliness efforts is noticed as an effect from Covid.
- Demographics and geopolitical tensions**
 Challenging for Western players, who may find themselves partially being excluded from Eastern growth markets.

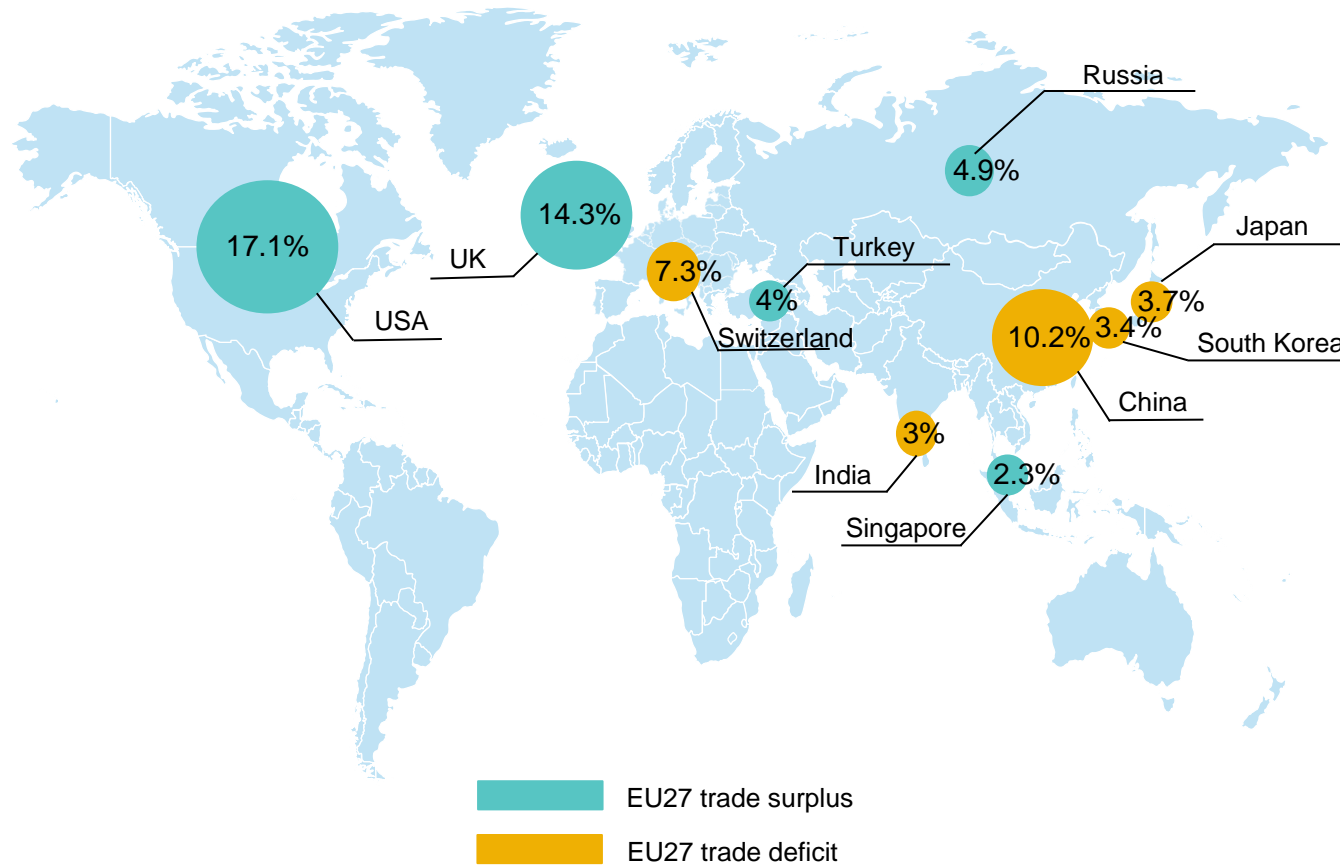
Total shareholder returns , compound annual growth rate



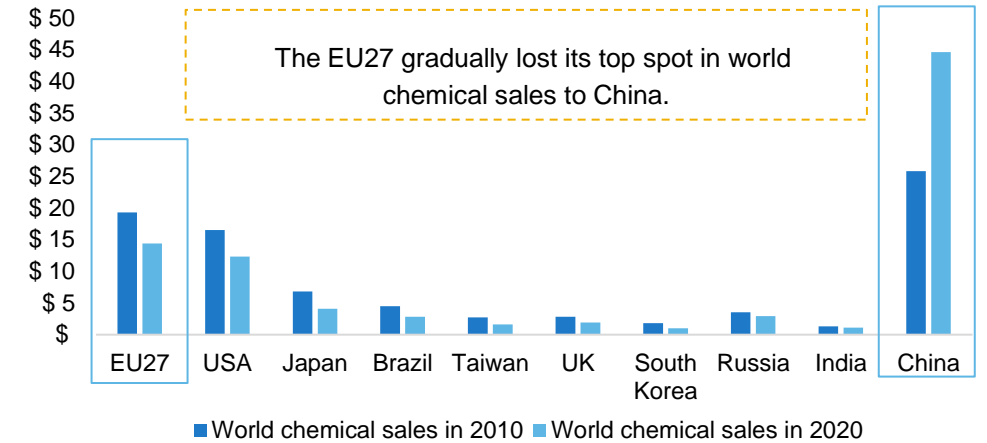
Chemical industry - Market

Chemical industry geographical overview with the focus on EU27

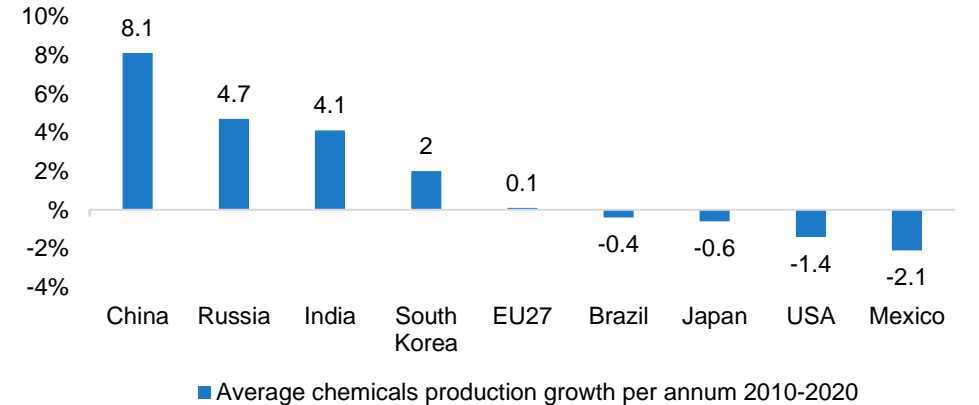
EU27 chemicals trade flows with top 10 partners in 2020



World specialty chemical sales by country (in bn)



Average chemical production growth per country



Wastewater treatment – Market Drivers & Trends

Growing demand for a limited resource could prove difficult to service for Ecolab and other players

Overview of the wastewater treatment industry trends

Growing Demand for a Limited Resource:

The demand for readily available fresh water and declining quality of water are threats that increase water scarcity.

High cost of wastewater treatment technologies:

Wastewater treatments need specific skills and are highly capital intensive. A few components that increase the cost of it are flow rates of the effluent, water quality, the required degree of purity, and construction materials.

Environmental Footprint:

Wastewater management facilities also leave an environmental footprint when they treat water. After all, the organic matter stripped from the water needs to go somewhere.

Energy consumption :

The process of filtering wastewater eats between 3% to 15% of the US electrical power every year.

The Municipal Segment is expected to dominate the market:

The rising scarcity of potable water and the growing population and water demand in cities are the major concerns driving the demand in the market.

North America is the largest wastewater treatment services market:

North America has always been a major market due to the presence of developed industrial sector in the region. This market is growing more due to adoption of stringent regulations towards the environment.

APAC is the fastest-growing wastewater treatment services market:

However, establishing new plants and creating a value supply chain in the APAC are expected to be a challenge for industry players as there is low urbanization and industrialization..

Key industry facts

Types of water treatment:

Physical: screening, sedimentation and skimming

Chemical: oxidizing

Biological: Aerobic, anaerobic, composting

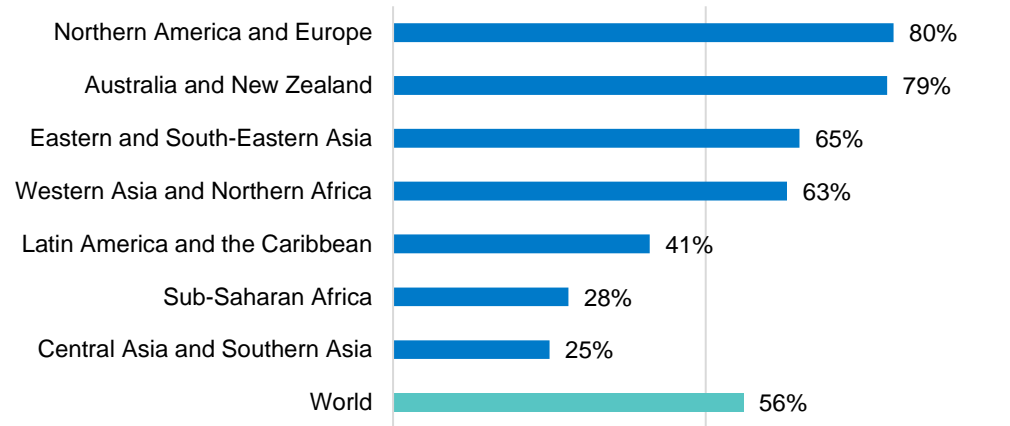
Sludge treatment

- 1 All wastewater first goes through the **primary treatment process**, which involves screening and settling out large particles.
- 2 **Secondary treatment process** –organic matter is removed by allowing bacteria to break down the pollutants. The treated wastewater is then usually disinfected with chlorine.
- 3 Lastly, there is an **advanced treatment process** to reduce the level of pollutants of special concern to the local waterbody, such as nitrogen or phosphorus

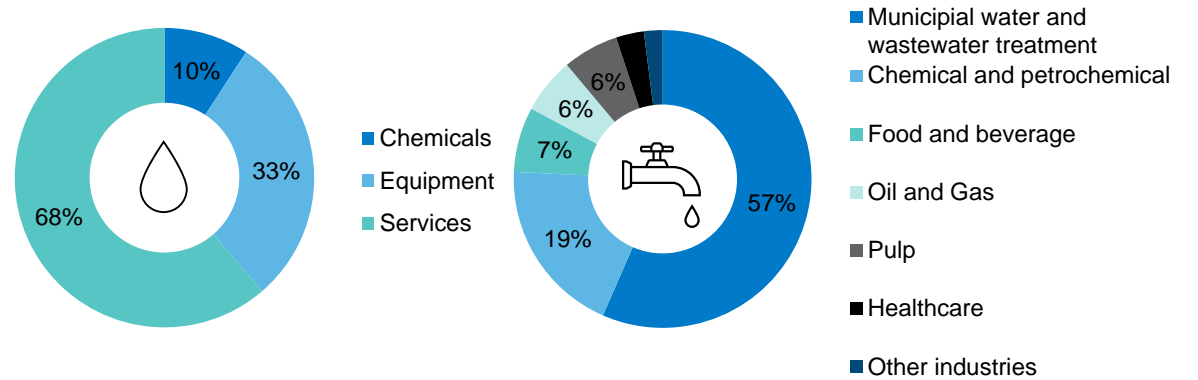
Wastewater treatment – Market Drivers & Trends

Wastewater treatment mostly needed in the APAC region and Sub-Saharan Africa in the upcoming years

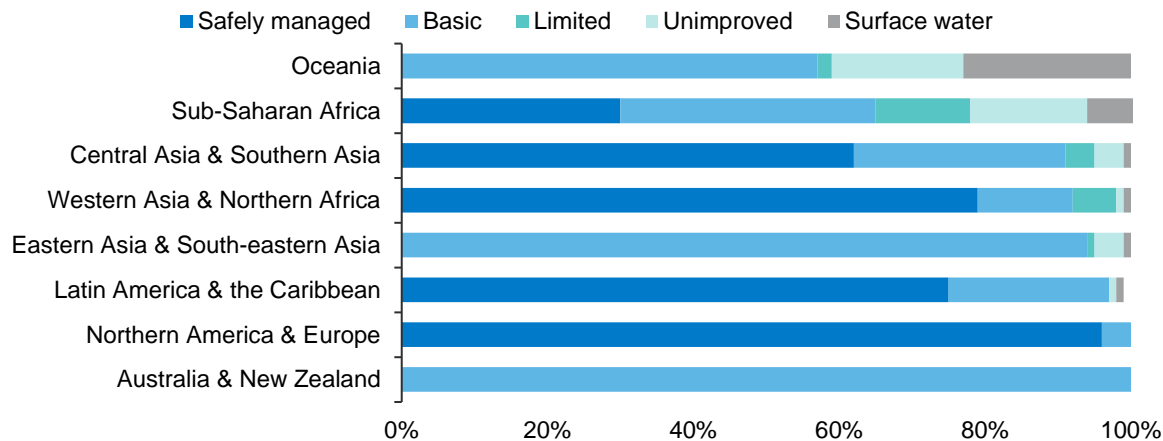
Global share of wastewater safely treated 2020, by region



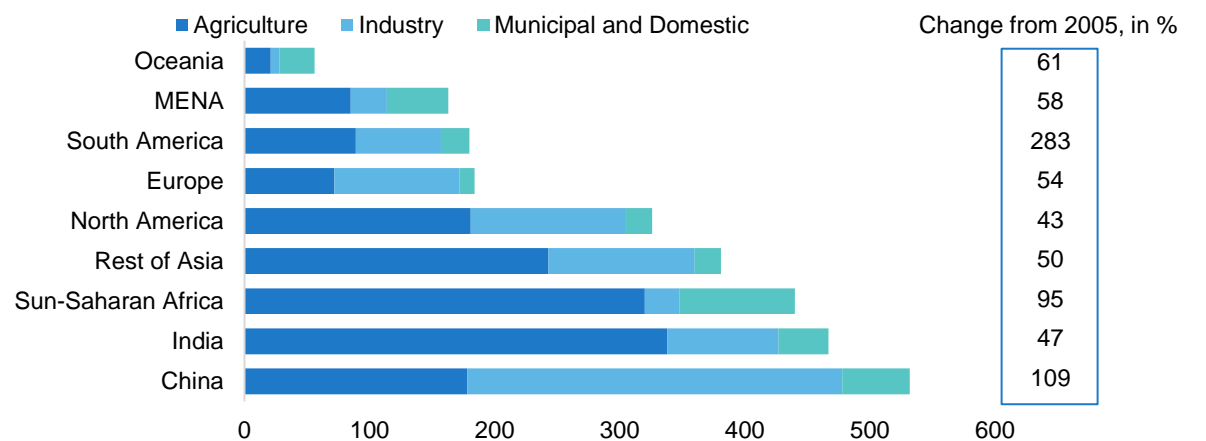
Global Wastewater treatment marketshare by segment and end-use



Water and Wastewater treatment marketsize worldwide



Increase in annual water demand 2005-2030 worldwide, in billion m³

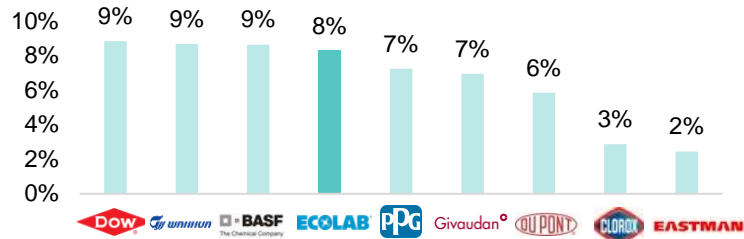


Specialty Chemicals and Wastewater Treatment – Market

Ecolab lands the 4th spot in terms of market share in both industries

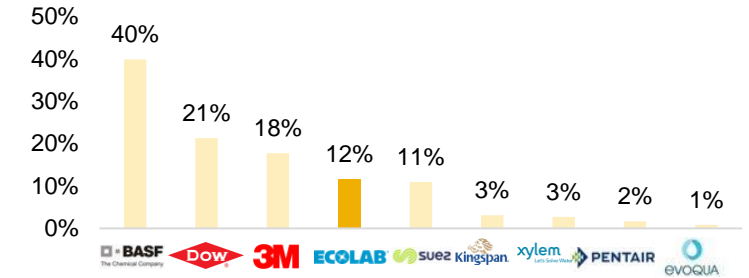
Sub-segment market share and growth projections

Specialty chemicals market share



Ecolab remains steadily in the 4th spot for years when it comes to market share for specialty chemicals.

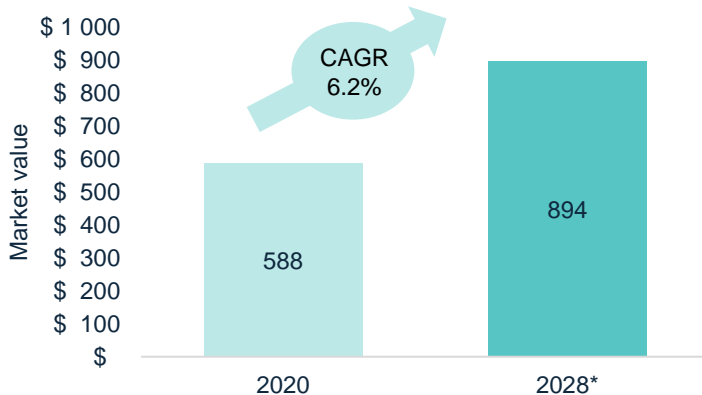
Wastewater treatment market share



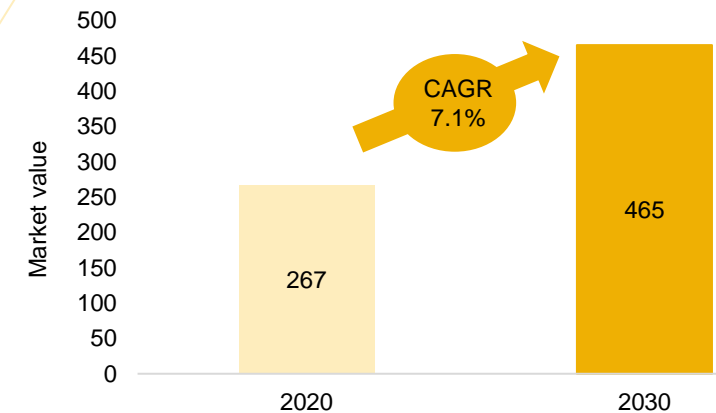
Ecolab also takes the 4th spot when it comes to market share in the wastewater treatment market.



Specialty chemicals market growth (in bn)



Wastewater treatment market share (in bn)





ECOLAB® Digital Center

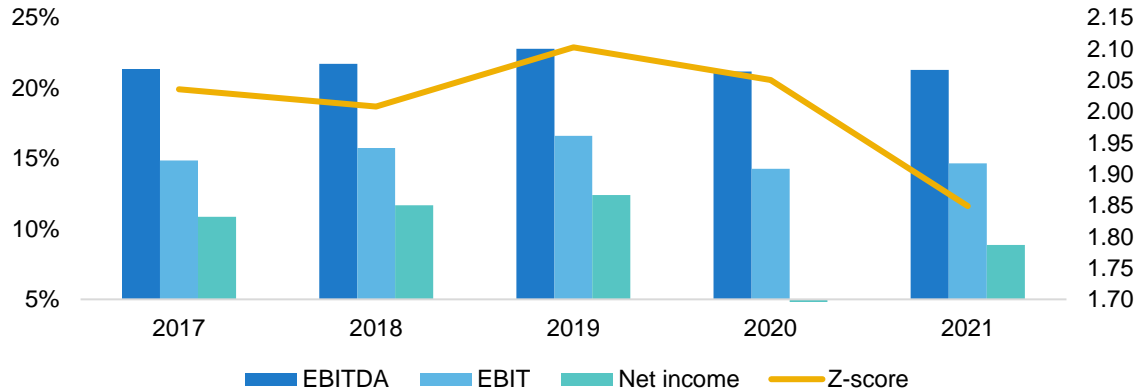
POWERED BY **SMCI**²

Financial Analysis and Valuation

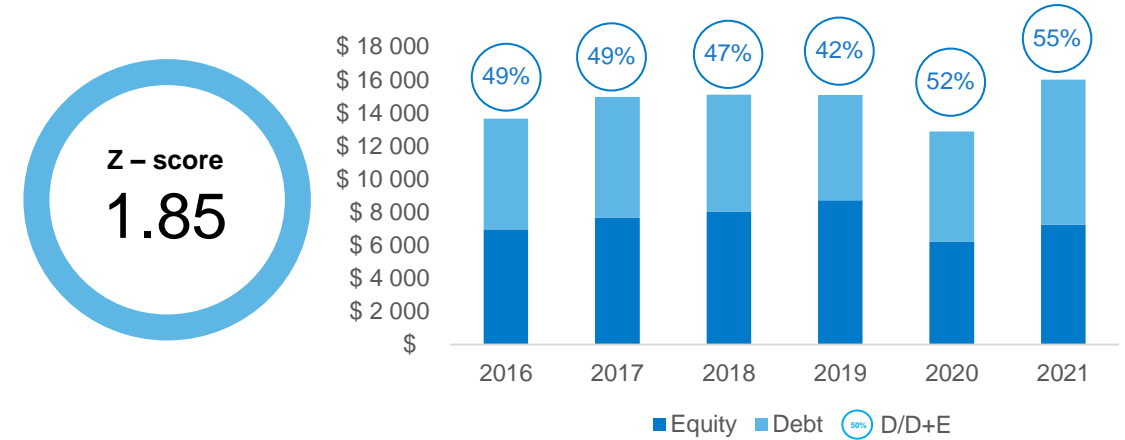
Financials/KPI's I

Profitability and liquidity are on the decline for Ecolab, possibly resulting in solvency issues

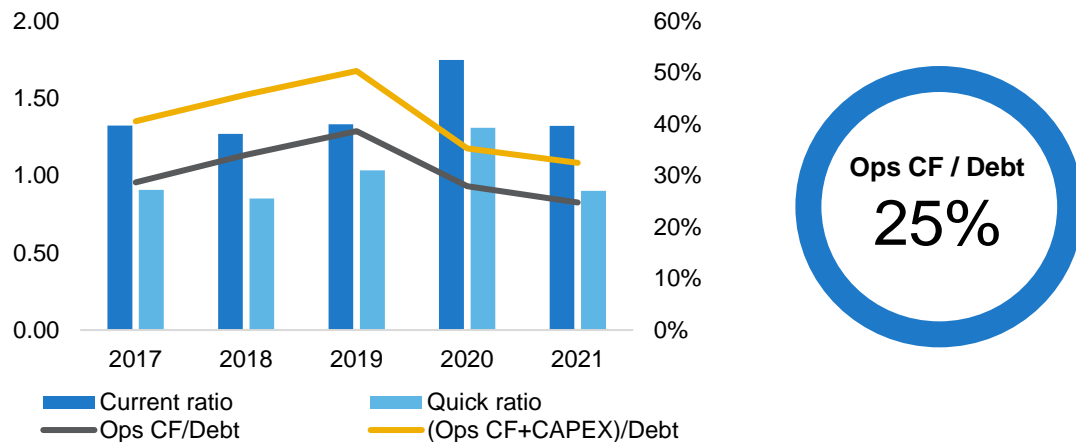
Margins & Z-score development



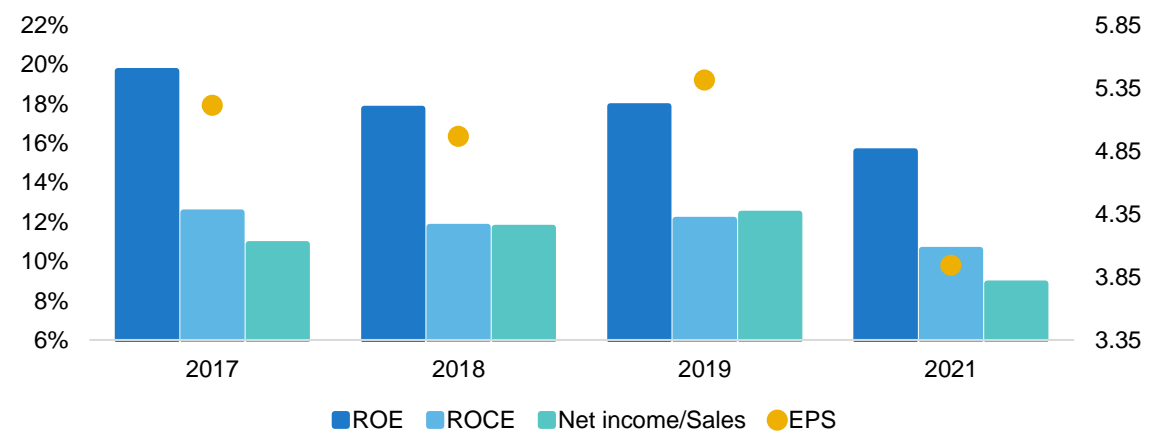
Funding structure (in mn)



Liquidity & Solvency



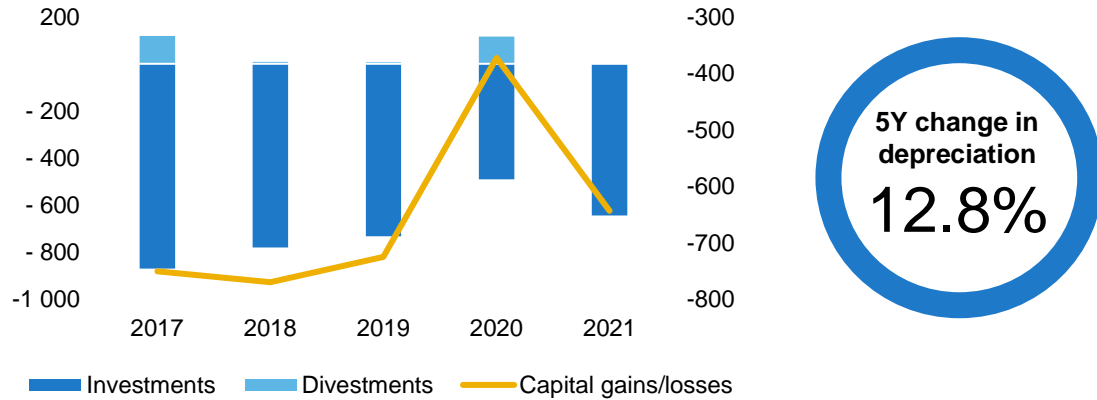
Profitability



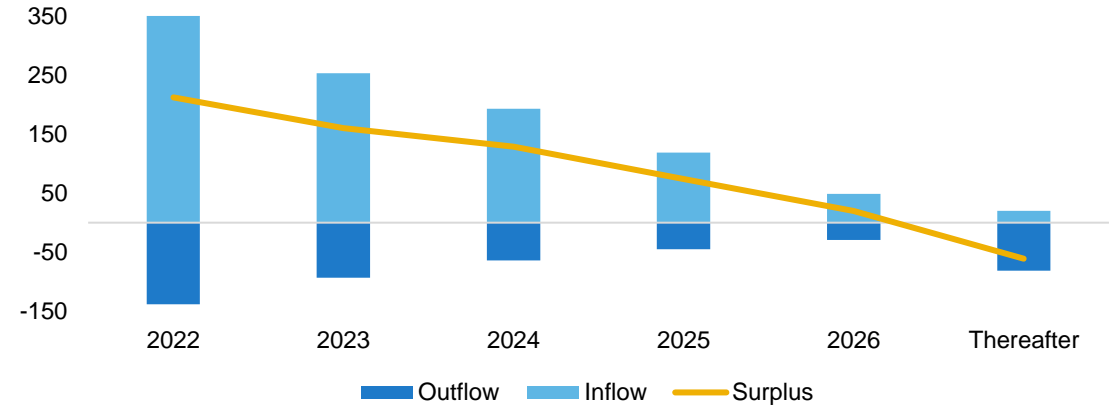
Financials/KPI's II

Compared to competitors, Ecolab does not stand out in terms of return

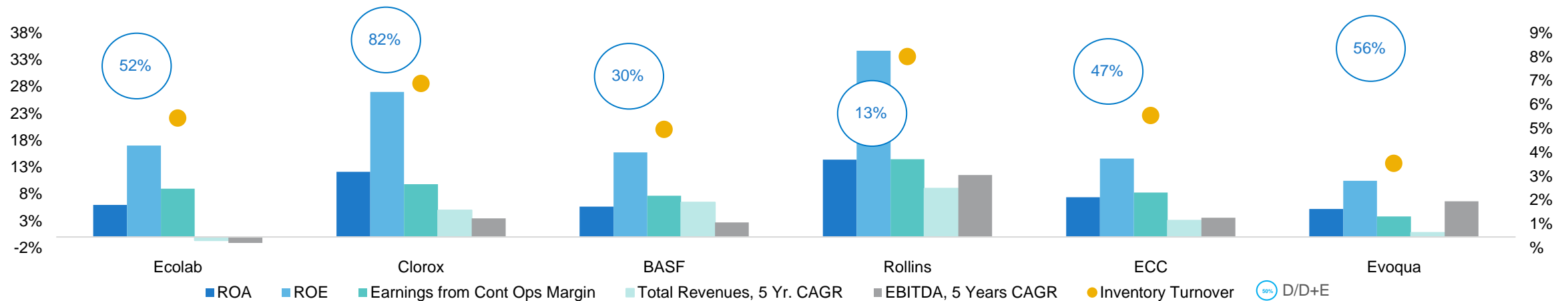
Capital gains/losses



Cashflow from leases



Competitors' KPI's

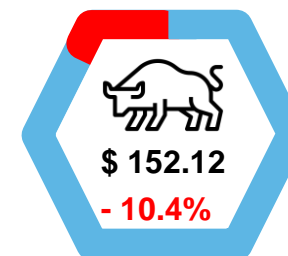


After thorough valuation, we do not see a buy recommendation in any case at the current share price

01

Bullish Scenario

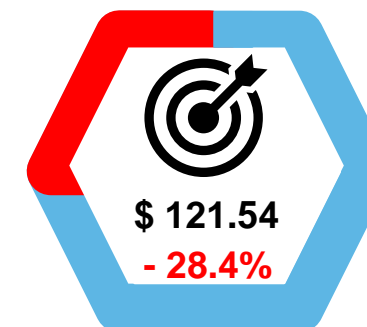
- Successful integration of Purolite acquisition & revenue in line with historical growth
- Increase in revenue share from fast growing economies (China, India, Africa & Middle East)
- Increase in production efficiencies and “back to normal” inflation rates



02

Base Scenario

- Successful integration of Purolite acquisition & below historical growth rate
- Steady revenue share from fast growing economies (China, India, Africa & ME)
- Slight increases in efficiencies with slightly higher than expected inflation rates



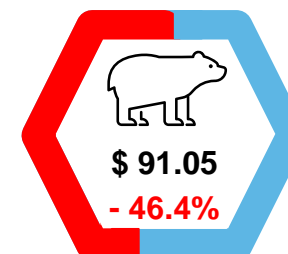
Current Share Price



03

Bearish Scenario

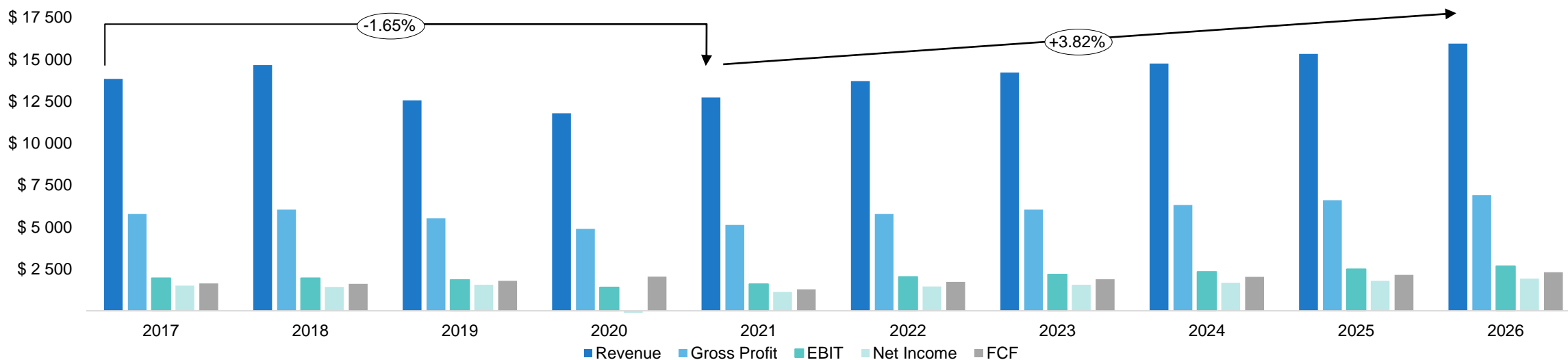
- Unsuccessful integration of Purolite acquisition & significantly lower than historical revenue growth rate
- Loss of market access to China, India, Africa & ME due to rising political and economic conflicts between the US and China
- Slightly decreasing production efficiencies and 1% higher than expected long-term inflation rates



*as of June 6th, 2022 EOD

Despite overvaluation, we recognize likely growth in financials for Ecolab

Key financials forecast (in mn)



Key Top-Line Drivers

- Demographic trends:** Expectations of increase in population and thereby increased demand for everyday products and services
- Successful integration of acquisitions:** Historical track record of successful acquisitions and integration of the product – see Nalco and Puro-lite
- Historical performance:** Ecolab's 6-year historical financial performance and growth rates

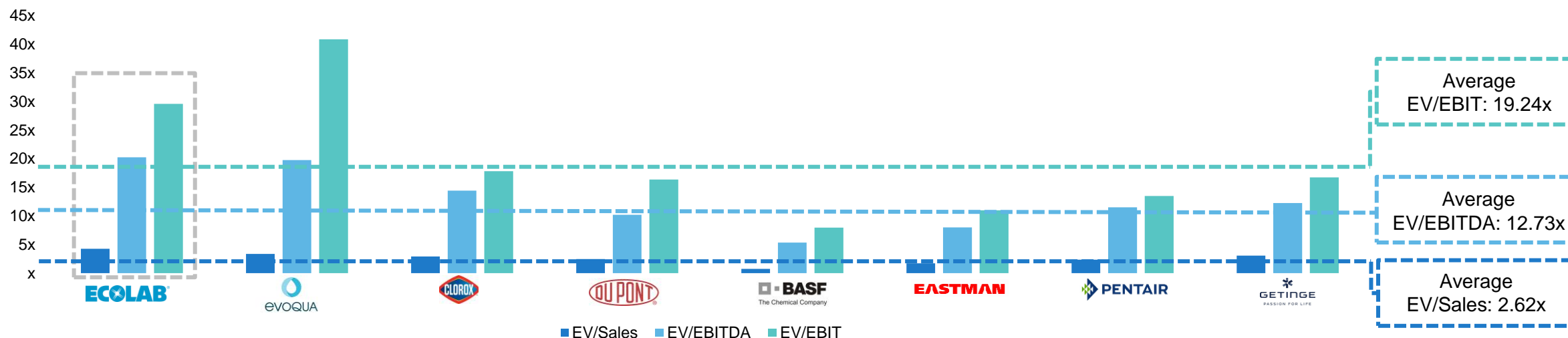
Operating Assumptions

- Revenue:** Ecolab fails to additionally expand their market share and revenue in fast growing economies, due to competition and economic restrictions
- Gross Profit:** Slight decrease in Cost of Sales, based on trends in historical data and assumptions of increased efficiency – especially in sales
- Acquisitions:** Assumption of additional successful acquisitions and integrations, based on Ecolab's historical track record

Comparable Companies Analysis

Ecolab is valued significantly higher than its peers according to key metrics and multiples

Multiples Chart



Multiples Table

Multiples	Price/Sales	P/E	P/EBIT	EV/Sales	EV/EBITDA	EV/EBIT
Ecolab	3,60	41,41	24,98	4,26	20,26	29,58
Evoqua	2,96	81,20	35,82	3,38	19,78	40,86
Clorox	2,60	27,75	15,86	2,92	14,41	17,81
Dupont de Nemours	1,90	19,30	12,63	2,47	10,18	16,38
BASF SE	0,56	8,16	5,87	0,77	5,35	7,97
Eastman Chemical	1,25	16,43	8,04	1,71	8,01	10,98
Pentair	2,14	14,57	12,27	2,35	11,49	13,48
Getinge AB	2,92	26,61	15,97	3,06	12,25	16,74
Mean	2,24	29,43	16,43	2,62	12,73	19,24



ECOLAB[®]

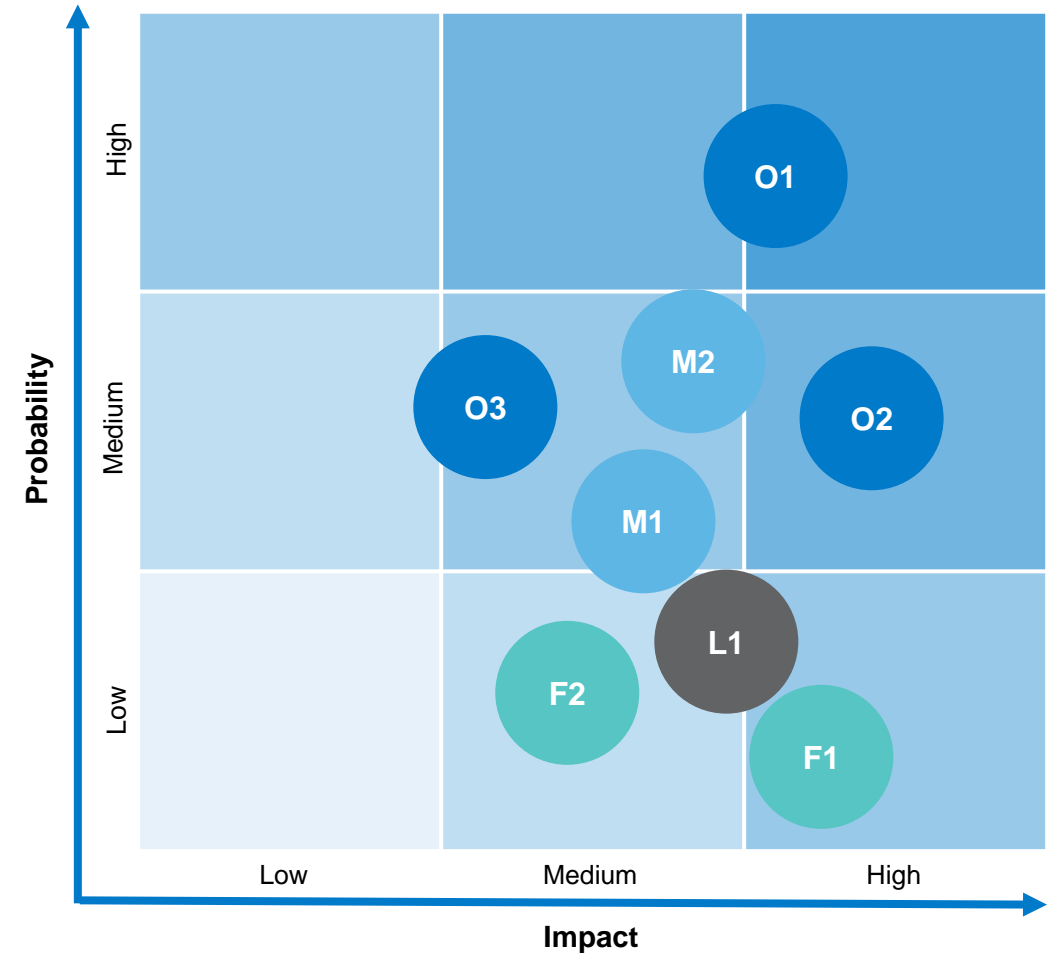
Risk Matrix

Company Specific Risks

The company faces a number of medium- to high- impact and probability risks







- O1
 The company has issues in the **supply of certain raw materials** that causes **fluctuations in the cost of raw materials** and **affects margins**
- O2
Consolidation of customers and vendors have a material effect and adversely impact the results and the pricing flexibility of the company
- O3
Chemicals are spilled and released accidentally during production or transportation, and this has a material adverse effect on consolidated results
- M1
Downturns in larger markets including the foodservice, hospitality, travel, health care and other industries impact the end-users
- M2
 The **significant non-U.S. operations** expose the firm to **global economic, political, and legal risks** that impact profitability
- F1
Changes in tax laws and unanticipated tax liabilities affect the taxes that the company has to pay and the profitability
- F2
 The **indebtedness limits the operations and use of cash flows**, and any failure to comply with the covenants applied to indebtedness affect liquidity
- L1
 Ecolab has to comply with **laws and governmental regulations**, and that is materially and adversely affected by changes in law and regulations

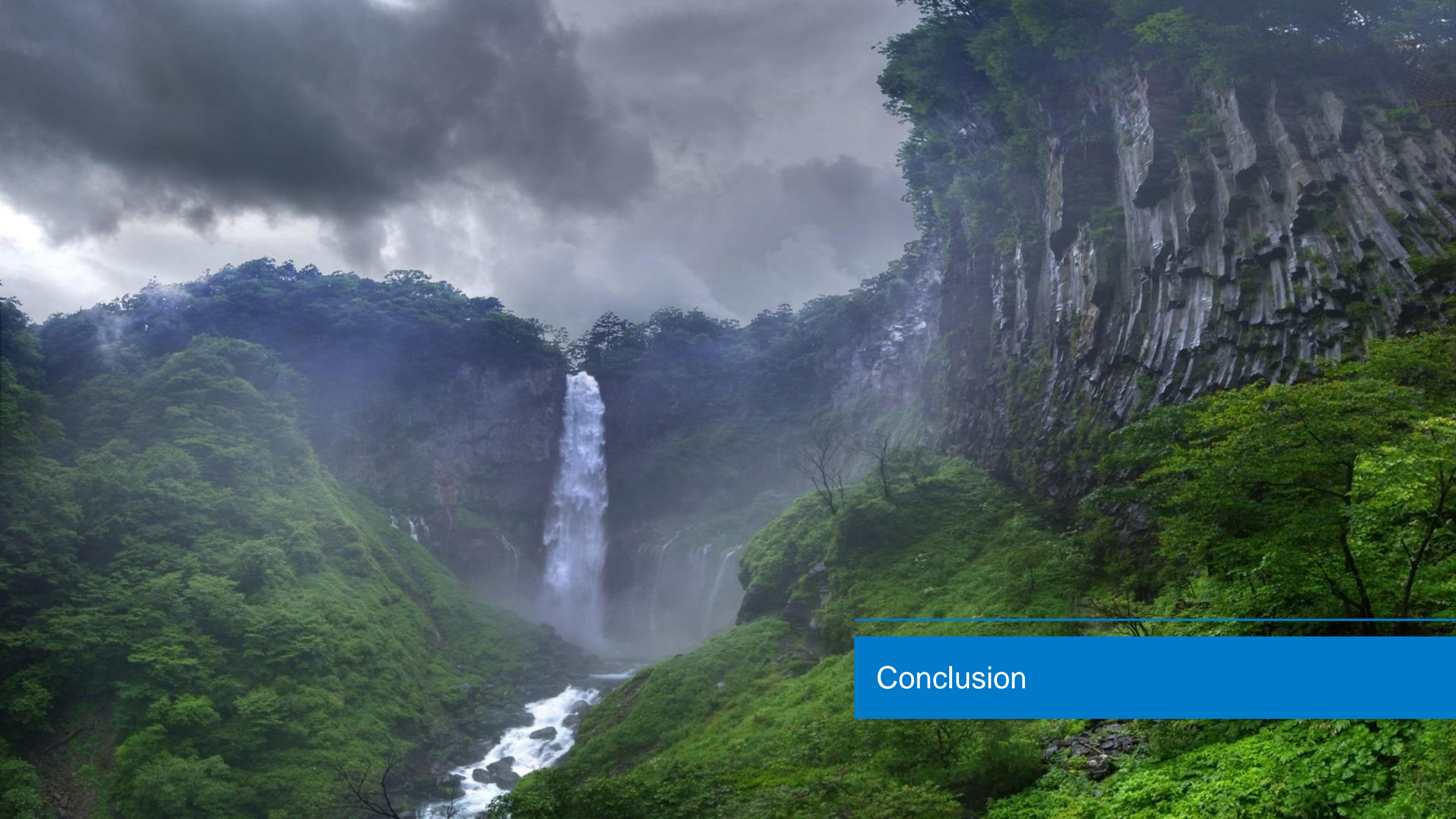
Operations (O) – Market (M) – Financial (F) – Legislation (L)



Catalysts

Catalysts mainly represent a potential downturn in the company's share price

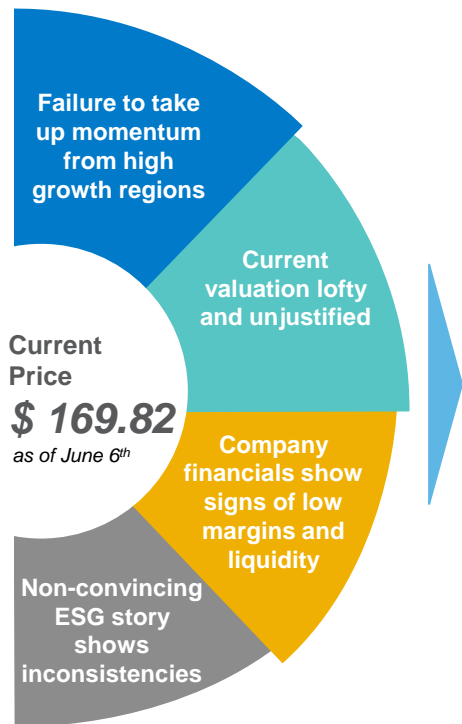
Catalyst	Type	Probability	Estimated impact on share price
Chinese government intervention	Hard	Medium	<ul style="list-style-type: none"> Loose access to fastest growing markets such as China & Africa 
Ongoing Covid-19 lockdowns	Hard	Medium	<ul style="list-style-type: none"> Closure of hotels, restaurants and educational facilities might lead to significantly lower revenue 
Unsuccessful acquisitions	Hard	Low/Medium	<ul style="list-style-type: none"> Failing to close successful acquisitions might lead to Ecolab losing out on competitors in terms of innovation 
Loss of Customer Relations	Hard	Low	<ul style="list-style-type: none"> Loss of customer engagement and therefore loss of orders due to the Institutional Advancement Program (IAP) 
Financing difficulties	Soft	Low	<ul style="list-style-type: none"> Failure to raise funds for M&A activity which Ecolab relies on for innovation due to rising debt levels 
Environmental Regulation	Hard	High	<ul style="list-style-type: none"> Increased demand for water management products due to improvements in environmental regulation 



Conclusion

Conclusion

In conclusion we recommend a SELL rating with a downside potential of 28.73%



Appendix

Appendix: M&A

Acquisitions & Divestures as an integral path towards innovation for Ecolab with a focus on intangibles

Mergers and acquisitions

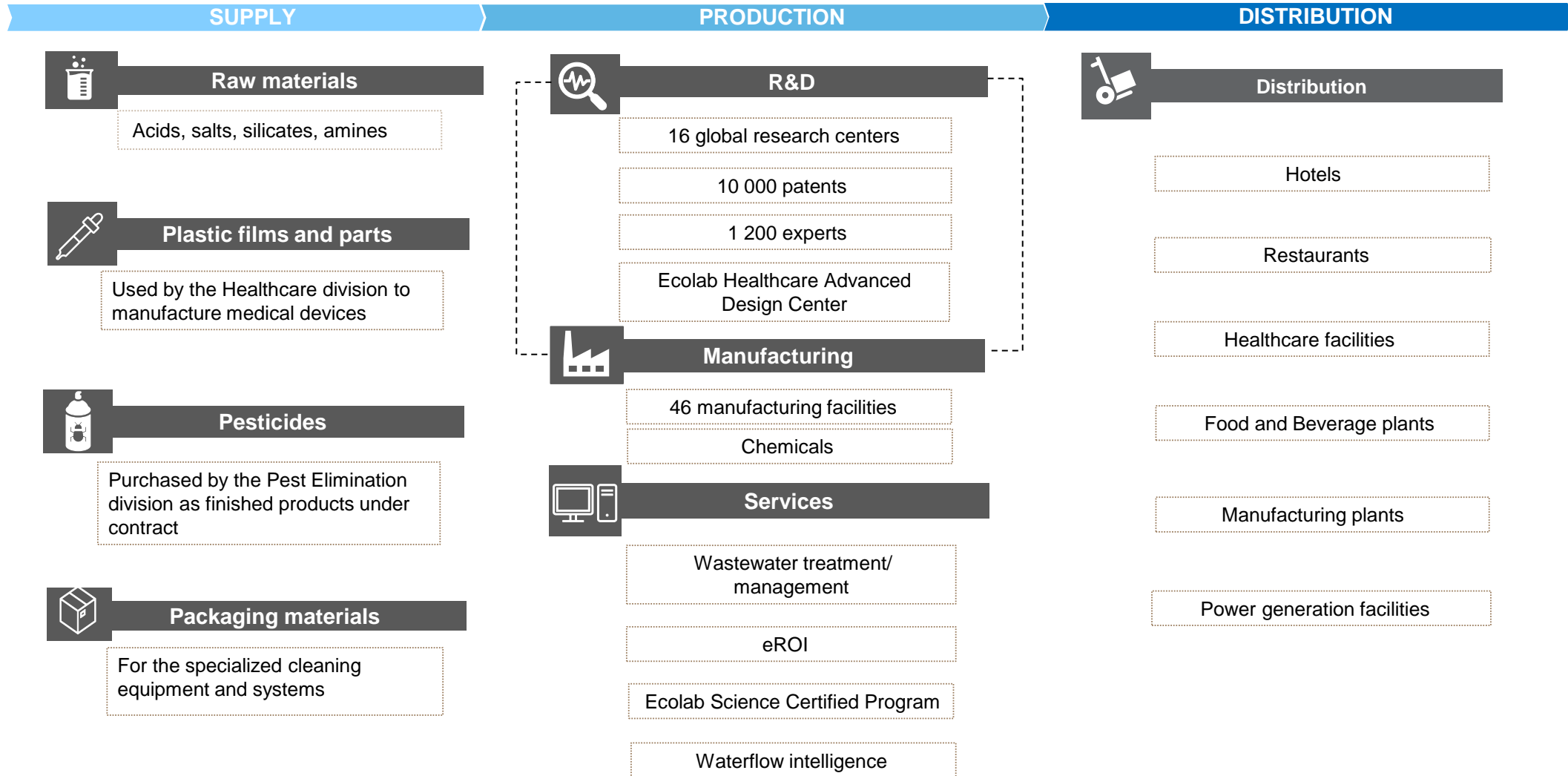
Nalco	Purolite	Permian Mud Service, Inc.	Laboratoires Anios	CID Lines NV	Adams Healthcare	Quimiproducos, S. de R.L. de C.V.	Aquatech International LLC	
						Acquired for \$ 35 mn	Acquired for \$ 35 mn	
						Acquired for \$ 25 mn.	Lobster Ink	Cascade Water Services, Inc.
Acquired for \$ 5.40 bn	Acquired for \$ 3.70 bn	Acquired for \$ 2.2 bn	Acquired for \$ 850 mn	Bioquell	Jianghai Environmental Protection Co., Ltd.	Undisclosed	Undiscl...	Undiscl...
						Business Of Chemstar Corporation	Gallay Medical & Scientific Pty Ltd	Undisclosed
				Acquired for \$ 506.9 mn.	Acquired for \$ 190 mn	Undisclosed		

Divestures

Changzhou Jiayou Chemical Co., Ltd.	Fab-Tech Business Unit Of Ecolab Inc.	Ecolab Inc., Equipment Care Business	Ecolab Inc., Restroom Cleaning Business	Krofta Technologies, LLC and Anaerobic Biological Wastewater Treatment Business of Ecovation, Inc.	ChampionX	Nalco Mobotec LLC	Ecolab NL 5 BV	Ecolab Inc., Vehicle Care Division
Undisclosed	\$ 8.90 mn	Undisclosed	Undisclosed	Undisclosed	\$ 7.20 mn	Undisclosed	Undisclosed	\$ 120 mn

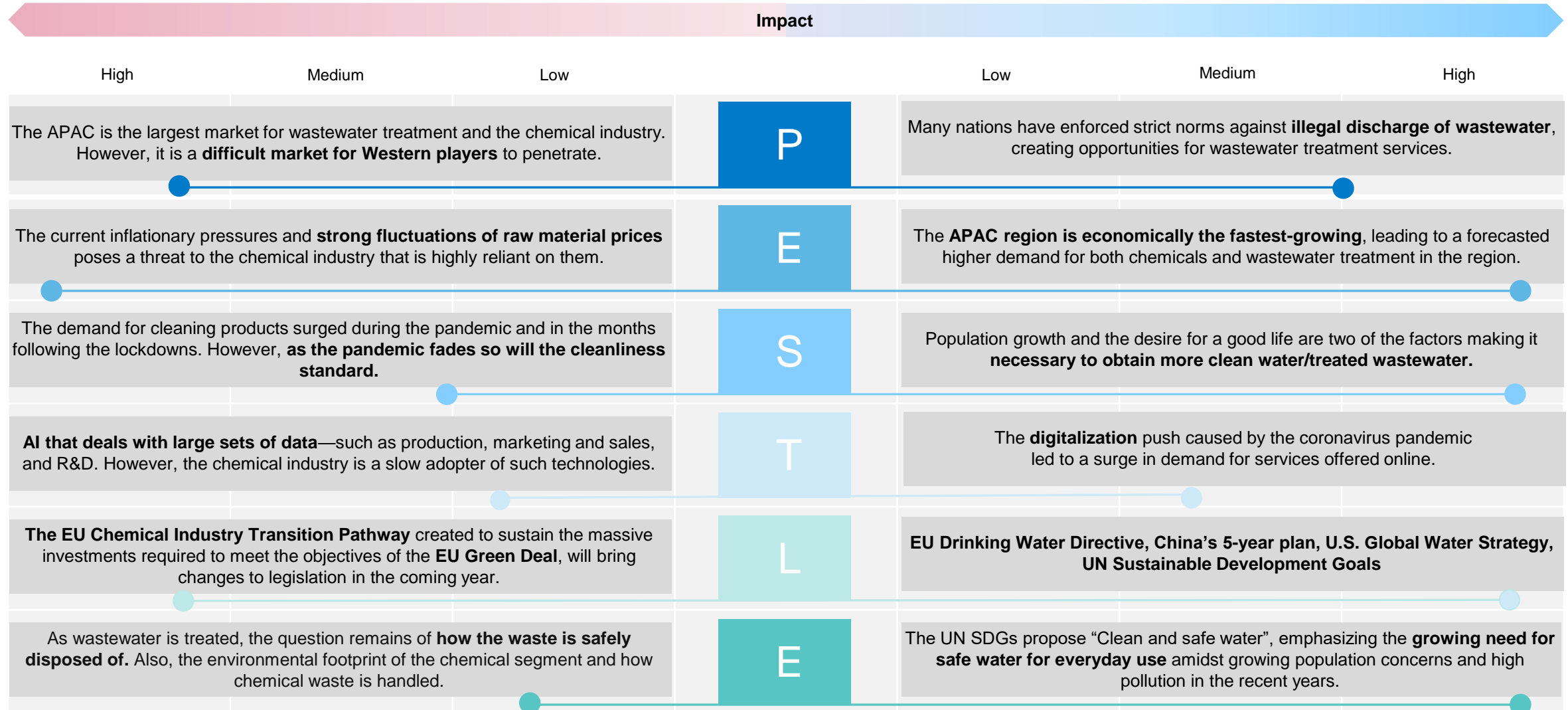
Appendix: Supply chain

Research and development represents an integral part of production within Ecolab's value chain



Appendix: PESTLE Analysis

Legislative changes play in favor of the wastewater treatment sector



Appendix: SWOT

Weaknesses and threats outweigh strengths and opportunities

STRENGTHS

- **Established** company with **solid track record**
- The **stable cash flows** enables the firm to improve in the future
- Ongoing **M&A activity** helps the company stay competitive
- The company has a **good reputation** in the markets that they are operating in

OPPORTUNITIES

- **Potential acquisitions** could serve as an entry into new markets
- Increasing appearance and operations in **China** could drive the revenues and enable market access to other regions
- **Sensitivity towards sanitizers** since COVID-19 pandemic
- **Climate change** and **water shortages** could drive the demand
- Changes in **legislation**



- Stagnant **revenue development**
- **Weak financials** signal a rather negative outlook for the future
- **Falling behind in R&D** efforts could lead to losing market share
- **ESG inconsistencies** and fines could question the firm's reputation
- **Strategic inconsistencies & lacking agility**

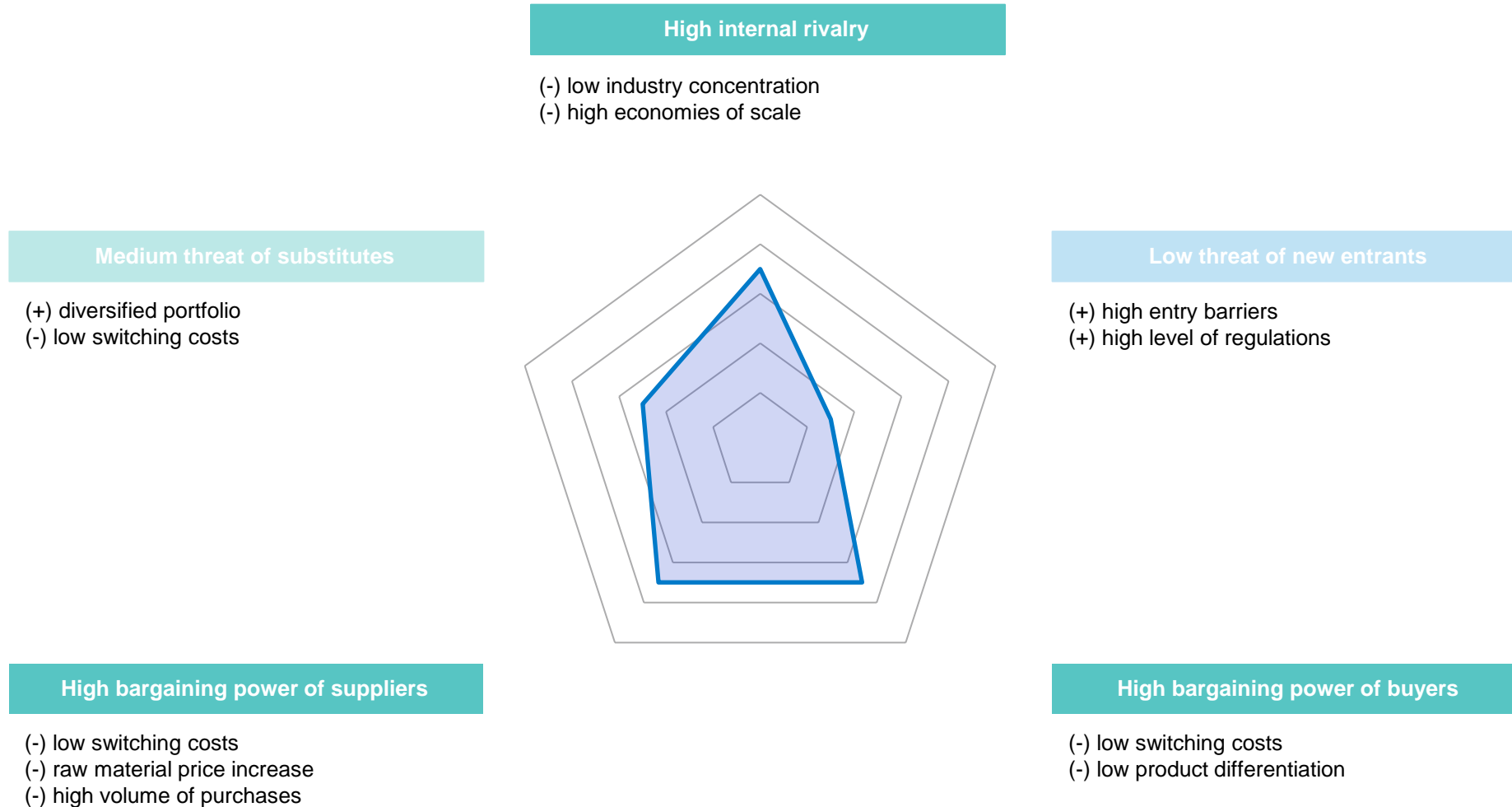
WEAKNESSES

THREATS

- **Lawsuits** can threaten the company and hurt the brand
- Global **supply chain** instabilities effects the financial performance of the company
- **Consolidation** of customers and vendors makes the firm lose market share
- **Dependence** on few individual **suppliers**
- **Increasing competition** could lead to a decrease of revenues

Appendix: Porter's Five Forces

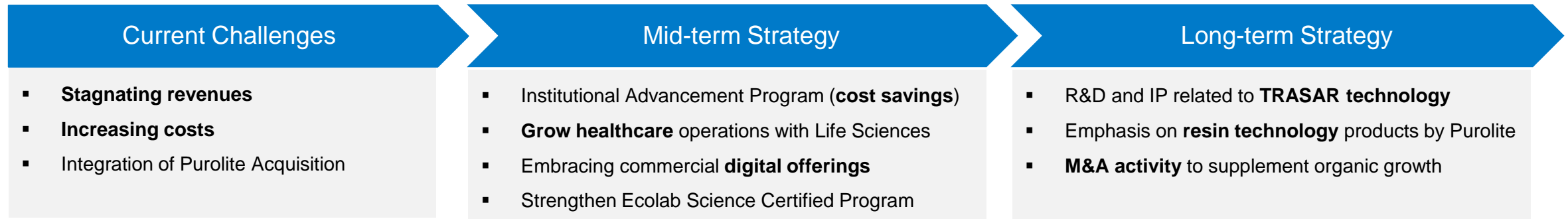
While there is a low threat of new entrants, Ecolab faces rivalries and high bargaining power from buyers and suppliers



Appendix: R&D Strategy

Ecolab has to uphold investment in R&D in order to create new IP and remain competitive

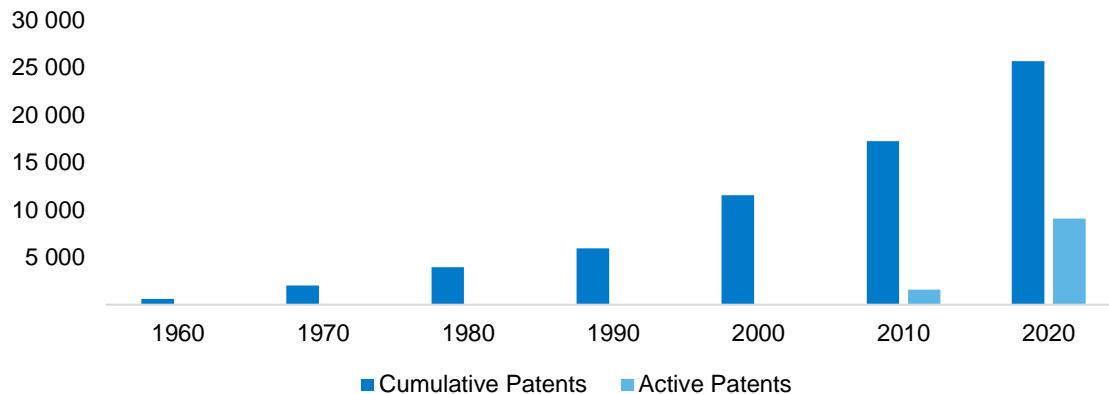
Strategic Challenges & Opportunities



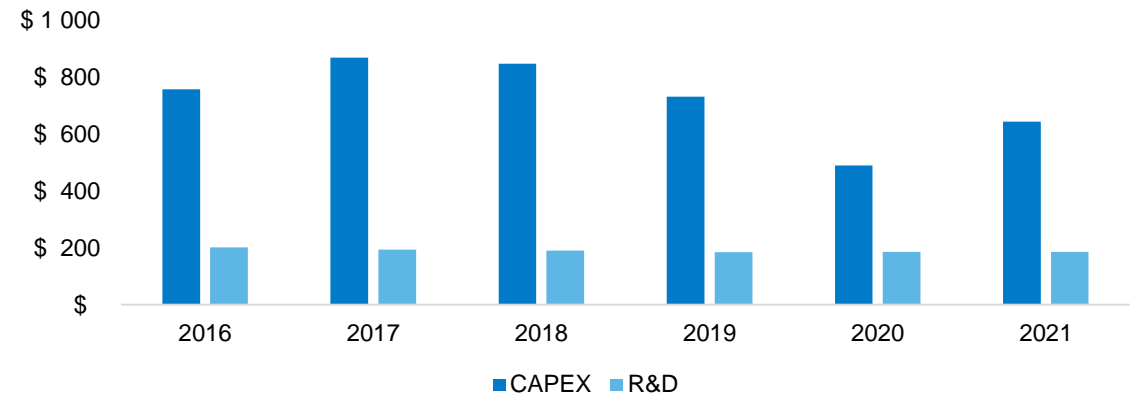
Conclusion

Ecolab has to maintain **high R&D** efforts as well as **IP-Protection** to remain competitive in existing markets and when entering new ones

Number of Patents (Cumulative & Active)



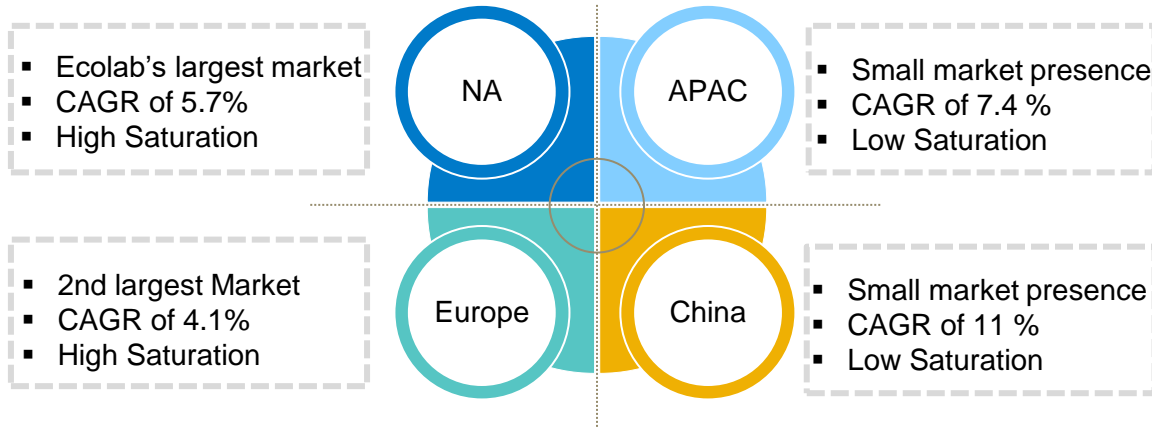
CAPEX & R&D (in mn)



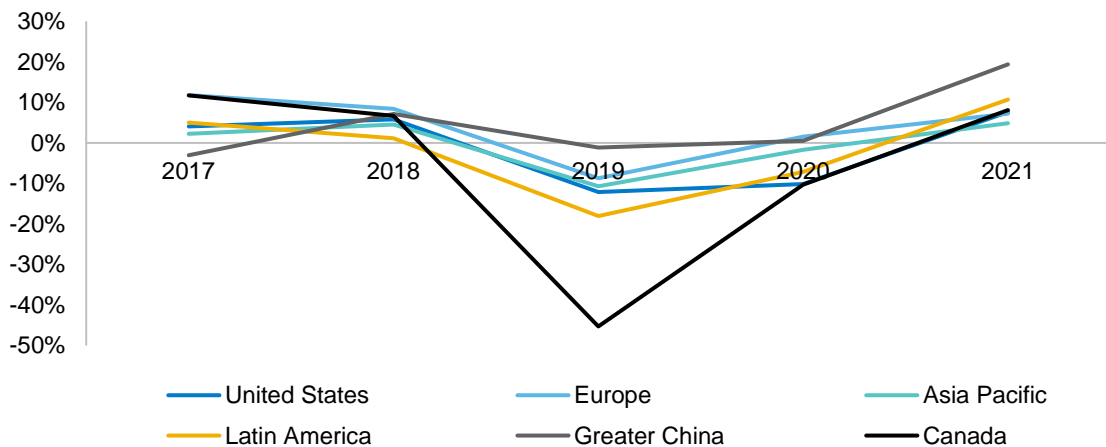
Appendix: Geographic positioning

Ecolab faces difficulties and weak strategic positioning regarding changing geographic market developments

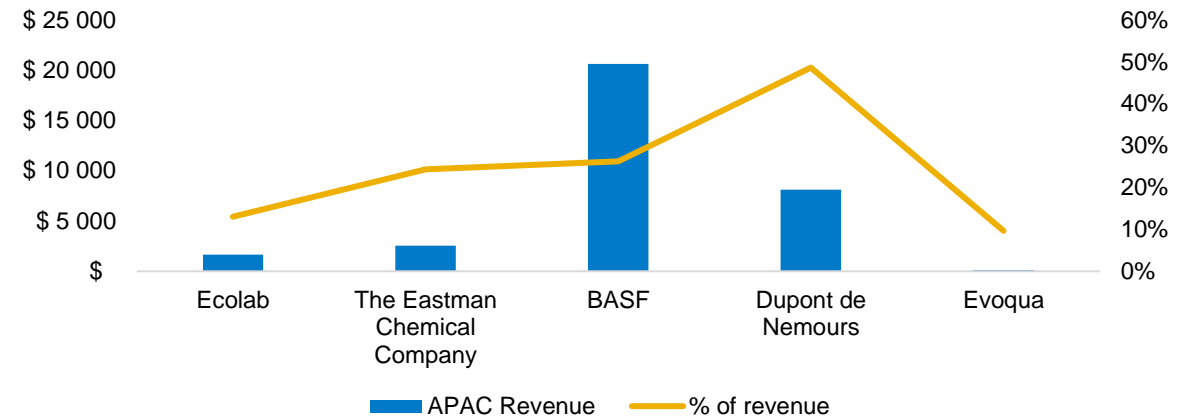
Key Markets-Overview



Revenue Growth by Region



APAC Revenue – Competitor Comparison (in mn)



Geographic Diversification - Strategy

If Ecolab wants to **continue to grow in the future**, it will have to come up with a more **aggressive expansion plan into the APAC region**



No apparent strategy

Ecolab **hasn't published any materials on how they want to enter those fast growing markets more successfully**



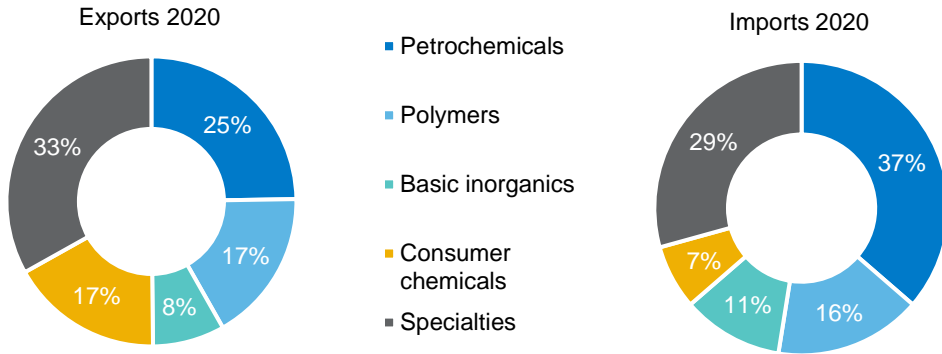
No communication

Ecolab **hasn't communicated that diversification will be vital** due to slowing growth in key markets

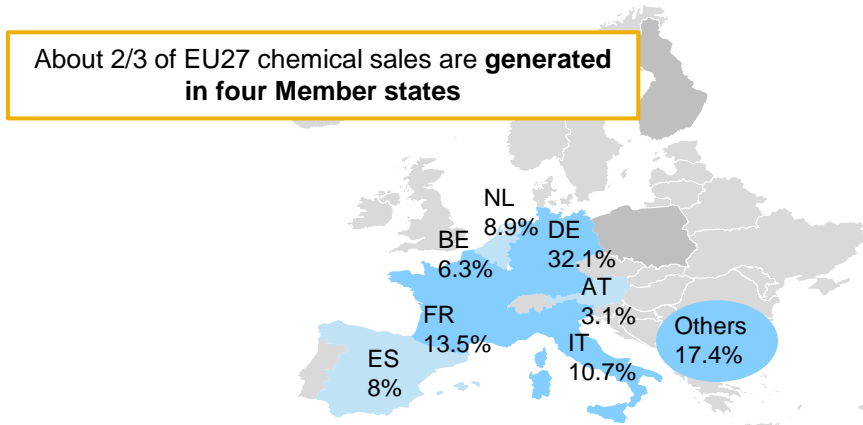
Appendix: Chemical market overview

An overview of the EU27 chemical industry market

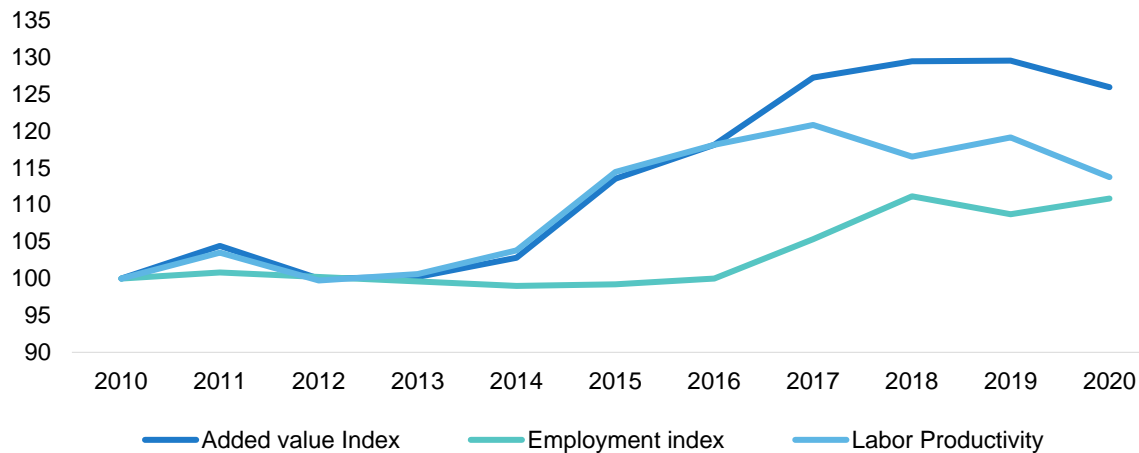
EU27 chemicals exports and imports in 2020



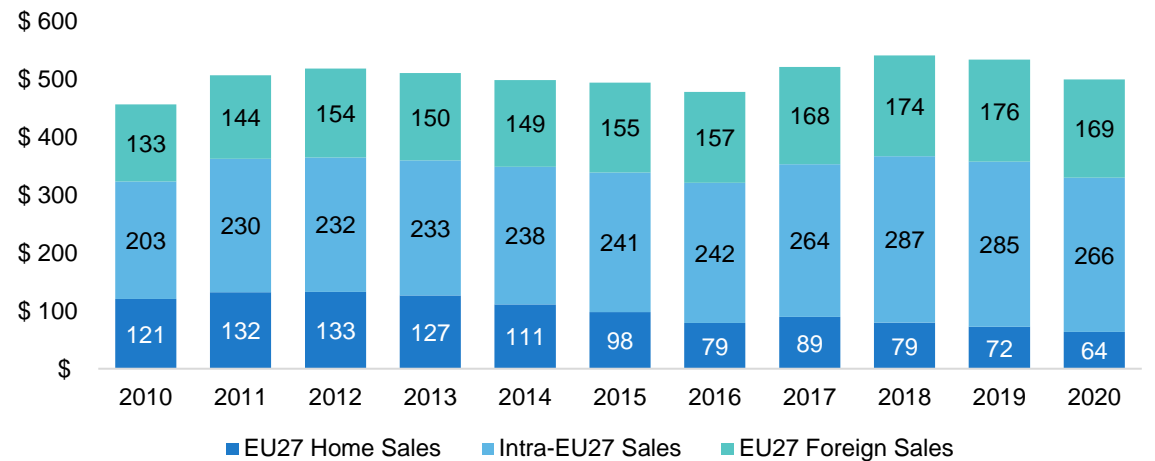
Global Wastewater treatment market-share by segment and end-use



Labor productivity in the EU chemical industry (indexed chart)



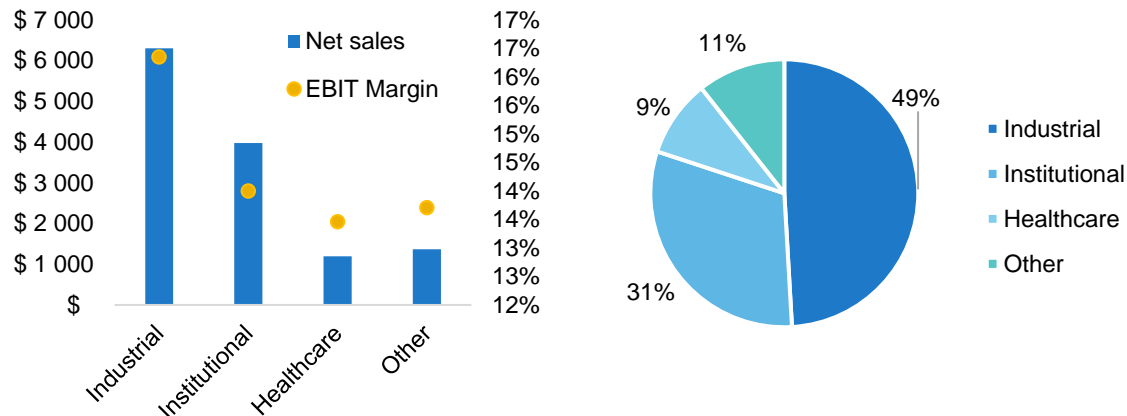
EU27 chemical sales structure (in bn)



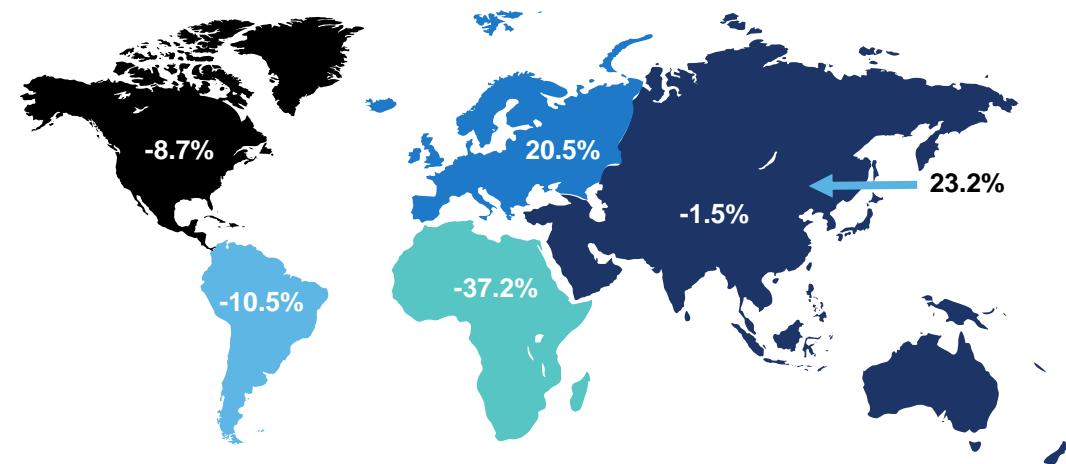
Appendix: Key performance indicator's overview

In terms of segment and geographic distribution, growth is not convincing enough to justify valuation

Segment distribution (in mn)



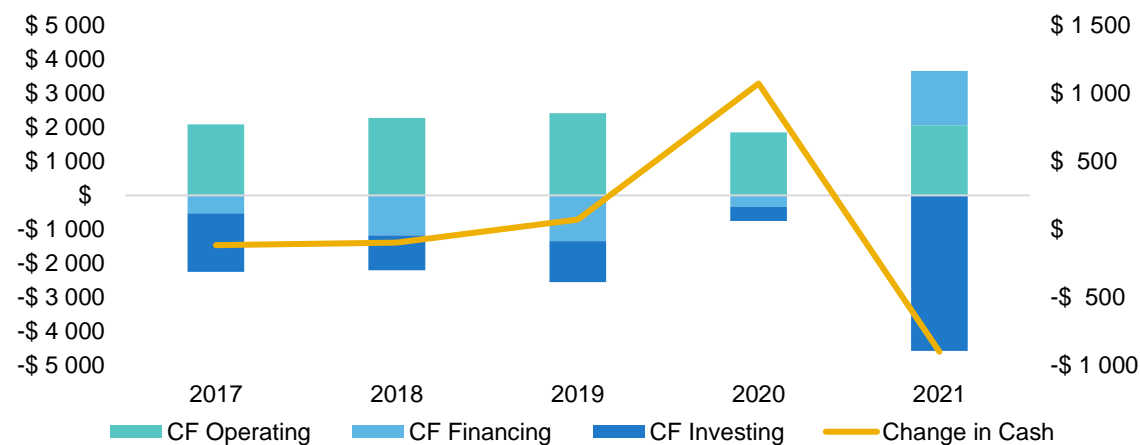
5Y Revenue growth / decline by geography



Financials/KPI's

(in millions USD)	2017	2018	2019	2020	2021
Sales	13.8	12.2	12.6	11.8	12.7
Net Income	1.5	1.4	1.6	-1.2	1.1
Gross profit margin	42.0%	43.8%	44.2%	41.8%	40.9%
ROA	7.5%	7.1%	7.5%	-6.6%	5.3%
Sales/TA	69.3%	60.9%	60.2%	65.0%	60.0%

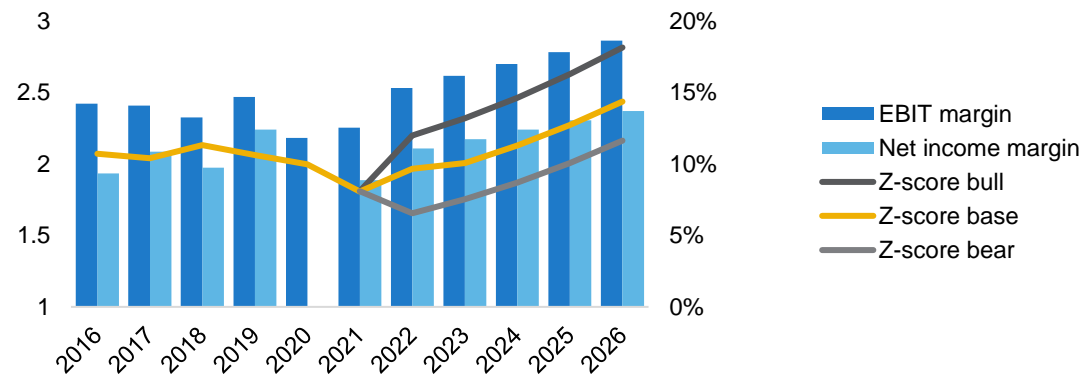
Cashflow distribution (in mn)



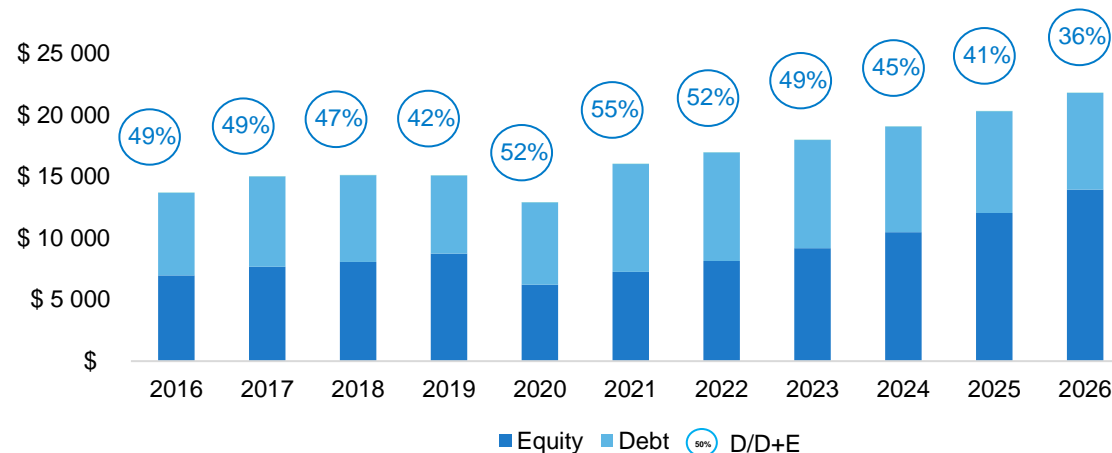
Appendix: Performance prediction

A stabilizing financial future ahead

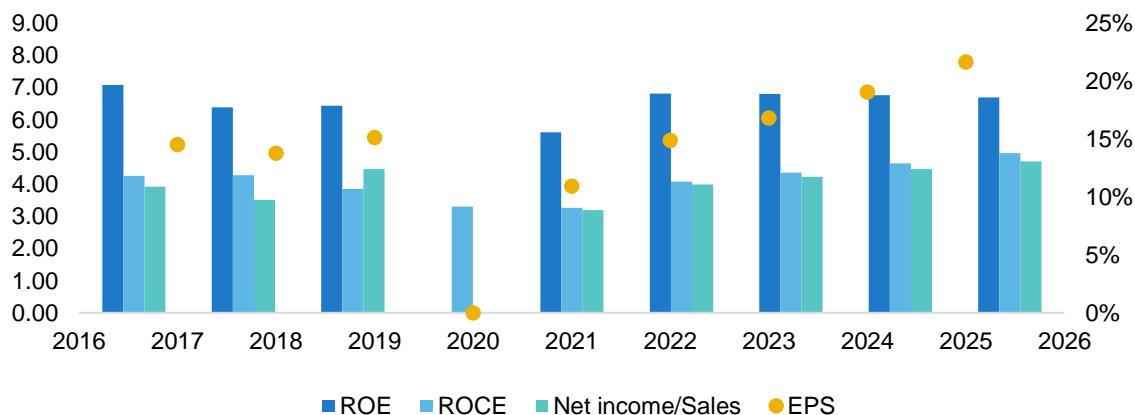
Z-score & margins prediction



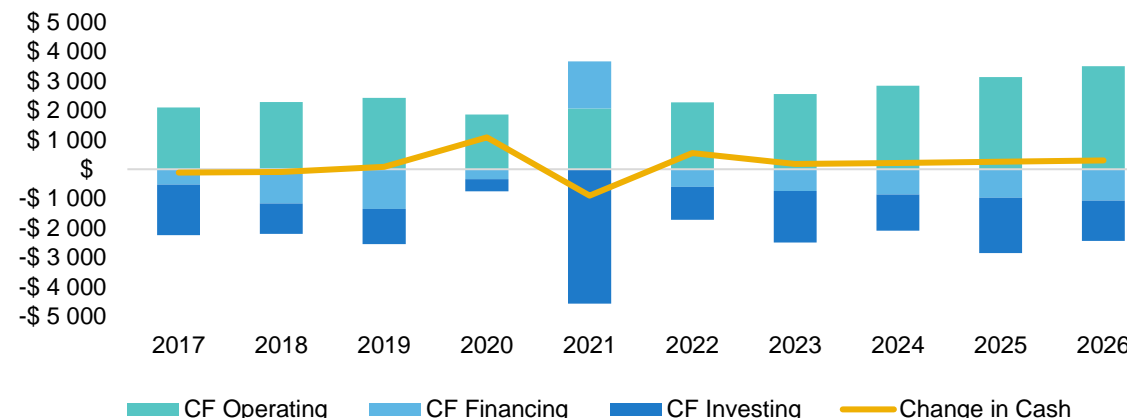
Funding structure prediction (in mn)



Profitability prediction




Cashflow distribution prediction (in mn)



Appendix: DCF Analysis


Even with stable financials and revenue growth in each of the three scenarios, Ecolab fails to live up to its hype

Valuation Assumptions




WACC (5 year) – 10.26%:
Cost of Debt: 3.92%, Cost of Equity: 8.76%, Beta: 0.992

WACC (TV) – 6.71%:
Cost of Debt: 2.86%, Cost of Equity: 5.49%, Beta: 0.992

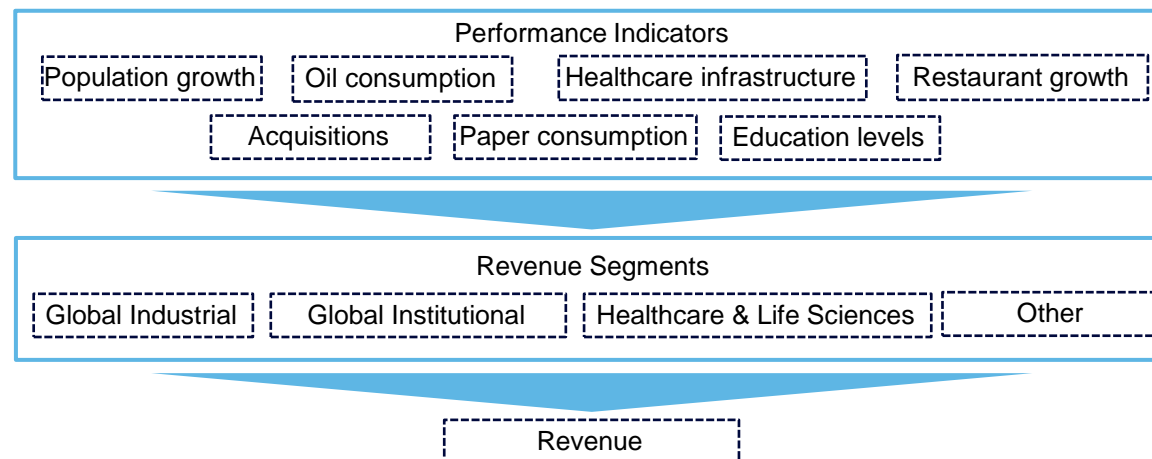


Terminal value assumptions:
Long term growth rate adjusted to the expected inflation target in the United States and Euro-area of 2%

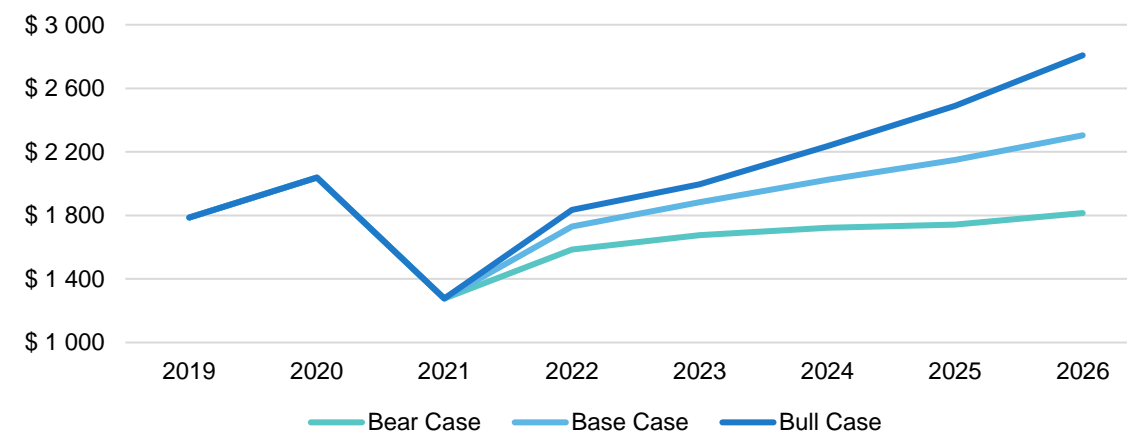


Net Debt: 8.680,9 mn USD
9.040,8 mn USD of interest-bearing debt
359,9 mn USD of cash and cash equivalents in FY2022

Valuation and Revenue Drivers



FCF by Scenario (in mn)

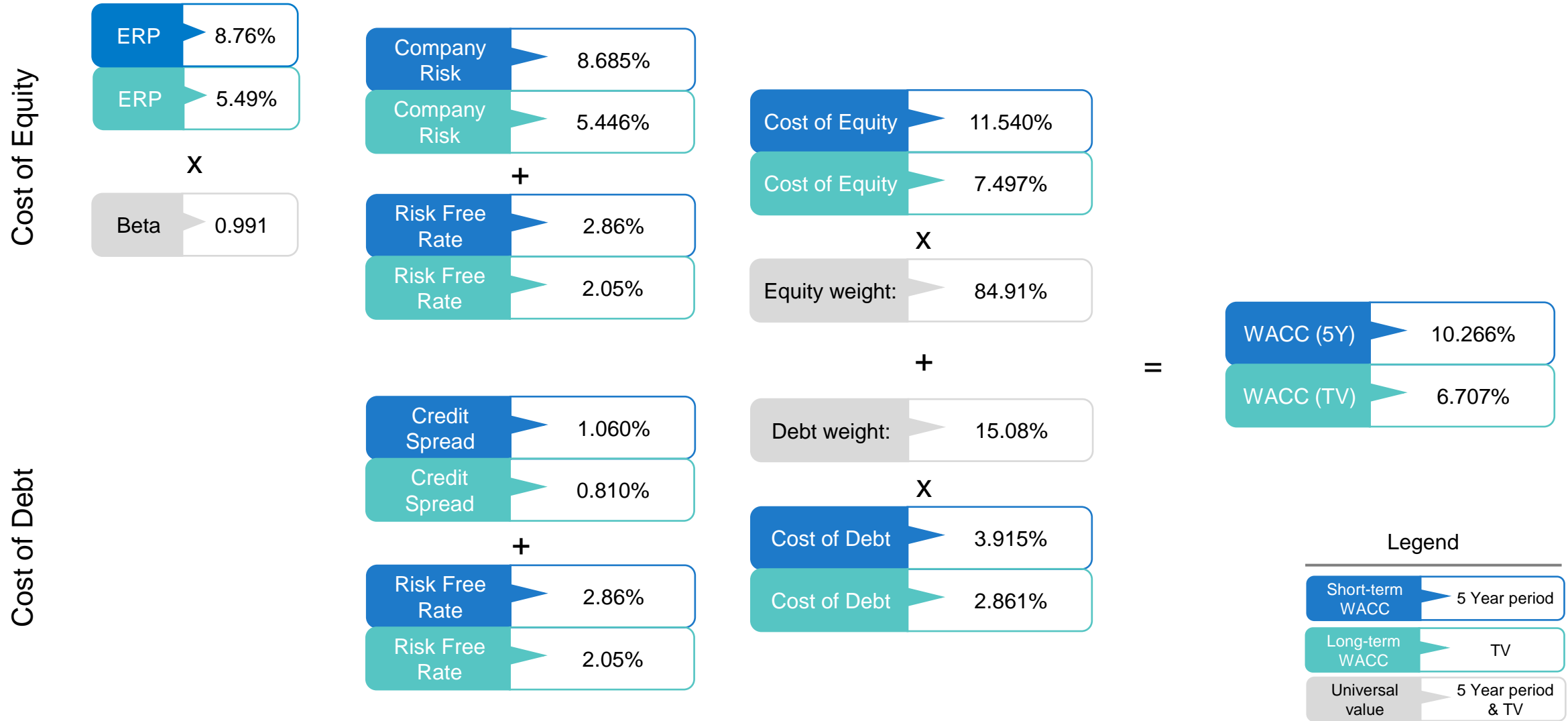


Sensitivity Analysis

WACC (TV)	WACC (5 Years)				
	9.26%	9.76%	10.26%	10.76%	11.26%
5.71%	163.89	163.53	163.18	162.83	162.50
6.21%	140.55	140.19	139.84	139.49	139.15
6.71%	122.25	121.89	121.54	121.19	120.86
7.21%	107.55	107.18	106.83	106.49	106.15
7.71%	95.48	95.12	94.77	94.42	94.08

Appendix: DCF Analysis

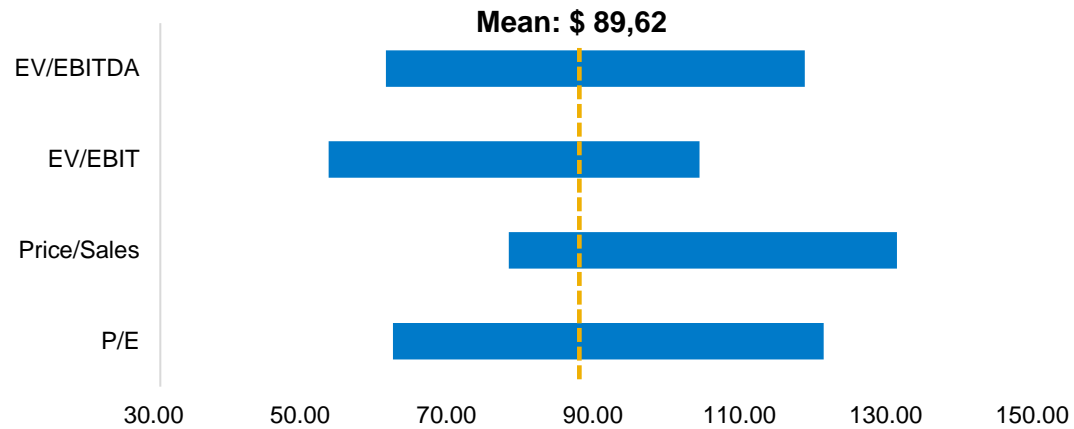
WACC Tree



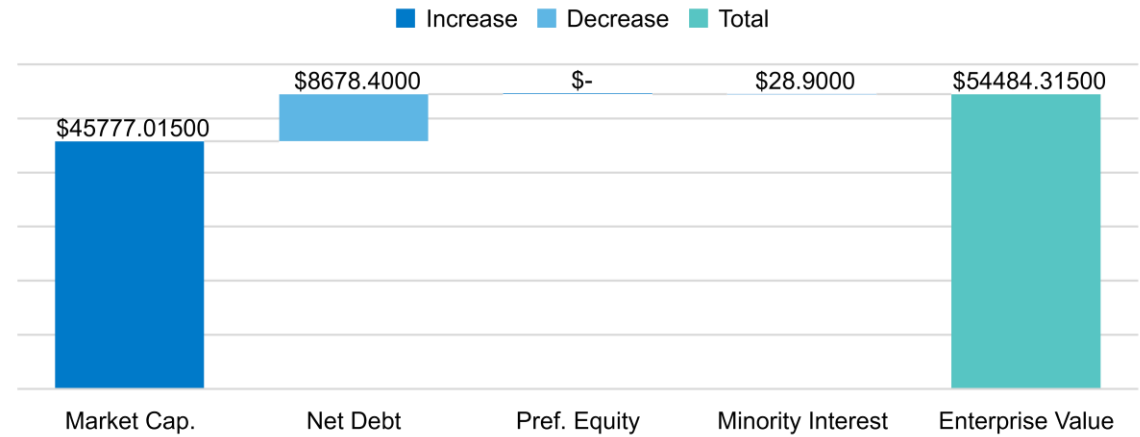
Appendix: Comparable Companies Analysis

Every peer based metric indicates Ecolab's lofty valuation

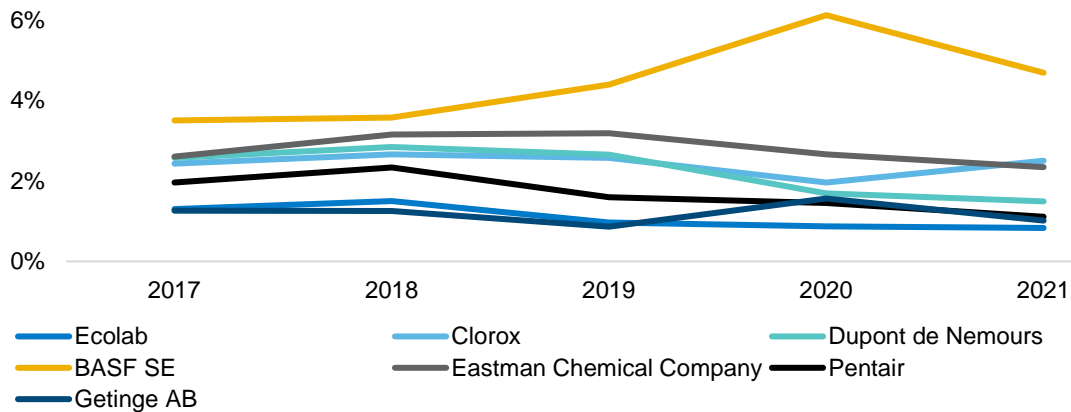
Football Field Chart



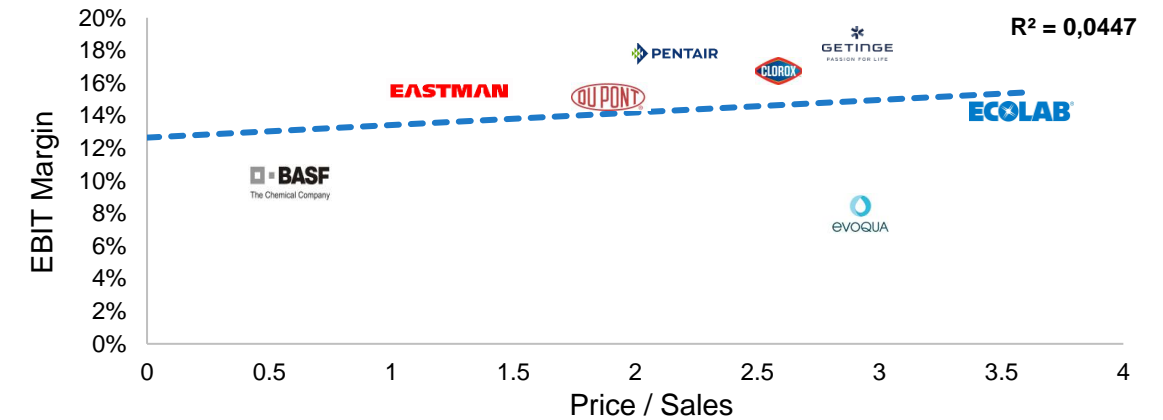
Equity Bridge



Low Dividend Yield



Price/Sales vs. EBIT margin



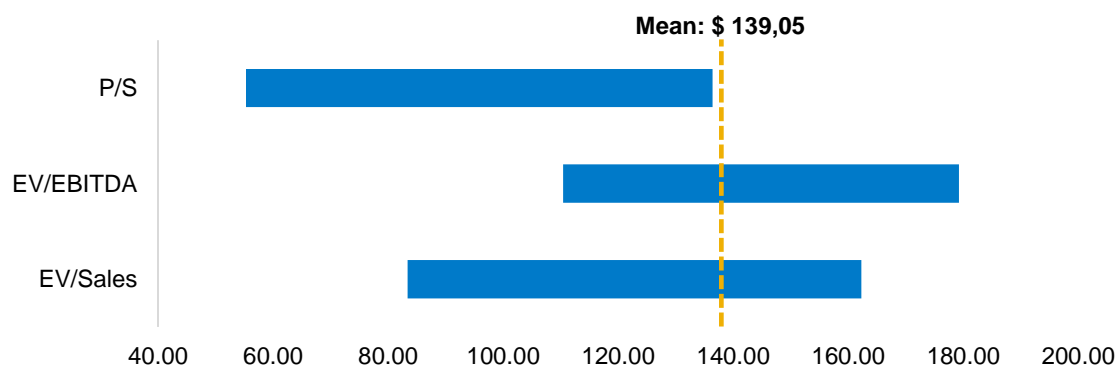
Appendix: Precedent Transaction Analysis

The chemicals industry showed a significant increase in M&A activity in 2021

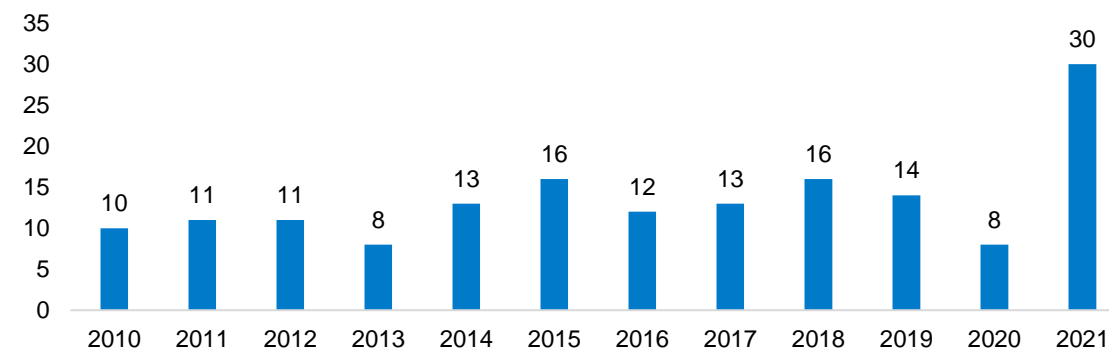
Key financials forecast

Target	Bidder	EV/Sales	EV/EBITDA	P/S
Trecora Resources	Balmoral Funds	0,88x	10,91x	0,82x
Maronne Bio Innovations	Bioceres Crop Solutions	5,92x	n.m.	5,51x
Hexion	American Securities	1,38x	27,35x	0,80x
CMC Materials	Entegris	5,52x	19,11x	4,86x
GCP Applied Technologies	Compaigne de Saint Gobain SA	3,02x	8,25x	3,11x
Kraton Corp.	DL Chemical	1,65x	n.m.	1,05x
Ferro Corp.	Prince Int. Corp,	2,08x	19,03x	1,83x
W.R. Grace Corp.	Standard Industries Inc.	3,59x	28,14x	2,64x
Corning Inc.	Corning Inc.	3,37x	19,14x	2,91x
Lanxess AG	American Securities	2,50x	11,79x	2,42x
Dupont Nutrition & Bioscience	International Flavours & Fragrances	3,69x	15,15x	n.m.
Mean		3,05x	17,65x	2,60x
Median		3,02x	19,03x	2,53x


Football Field



Chemicals industry M&A transactions (\$1 bn+)



Ecolab
Final Pitch
WU Academic Trading and Investment Society



General Information

Project Members

Team Head:	Valentin Horak	Date of submission:	Wednesday, 8. June 2022
Associates:	Christopher Schulz Nevena Vujovic Bence Pataki	Date of valuation:	Tuesday, 7. June 2022
Analysts:	Emil Wolner Joseph Schiedlbauer Matous Ryska		

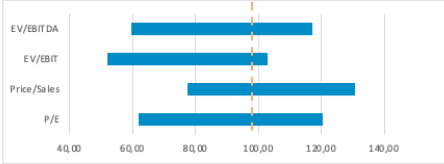
Contents

- [Overview](#) Coverage with Key Figures and Indicators
- [Historical Data](#) Historical Data extracted from Annual Reports
- [Operating Model](#) Calculations and Assumptions used for DCF Model
- [Revenue Forecast](#) Revenue drivers in each of the operating segments
- [DCF Model](#) DCF Model, incl. valuation & share price
- [Multiples](#) Comparable Company Valuation
- [CTA](#) Comparable Transactions Analysis

Key Data

DCF Financials	2019	2020	2021	2022	2023	2024	2025	2026
Revenue	\$12.562	\$11.790	\$12.733	\$13.698	\$14.203	\$14.733	\$15.293	\$15.885
EBIT	\$1.845	\$1.396	\$1.599	\$2.024	\$2.167	\$2.318	\$2.479	\$2.650
EBIT Margin	14,69%	11,84%	12,55%	14,78%	15,26%	15,74%	16,21%	16,68%
Net Income	\$1.559	-\$1.205	\$1.130	\$1.449	\$1.556	\$1.670	\$1.790	\$1.919
FCF	\$1.787	\$2.039	\$1.278	\$1.731	\$1.883	\$2.023	\$2.146	\$2.299

Multiples	25%	Range	75%
P/E	61,79	58,83	120,61
Price/Sales	77,59	53,02	130,61
EV/EBIT	51,99	50,90	102,89
EV/EBITDA	59,79	57,23	117,02



Company Information

ECOLAB INC. (KNYS:ECL)

Ticker: ECL
Last price: \$ 169,82
52 week high: \$ 238,93
52 week low: \$ 154,31
Stock Exchange: New York Stock Exchange

Company Description:
 Ecolab Inc. provides water, hygiene and infection prevention solutions and services. The Company delivers various solutions, data-driven insights and personalized service to various industries. Its segments include Global Industrial, Global Institutional & Specialty and Global Health care & Life Sciences. Its Global Industrial segment provides water treatment and process applications, and cleaning and sanitizing solutions, primarily to industrial customers within the manufacturing, food and beverage processing, transportation, chemical, primary metals and mining, power generation, global refining, petrochemical, pulp and paper industries. Its Global Institutional & Specialty segment provides specialized cleaning and sanitizing products to the food service, hospitality, lodging, government, education and retail industries. Its Global Health care & Life Sciences segment provides specialized cleaning and sanitizing products to the healthcare, personal care and pharmaceutical industries.

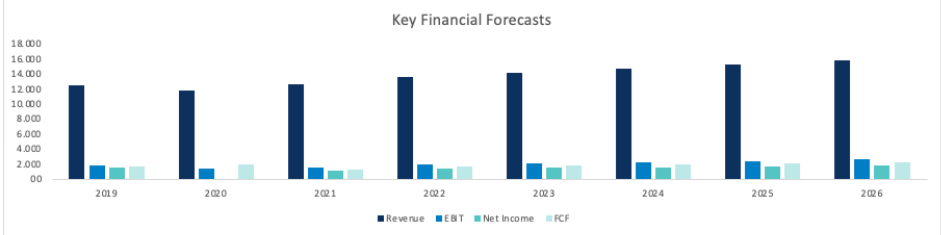
Valuation Outcome

Scenario	Method	Weight %	Target Share Price	Downside Potential:
Base Case	DCF	80%	121,54	-28,43%
	CCA	10%	98,87	-41,78%
	CTA	10%	139,05	-18,12%

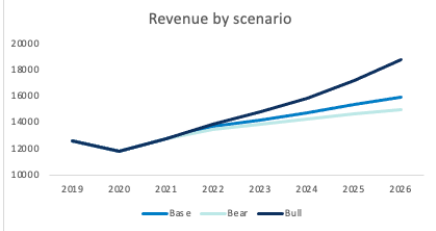
Final share Price Target: 121,02
Downside Potential: -28,73%

Key Visualizations

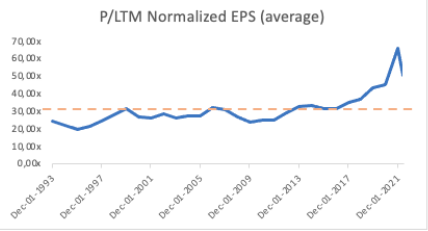
Key Financial Forecasts



Revenue by scenario



P/LTM Normalized EPS (average)



Appendix: Valuation

Operating Model I (Income Statement)

	Historicals						Average	Forecasts				
	Year ended December 31,		2018	2019	2020	2021		2022E	2023E	2024E	2025E	2026E
	2016	2017										
Income Statement												
Total	\$ 13,151,80	\$ 13,835,90	\$ 14,668,20	\$ 12,562,00	\$ 11,790,20	\$ 12,733,10	\$ 13,698,14	\$ 14,203,32	\$ 14,733,49	\$ 15,293,01	\$ 15,884,67	
Growth in %		5,20%	6,02%	-14,36%	-6,14%	8,00%	7,58%	3,69%	3,73%	3,80%	3,87%	
Global Industrial	\$ 4,695,20	\$ 4,918,00	\$ 5,286,50	\$ 5,980,20	\$ 5,870,80	\$ 6,237,80	\$ 6,441,02	\$ 6,648,86	\$ 6,863,70	\$ 7,088,39	\$ 7,324,49	
Growth in %		4,75%	7,49%	13,12%	-1,83%	6,25%	3,26%	3,23%	3,23%	3,27%	3,33%	
Global Institutional & Specialty	\$ 4,482,90	\$ 4,776,20	\$ 5,098,50	\$ 4,401,50	\$ 3,553,20	\$ 3,955,90	\$ 4,291,32	\$ 4,423,66	\$ 4,561,39	\$ 4,704,73	\$ 4,853,86	
Growth in %		6,54%	6,75%	-13,67%	-19,27%	11,33%	8,48%	3,08%	3,11%	3,14%	3,17%	
Global Healthcare & Life Sciences	\$ -	\$ -	\$ -	\$ 972,80	\$ 1,181,90	\$ 1,181,60	\$ 1,680,07	\$ 1,774,19	\$ 1,876,98	\$ 1,989,50	\$ 2,112,56	
Growth in %					21,49%	-0,03%	42,19%	5,60%	5,79%	5,99%	6,19%	
Global Energy	\$ 3,092,90	\$ 3,230,00	\$ 3,421,10	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Growth in %		4,43%	5,92%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	
Other	\$ 880,80	\$ 911,70	\$ 862,10	\$ 1,207,50	\$ 1,084,30	\$ 1,218,60	\$ 1,285,74	\$ 1,356,61	\$ 1,431,42	\$ 1,510,39	\$ 1,593,75	
Growth in %		3,51%	-5,44%	40,06%	-10,20%	12,39%	5,51%	5,51%	5,51%	5,52%	5,52%	
Corporate	\$ -	\$ -	\$ -	\$ -	\$ 100,00	\$ 139,20	\$ -	\$ -	\$ -	\$ -	\$ -	
Growth in %						39,20%	0,00%	0,00%	0,00%	0,00%	0,00%	
Total Cost of Sales	\$ 7,533,90	\$ 8,064,20	\$ 8,625,90	\$ 7,045,80	\$ 6,905,80	\$ 7,615,80	\$ 7,924,44	\$ 8,175,61	\$ 8,438,37	\$ 8,715,04	\$ 9,006,95	
% of Total sales	57,28%	58,28%	58,81%	56,09%	58,57%	59,81%	57,85%	57,56%	57,27%	56,99%	56,70%	
Gross Profit	\$ 5,617,90	\$ 5,771,70	\$ 6,042,30	\$ 5,516,20	\$ 4,884,40	\$ 5,117,30	\$ 5,773,70	\$ 6,027,71	\$ 6,295,11	\$ 6,577,97	\$ 6,877,72	
Gross Profit margin	42,72%	41,72%	41,19%	43,91%	41,43%	40,19%	42,15%	42,44%	42,73%	43,01%	43,30%	
Selling, general and administrative expenses	\$ 3,708,20	\$ 3,825,30	\$ 3,968,60	\$ 3,550,80	\$ 3,309,10	\$ 3,416,10	\$ 3,648,59	\$ 3,755,95	\$ 3,868,14	\$ 3,986,18	\$ 4,110,63	
% of Total	28,20%	27,65%	27,06%	28,27%	28,07%	26,83%	26,64%	26,44%	26,25%	26,07%	25,88%	
Special (gains) and charges	\$ 39,50	\$ (3,70)	\$ 126,70	\$ 120,20	\$ 179,60	\$ 102,60	\$ 100,98	\$ 104,71	\$ 108,62	\$ 112,74	\$ 117,10	
% of Total	0,30%	-0,03%	0,86%	0,96%	1,52%	0,81%	0,74%	0,74%	0,74%	0,74%	0,74%	
EBIT	\$ 1,870,20	\$ 1,950,10	\$ 1,947,00	\$ 1,845,20	\$ 1,395,70	\$ 1,598,60	\$ 2,024,13	\$ 2,167,05	\$ 2,318,35	\$ 2,479,05	\$ 2,649,99	
EBIT margin	14,22%	14,09%	13,27%	14,69%	11,84%	12,55%	14,78%	15,26%	15,74%	16,21%	16,88%	

Appendix: Valuation

Operating Model I (Income Statement)

Other (income) expense (b)	\$	(43,80)	\$	(67,30)	\$	(79,90)	\$	(77,00)	\$	(55,90)	\$	(33,90)	\$	(62,04)	\$	(64,33)	\$	(66,73)	\$	(69,26)	\$	(71,94)
% of Total		-0,33%		-0,49%		-0,54%		-0,61%		-0,47%		-0,27%		-0,45%		-0,45%		-0,45%		-0,45%		-0,45%
Interest expense, net (c)	\$	264,60	\$	255,00	\$	222,30	\$	190,70	\$	290,20	\$	218,30	\$	252,60	\$	261,92	\$	271,69	\$	282,01	\$	292,92
% of Total		2,01%		1,84%		1,52%		1,52%		2,46%		1,71%		1,84%		1,84%		1,84%		1,84%		1,84%
Income before income taxes	\$	1.649,40	\$	1.762,40	\$	1.804,60	\$	1.731,50	\$	1.161,40	\$	1.414,20	\$	1.833,57	\$	1.969,46	\$	2.113,39	\$	2.266,31	\$	2.429,01
EBIT margin		12,54%		12,74%		12,30%		13,78%		9,85%		11,11%		13,39%		13,87%		14,34%		14,82%		15,29%
Provision for income taxes	\$	402,90	\$	243,80	\$	364,30	\$	288,60	\$	176,60	\$	270,20	\$	385,05	\$	413,59	\$	443,81	\$	475,92	\$	510,09
Tax rate		24,43%		13,83%		20,19%		16,67%		15,21%		19,11%		21,00%		21,00%		21,00%		21,00%		21,00%
Net income from continuing operations, including noncontrolling interest	\$	1.246,50	\$	1.518,60	\$	1.440,30	\$	1.442,90	\$	984,80	\$	1.144,00	\$	1.448,52	\$	1.555,88	\$	1.669,58	\$	1.790,38	\$	1.918,92
Net income from continuing operations attributable to noncontrolling interest	\$	17,50	\$	14,00	\$	11,20	\$	17,30	\$	17,40	\$	14,10	\$	-	\$	-	\$	-	\$	-	\$	-
Net income from continuing operations attributable to Ecolab	\$	1.229,00	\$	1.504,60	\$	1.429,10	\$	1.425,60	\$	967,40	\$	1.129,90	\$	1.448,52	\$	1.555,88	\$	1.669,58	\$	1.790,38	\$	1.918,92
Net income (loss) from discontinued operations, net of tax (Note 5) (d)	\$	-	\$	-	\$	-	\$	133,30	\$	(2.172,50)	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Net income (loss) attributable to Ecolab	\$	1.229,00	\$	1.504,60	\$	1.429,10	\$	1.558,90	\$	(1.205,10)	\$	1.129,90	\$	1.448,52	\$	1.555,88	\$	1.669,58	\$	1.790,38	\$	1.918,92
Net Income margin		9,34%		10,87%		9,74%		12,41%		-10,22%		8,87%		10,57%		10,95%		11,33%		11,71%		12,08%

Appendix: Valuation

DCF Output

t	1	2	3	4	5	TV
(in millions, USD)	2022	2023	2024	2025	2026	
Revenue	13.698	14.203	14.733	15.293	15.885	
COGS	7.924	8.176	8.438	8.715	9.007	
Gross Profit	5.774	6.028	6.295	6.578	6.878	
SG&A	3.649	3.756	3.868	3.986	4.111	
Special (gains) and charges	101	105	109	113	117	
EBIT	2.024	2.167	2.318	2.479	2.650	
- Tax	(385)	(414)	(444)	(476)	(510)	
EBIAT	1.639	1.753	1.875	2.003	2.140	
+ Depreciation	558	651	675	700	726	
+ Amortization	309	313	340	343	369	
- CAPEX	749	777	806	837	869	
+/- Change in NWC	25	57	60	64	68	
Unlevered FCF	1.731	1.883	2.023	2.146	2.299	49.806
Discount rate	91%	82%	75%	68%	61%	72%
Present Value of FCF in t=0	1.570	1.549	1.509	1.452	1.410	36.000

General Information	
Beta	0,99
Risk-free Rate	2,9%
D/(D+E)	15%
Debt	8.678
Equity	48.914
D/E	18%

Cost of equity	11,54%
WACC	10,27%

WACC (5 Years) 10,27%

WACC (TV) 6,71%

Terminal Value 49.806

FCF	2.299
g	2,00%
WACC (TV):	6,71%

Scenario: Base Case

Enterprise Value	43.489
Net debt	8.678
Minority interest (noncontrolling interest):	29
Equity Value	34.782
Total shares outstanding (in thousands):	286
Target price per share	121,49
Current price per share	170,85
Upside potential in %	-29%

	Sensitivity Analysis				
	9,26%	9,76%	10,26%	10,76%	11,26%
5,71%	163,89	163,53	163,18	162,83	162,50
6,21%	140,55	140,19	139,84	139,49	139,15
6,71%	122,25	121,89	121,54	121,19	120,86
7,21%	107,55	107,18	106,83	106,49	106,15
7,71%	95,48	95,12	94,77	94,42	94,08

Appendix: Valuation

CCA

Peer Benchmarking Sheet													Multiples					
Company	Shareprice	Market Capitalization	Interest bearing Debt	Cash and Cash Equivalents	Minority Interest	Preferred Equity	Enterprise Value	Sales	EBITDA	EBIT	EPS	Price/Sales	P/E	P/EBIT	EV/Sales	EV/EBITDA	EV/EBIT	
Ecolab	\$ 160,25	\$ 45,777,02	\$ 9,038,30	\$ 359,90	\$ 28,90	\$ -	\$ 54,484,32	\$ 12,733,10	\$ 2,675,40	\$ 1,832,30	\$ 3,87	3,60x	41,41x	24,98x	4,28x	20,36x	29,74x	
Evoqua	\$ 35,73	\$ 4,334,05	\$ 754,51	\$ 146,20	\$ 1,50	\$ -	\$ 4,943,86	\$ 1,464,40	\$ 250,00	\$ 121,00	\$ 0,44	2,96x	81,20x	35,82x	3,38x	19,78x	40,86x	
Clorox	\$ 154,86	\$ 19,063,27	\$ 2,484,00	\$ 319,00	\$ 181,00	\$ -	\$ 21,409,27	\$ 7,341,00	\$ 1,486,00	\$ 1,202,00	\$ 5,58	2,60x	27,75x	15,86x	2,92x	14,41x	17,81x	
Dupont de Nemours	\$ 62,34	\$ 31,699,89	\$ 10,782,00	\$ 2,011,00	\$ 617,00	\$ -	\$ 41,087,89	\$ 16,653,00	\$ 4,035,00	\$ 2,509,00	\$ 3,23	1,90x	19,30x	12,63x	2,47x	10,18x	16,38x	
BASF SE	\$ 51,02	\$ 46,098,74	\$ 17,871,36	\$ 2,728,96	\$ 1,340,56	\$ -	\$ 62,581,70	\$ 81,741,92	\$ 11,687,52	\$ 7,853,04	\$ 6,25	0,56x	8,16x	5,87x	0,77x	5,35x	7,97x	
Eastman Chemical Company	\$ 101,86	\$ 13,119,57	\$ 5,159,00	\$ 459,00	\$ 84,00	\$ -	\$ 17,903,57	\$ 10,476,00	\$ 2,236,00	\$ 1,631,00	\$ 6,20	1,25x	16,43x	8,04x	1,71x	8,01x	10,98x	
Pentair	\$ 48,68	\$ 8,051,67	\$ 894,10	\$ 94,50	\$ -	\$ -	\$ 8,851,27	\$ 3,764,80	\$ 770,10	\$ 656,40	\$ 3,34	2,14x	14,57x	12,27x	2,35x	11,49x	13,48x	
Gefinge AB	\$ 28,71	\$ 7,820,60	\$ 737,95	\$ 403,43	\$ 42,27	\$ -	\$ 8,197,40	\$ 2,677,85	\$ 669,34	\$ 489,75	\$ 1,08	2,92x	26,61x	15,97x	3,06x	12,25x	16,74x	
Minimum	\$ 28,71	\$ 4,334,05	\$ 737,95	\$ 94,50	\$ -	\$ -	\$ 4,943,86	\$ 1,464,40	\$ 250,00	\$ 121,00	\$ 0,44	0,56x	8,16x	5,87x	0,77x	5,35x	7,97x	
25%-Percentille	\$ 45,44	\$ 7,993,91	\$ 859,20	\$ 275,80	\$ 22,05	\$ -	\$ 8,687,80	\$ 3,493,06	\$ 744,91	\$ 614,74	\$ 2,69	1,74x	15,97x	11,21x	2,19x	9,64x	12,86x	
Median	\$ 56,68	\$ 16,091,42	\$ 3,821,50	\$ 381,66	\$ 63,14	\$ -	\$ 19,656,42	\$ 8,908,50	\$ 1,861,00	\$ 1,416,50	\$ 3,61	2,37x	22,95x	14,25x	2,69x	11,87x	16,56x	
Mean	\$ 80,43	\$ 21,995,60	\$ 5,965,15	\$ 815,25	\$ 286,90	\$ -	\$ 27,432,41	\$ 17,106,51	\$ 2,976,17	\$ 2,036,81	\$ 3,75	2,24x	29,43x	16,43x	2,62x	12,73x	19,24x	
75%-Percentille	\$ 115,11	\$ 35,219,17	\$ 9,474,23	\$ 847,00	\$ 290,00	\$ -	\$ 44,437,00	\$ 13,713,08	\$ 3,015,30	\$ 2,001,48	\$ 5,74	2,93x	31,17x	18,22x	3,14x	15,75x	20,79x	
Maximum	\$ 160,25	\$ 46,098,74	\$ 17,871,36	\$ 2,728,96	\$ 1,340,56	\$ -	\$ 62,581,70	\$ 81,741,92	\$ 11,687,52	\$ 7,853,04	\$ 6,25	3,60x	81,20x	35,82x	4,28x	20,36x	40,86x	

Share Price Calculated with	P/E	EPS	Implied Shareprice
25%-Percentille	15,97x	\$ 3,87	\$ 61,79
Median	22,95x	\$ 3,87	\$ 88,83
Mean	29,43x	\$ 3,87	\$ 113,89
75%-Percentille	31,17x	\$ 3,87	\$ 120,61

EV calculated with	EV/EBIT	Equity Value	Shares Out.	Implied Shareprice
25%-Percentille	12,86x	\$ 14,851,85	285,66	\$ 51,99
Median	16,56x	\$ 21,630,11	285,66	\$ 75,72
Mean	19,24x	\$ 26,553,01	285,66	\$ 92,95
75%-Percentille	20,79x	\$ 29,390,61	285,66	\$ 102,89

Share Price Calculated with	Price/Sales	Shares Out	Implied Shareprice
25%-Percentille	\$ 22,165,17	285,66	\$ 77,59
Median	\$ 30,148,76	285,66	\$ 105,54
Mean	\$ 28,538,94	285,66	\$ 99,91
75%-Percentille	\$ 37,311,29	285,66	\$ 130,61

EV calculated with	EV/EBITDA	Equity Value	Shares Out.	Implied Shareprice
25%-Percentille	9,64x	\$ 17,080,60	285,66	\$ 59,79
Median	11,87x	\$ 23,050,60	285,66	\$ 80,69
Mean	12,73x	\$ 25,348,12	285,66	\$ 88,74
75%-Percentille	15,75x	\$ 33,428,50	285,66	\$ 117,02

Weighted Shareprice	
Mean of Means	\$ 98,87
Mean of Medians	\$ 87,70

Appendix: Valuation

CTA

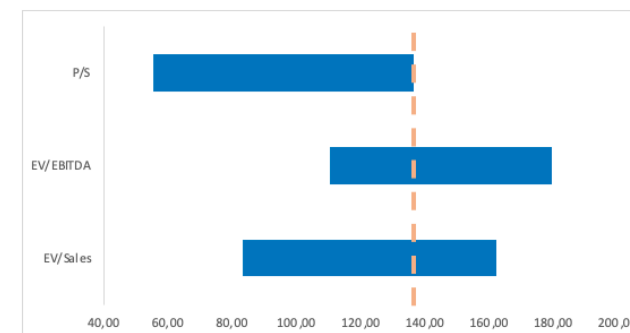
Comparable Transaction Analysis-Transaction Overview										Multiples		
Target	Bidder	Implied Equity Value	Net Debt	EV	Revenue	EBITDA	Deal Value	EV/Sales	EV/EBITDA	P/S		
Trecora Resources	Balmoral Funds	\$ 188,43	\$ 13,16	\$ 201,59	\$ 229,68	\$ 18,48	\$ 201,59	0,88x	10,91x	0,82x		
Maronne Bio Innovations	Bioceres Crop Solutions	\$ 180,59	\$ 13,38	\$ 193,98	\$ 32,76	\$ (8,78)	\$ 193,98	5,92x	n.m.	5,51x		
Hexion	American Securities	\$ 1.470,44	\$ 1.070,51	\$ 2.541,95	\$ 1.837,08	\$ 92,95	\$ 2.541,95	1,38x	27,35x	0,80x		
CMC Materials	Entegris	\$ 4.312,00	\$ 557,07	\$ 4.900,07	\$ 888,11	\$ 256,48	\$ 4.900,07	5,52x	19,11x	4,86x		
GCP Applied Technologies	Compaigne de Saint Gobain SA	\$ 2.056,16	\$ (60,00)	\$ 1.996,15	\$ 661,06	\$ 241,82	\$ 1.774,84	3,02x	8,25x	3,11x		
Kraton Corp.	DL Chemical	\$ 1.199,00	\$ 693,55	\$ 1.892,55	\$ 1.144,08	\$ (150,45)	\$ 1.892,55	1,65x	n.m.	1,05x		
Ferro Corp.	Prince Int. Corp,	\$ 1.286,02	\$ 177,32	\$ 1.463,34	\$ 701,86	\$ 76,90	\$ 1.463,34	2,08x	19,03x	1,83x		
W.R. Grace Corp.	Standard Industries Inc.	\$ 3.336,72	\$ 1.213,05	\$ 4.549,78	\$ 1.266,05	\$ 161,68	\$ 4.549,78	3,59x	28,14x	2,64x		
Corning Inc.	Corning Inc.	\$ 24.092,52	\$ 3.821,20	\$ 27.913,71	\$ 8.272,71	\$ 1.458,03	\$ 1.097,44	3,37x	19,14x	2,91x		
Lanxess AG	American Securities	\$ 751,23	\$ 25,28	\$ 776,51	\$ 311,06	\$ 65,87	\$ 776,51	2,50x	11,79x	2,42x		
Dupont Nutrition & Bioscience	International Flavours & Fragrances	n.a.	n.a.	\$ 19.657,86	\$ 5.333,28	\$ 1.297,80	\$ 19.657,86	3,69x	15,15x	n.m.		
	Minimum	\$ 180,59	\$ (60,00)	\$ 193,98	\$ 32,76	\$ (150,45)	\$ 193,98	0,88x	8,25x	0,80x		
	25%-Percentille	\$ 863,17	\$ 16,36	\$ 1.119,93	\$ 486,06	\$ 42,17	\$ 936,98	1,87x	11,79x	1,24x		
	Median	\$ 1.378,23	\$ 367,19	\$ 1.996,15	\$ 888,11	\$ 92,95	\$ 1.774,84	3,02x	19,03x	2,53x		
	Mean	\$ 3.887,31	\$ 752,45	\$ 6.007,95	\$ 1.879,79	\$ 319,16	\$ 3.549,99	3,06x	17,65x	2,59x		
	75%-Percentille	\$ 3.016,58	\$ 976,27	\$ 4.724,92	\$ 1.551,56	\$ 249,15	\$ 3.545,86	3,64x	19,14x	3,06x		
	Maximum	\$ 24.092,52	\$ 3.821,20	\$ 27.913,71	\$ 8.272,71	\$ 1.458,03	\$ 19.657,86	5,92x	28,14x	5,51x		

Share Price Calculated with	EV/Sales	Sales	Implied Shareprice
25%-Percentille	1,87x	\$ 12.733,10	\$ 83,35
Median	3,02x	\$ 12.733,10	\$ 134,61
Mean	3,06x	\$ 12.733,10	\$ 136,40
75%-Percentille	3,64x	\$ 12.733,10	\$ 162,25

Share Price Calculated with	EV/EBITDA	EBITDA	Implied Shareprice
25%-Percentille	11,79x	\$ 2.675,40	\$ 110,42
Median	19,03x	\$ 2.675,40	\$ 178,23
Mean	17,65x	\$ 2.675,40	\$ 165,30
75%-Percentille	19,14x	\$ 2.675,40	\$ 179,26

Share Price Calculated with	P/S	Sales	Implied Shareprice
25%-Percentille	1,24x	\$ 12.733,10	\$ 55,27
Median	2,53x	\$ 12.733,10	\$ 112,77
Mean	2,59x	\$ 12.733,10	\$ 115,45
75%-Percentille	3,06x	\$ 12.733,10	\$ 136,40

Weighted Shareprice	
Mean of Means	\$ 139,05
Mean of Medians	\$ 141,87



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