

**MASTERS IN  
FINANCE**

**MASTERS FINAL WORK  
PROJECT**

**EQUITY RESEARCH:  
ACS, ACTIVIDADES DE CONSTRUCCIÓN Y  
SERVICIOS**

**TOMÁS DA CRUZ AGAMA DOS REIS**

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**SUPERVISOR:  
PAULO FRANCISCO**

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# Abstract

ACS, ACTIVIDADES DE CONSTRUCCIÓN Y SERVICIOS, S.A ("ACS") is the largest Spanish company and one of the largest in the world in the construction industry with over €34 billion in revenue in 2022. Behind the success of this Spanish giant, there is a name: Florentino Pérez. After more than 20 years as CEO of the company, Juan Cases was appointed as Pérez's successor.

To analyze the company, various methods were used including DDM, Multiples, FCFF, and FCFE. The buy recommendation is based on the FCFF model, with a target price of €36.69, representing a potential appreciation of 19.5% over the current price of €30.70, with medium risk.

The undervaluation of the company is primarily due to three factors: i) The construction industry is unattractive and has low returns compared to the constant media hype around emerging industries with greater potential such as biotechnology and artificial intelligence. ii) Although Pérez continues to be part of the board of directors, the appointment of the new CEO to lead the company brings uncertainties as Pérez's reign brought growth and prosperity to the company. iii) The current macroeconomic environment makes investors more averse to investing in cyclical companies whose margins are highly affected by inflation and rising interest rates.

The industry may face various challenges in the medium term, but ACS is prepared to face them as the market leader it is. Debt reduction, dividend stability, and diversification of income sources are the main focal points for the new CEO.

JEL classification: G10; G32; G34

Keywords: Equity Research; Valuation; Mergers & Acquisitions; Construction; ACS, ACTIVIDADES DE CONSTRUCCIÓN Y SERVICIOS; Discounted Cash Flow; Free Cash Flow to Firm; Free Cash Flow to Equity

## Resumo

ACS, ACTIVIDADES DE CONSTRUCCIÓN Y SERVICIOS, S.A (“ACS”) é a maior empresa espanhola e uma das maiores no mundo no ramo da construção com mais de €34bn em receita em 2022. Por detrás do sucesso deste colosso espanhol, existe um nome: Florentino Pérez. Após mais de 20 anos como CEO da empresa, Juan Cases foi nomeado sucessor do reinado de Pérez.

Para analisar a empresa vários métodos foram utilizados incluindo DDM, Multiples, FCFF e FCFE. A recomendação de compra é baseada no modelo FCFF, com um preço-alvo de €36.69, representando uma valorização potencial de 19.5% sobre o preço atual de €30.70, com médio risco.

A subvalorização da empresa deve-se essencialmente a três fatores: i) A indústria da construção é desinteressante e com retornos baixos face ao constante bombardeamento pelos media de indústrias emergentes com maior potencial como biotecnologia e inteligência artificial; ii) Apesar de Pérez continuar a fazer parte do conselho de administração, a nomeação do novo CEO para comandar a empresa traz incertezas aquando do reinado de Pérez trouxe crescimento e prosperidade para a empresa; iii) O atual enquadramento macroeconómico torna os investidores extra avessos a investir em empresas cíclicas e cujas margens sejam altamente prejudicadas pela inflação e pela subida das taxas de juro

A indústria pode ter no médio-prazo diversos desafios para enfrentar, mas a ACS está preparada a enfrentá-los como o líder de mercado que é. Redução da dívida, fixação de dividendos e diversificação das suas fontes de rendimento são os principais pontos de foco do novo CEO.

Classificação JEL: G10; G32; G34

Palavras-Chave: Equity Research; Avaliação de Empresas; Fusões e Aquisições; Construção, ACS, ACTIVIDADES DE CONSTRUCCIÓN Y SERVICIOS, S.A (“ACS”); Discounted Cash Flow; Free Cash Flow to Firm; Free Cash Flow to Equity

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To all my friends, thank you for being part of my life and for helping me become who I am today. A huge shout-out to Gabriel Basso and António Cabral, my rave partners who have seen me at my lowest but also in “high revs”. Long live the legend of Bexona, the best driver in the zone, Teenager, who always pulls me back to reason, and of course, Rookie, who is now on the path to becoming a master.

To LIS for welcoming me even before my first day of classes and providing me with opportunities to showcase my worth and secure my first summer internship in the industry doing something I love. To David Tita, the current president of this institution, a friend and occasional finance tutor, thank you for all the help, whether it's in the club, during my master's program, or in my personal life. Soon, you'll have a chance to try to beat me at poker.

To my girlfriend, Marisa Salvado, for putting up with and standing by this character, I appreciate all the support and encouragement to finish this phase as quickly as possible. Your presence brings joy and tranquility to my life, and I am grateful for every moment shared with you.

Lastly, I want to thank my supervisor and everyone who helped me finish this project.

"Sunny days wouldn't be special if it wasn't for rain. Joy wouldn't feel so good if it wasn't for pain"

Curtis James Jackson III

# Index

1.	Research snapshot	1
	<b>Infrastructure as a key segment</b>	2
2.	Business Description	2
	<b>The North American dominance</b>	3
	<b>Strategy</b>	3
	<b>Shareholder remuneration</b>	4
3.	Management and ESG	4
	<b>A complex corporate structure</b>	5
	<b>Management Bodies</b>	5
	<b>The man behind the success</b>	6
	<b>There is no construction without controversy</b>	6
	<b>Master plan</b>	7
4.	Industry Overview and Competitive Positioning	7
	<b>Navigation through disruption</b>	7
	<b>Interest rate impact</b>	8
	<b>Smart cities</b>	8
	<b>New technologies</b>	9
	<b>5G</b>	10
	<b>The green transition</b>	10
	<b>Porter's five forces</b>	11
5.	Investment Summary	12
	<b>Valuation methods</b>	12
	<b>Investment risks</b>	13
6.	Valuation	13
	<b>Free Cashflow approach</b>	13
	<b>Dividend model</b>	15
	<b>Market-based valuation</b>	15
7.	Financial Analysis	15
	<b>Recovery in place</b>	15
	<b>Healthy cash generation</b>	15
	<b>Improving solvency</b>	16
	<b>Focus on efficiency</b>	16
8.	Risks	16
	<b>Operational Risks</b>	16
	<b>Political &amp; Environmental Risks</b>	17
	<b>Economic and Market risks</b>	17
	<b>Price Target Sensitivity</b>	18
	Appendices	19
	<b>Appendix 1: Statement of Financial Position</b>	19

<b>Appendix 2: Income Statement</b>	20
<b>Appendix 3: Cash Flow Statement</b>	20
<b>Appendix 4: Balance Sheet (common size)</b>	21
<b>Appendix 5: Income Statement (common size)</b>	22
<b>Appendix 6: Cash Flow Statement (common size)</b>	22
<b>Appendix 7: Key Financial Ratios</b>	23
<b>Appendix 8: Main assumptions</b>	24
<b>Appendix 9: Cost of debt</b>	24
<b>Appendix 10: Cost of debt (MV in thousands)</b>	25
<b>Appendix 11: Beta estimation</b>	25
<b>Appendix 12: WACC Method</b>	25
<b>Appendix 13: FTE Method</b>	26
<b>Appendix 14: DDM Method</b>	26
<b>Appendix 15: Market-based Valuation</b>	26
<b>Appendix 16: Global EV Sales</b>	27
<b>Appendix 17: Private capital raised by funds</b>	27
<b>Appendix 18: Sustainable financing projects by region</b>	27
<b>Appendix 19: ACS Focus Markets</b>	28
<b>Appendix 20: ACS History</b>	29
References	30

## List of Figures

Figure 1- ACS share price vs European benchmark	1
Figure 2 - Operational Free Cash-Flow	1
Figure 3- Total Revenue (€'M)	2
Figure 4- FY2022 EBITDA by segment	2
Figure 5- FY2022 revenue per region	2
Figure 6- FY2022 Backlog per region	3
Figure 7- CAGR growth in Chinese construction market 2020-2030	3
Figure 8- Traffic evolution (2022)	3
Figure 9- Dividends per share	4
Figure 10- Shareholder structure	4
Figure 11- Florentino Perez	6
Figure 12- Reported bribery and corruption by industry	6
Figure 13- Construction industry annual greenhouse gas emissions	6
Figure 14- ACS Priority SDGs	7
Figure 15- KPMG supply chain stability index	7
Figure 16- Quiet quitters	7
Figure 17- Share of urban population	8
Figure 18- Euribor 6-month	8
Figure 19- American Housing Market Index	8
Figure 20- 5G IoT unit sales forecast	9
Figure 21- Total public construction spending in the US	9
Figure 22- Drone usage by industry	10
Figure 23- EV sales vs charging points constructed	10
Figure 24- Energy consumption by fuel (quadrillion British thermal units)	10
Figure 25- SWOT Analysis	11
Figure 26- Top International Contractors	12
Figure 27- Valuation Methods summary	12
Figure 28- Equity value from FCFF approach (€bn)	13
Figure 29- Price vs Fair Value	13
Figure 30- Cost of equity	14
Figure 31- Sources of capital	14
Figure 32- Sustainable growth rate	14

Figure 33- Payout ratio	15
Figure 34- Market-based valuation	15
Figure 35- Profit margins	15
Figure 36- Solvency Ratios	16
Figure 37- Risk matrix	16
Figure 38- EUR/USD	17
Figure 39- S&P Commodity Index	17
Figure 40- Real GDP growth (Annual %)	18
Figure 41- Monte Carlo Simulation	18

## **List of Tables**

Table 1- ACS management bodies	5
Table 2- ACS BoD	5
Table 3- Sensitivity Analysis Table	18

Medium risk

14 April 2023

Portugal

## 1. Research snapshot

### Buy recommendation

ACS, Actividades de Construcción y Servicios is initiated as a buy recommendation with a 2023YE price target of €36.69. The DCF model implies a 19.5% upside potential (28.3% annualized return from April 14<sup>th</sup> closing price), although it is important to note that the investment carries a medium level of risk.

Construction may not have the same level of buzz and excitement as industries like AI or Biotech, but it remains a historically profitable and steadily growing sector. While some short-term challenges exist, particularly inflation and a deteriorated macroeconomic outlook, investors should focus on its long-term prospects, as ACS track record proves its experience and expertise on the field. The current strategy to deleverage, deliver more value to shareholders and diversifying should be enticing points for investors to take a deeper look into the Spanish beast.

### Margins under pressure

The construction industry has low margins, with ACS achieving an average 6% EBITDA margin. Inflation in raw materials (c.70% of operational costs) and demand for higher wages (c.20% of operational costs) are adding additional strain to an already tight profit margin. Nevertheless, as one of the biggest players in the industry with an amazing track record at managing costs, investors should rest assured the Group will thrive when everything returns to normal.

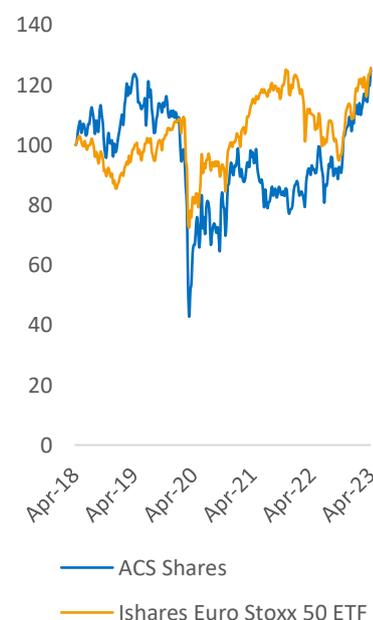
### Cyclical business

Despite the current economic challenges, the construction industry holds significant long-term potential that savvy investors should not overlook. While short-term fluctuations and pessimism may impact sentiment, it is important to recognize the enduring demand for infrastructure development and the essential role construction plays in driving economic growth. Historically, the industry has demonstrated resilience and adaptability, weathering various economic cycles and emerging strong.

### Sailing through a sea of problems

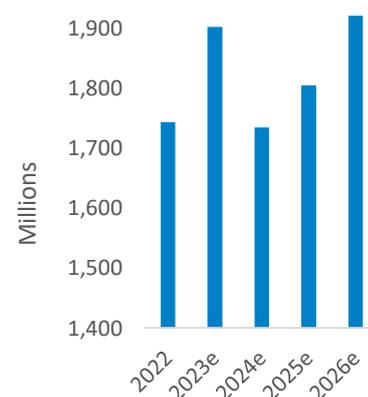
ACS distinguishes itself as a global infrastructure leader through its conservative and calculated approach. The company's strong financial position, combined with its culture of expertise and innovation, sets it apart as an exceptional investment opportunity for exposure to the sector. In line with its commitment to delivering value to shareholders, ACS has recently implemented a new policy to pay a fixed dividend of €2.00 per share, further enhancing its appeal to investors. This dividend policy demonstrates ACS's focus on providing consistent returns and rewarding shareholders for their investment in the company.

Figure 1- ACS share price vs European benchmark



Source: Refinitiv

Figure 2 - Operational Free Cash-Flow



Source: Author estimates

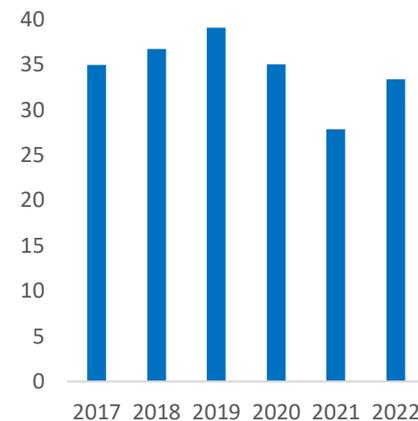
## 2. Business Description

ACS, also known as Actividades de Construcción y Servicios, is a Spanish-based international construction and services company with over 128,000 employees as of December 2022. Since its establishment in 1997, ACS has become a leading contractor in the international construction industry, maintaining its position for the past eight years according to Engineering News-Record (ENR). The company was formed after the merger of OCP Construcciones, S.A and Ginés Navarro Construcciones, S.A. Over time, ACS has acquired control of several important companies in the European construction industry, including Dragados in 2002, a Spanish construction company, and a significant participation in Hochtief in 2007, a world leader in infrastructure with a strong presence in the US, Central Europe, Australia, and South Asia. In 2018, ACS acquired a 30% direct stake in Abertis and 20% minus one share through Hochtief. As of 21FYE, ACS has closed the sale of Cobra group, which represented much of its industrial services segment.

### Infrastructure as a key segment

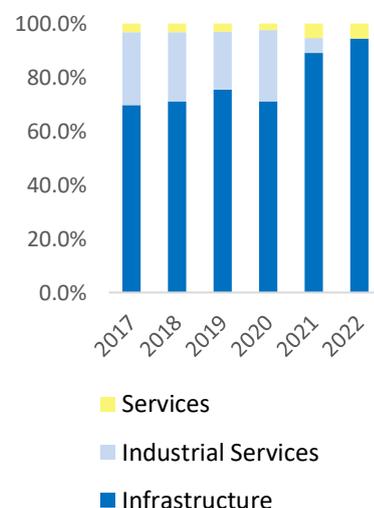
ACS reported three segments in 2022FYE: Construction, concessions, and services. Construction and concessions started to disintegrate from the infrastructure segment in 2021, when the company decided to report them differently. This happened due to a change in the company's strategy to start focusing on stable and recurring revenue coming from concessions as part of the diversification strategy. Construction is the most important segment of the company, representing 94% of sales and 81% of EBITDA in 2022FYE. In this area, Dragados and Hochtief develop different projects such as Civil works (activities related to the development of infrastructures such as highways, railways, maritime and airport works), building (residential, social facilities and installations) as well as infrastructure services (rail, transport, communications and technology, energy, resources, water, and defense sectors). The regions with the highest exposure to this area are North America, Asia Pacific, and Europe, mainly in developed markets. It experienced a +2.9% sales CAGR between 2017 and 2022. Concessions activity is performed through Iridium and a minority stake in Abertis and is focused on the development and operation of transport concessions, through either direct construction models for clients or through public-private partnership models in which ACS covers the entire value chain of the concession business from conception to financing construction and operation. The regions with the highest exposure are Europe, Latam and North America. It experienced a -3.6% CAGR between 2016 and 2022, after it was highly impacted by the Covid pandemic. Between 2020 and 2022, it experienced a 5.3% CAGR and is showing strong signs of recovery. The final segment reported is Services and it covers three areas: services for people cover the assistance needs and resources for vulnerable groups, services for buildings includes services that are necessary for optional operation of any property and services for the city, including activities aimed at the conservation and care of public spaces. This area is done by Clece and is mainly based in Spain but is slowly making headway in the European market. Sales grew 4.7% and EBITDA grew 5.8% CAGR between 2017-2022. Industrial services segment was dedicated to applied industrial engineering and it declined 2.2%

Figure 3- Total Revenue (€M)



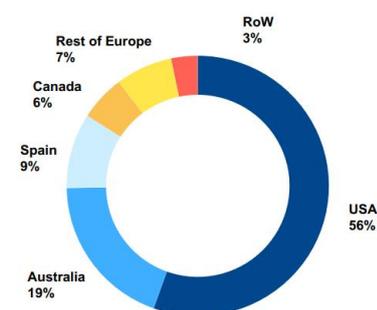
Source: Annual Report

Figure 4- FY2022 EBITDA by segment



Source: Annual Report

Figure 5- FY2022 revenue per region



Source: Annual Report

between 2017-2020. ACS' strategy shifted in this segment and decided to sell this business line to Vinci for €5.5bn in 2021 and form a joint venture with them, having 49% of this new organization.

**The North American dominance**

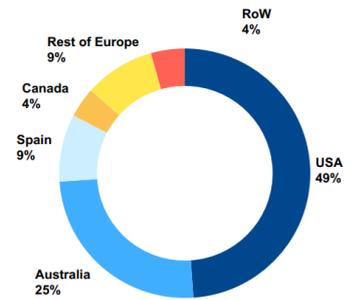
ACS has been slowly recovering its revenue to pre-COVID levels, following a sharp drop in sales of 25% in 2020. In the last two years, the company has recorded a 7.1% CAGR, indicating a slow but steady pace of recovery. The United States is a crucial region for the company, accounting for 56% of total revenue in the 2022 fiscal year, with a CAGR of 7.16% in the last five years. Only Canada has outpaced the US growth rate with a CAGR of 9.74%, accounting for a total of 5.7% of sales. Apart from Germany, all the remaining reported regions showed positive year-on-year growth, with the US leading the way with strong growth of 27%. The construction segment in North America showed a solid recovery in activity after the pandemic slowdown, with construction in the US returning to pre-pandemic growth trends. This was supported by a backlog of €36bn, which was 9.7% higher than the comparable period. Concerning concessions, the United States continued to be an important market, ranking just behind Brazil and Mexico in terms of revenue, with a total of €5,102m. Brazil's concession revenue grew by 34% YoY, with an EBITDA YoY growth of 33%. Mexico also recorded strong growth, with a revenue growth of 33% and an EBITDA growth of 34%, while the United States saw a revenue growth of 26% and EBITDA growth of 36%. Despite strong growth in the American region, Spain's sales in this segment (€512m) decreased by 41% YoY due to the expiration of a concession in August 2021. However, the overall growth in revenue and EBITDA for the company was still positive at 5.1% and 5.5%, respectively. The last segment, services, represents €1.6bn (or 5.5%) of total revenue and is present in Spain (89% of sales), the United Kingdom (9%), and Portugal (1%). Overall, ACS is showing signs of a slow but steady recovery, with the US market remaining a key region for the company's revenue growth. The company's concession segment also presents promising growth opportunities, particularly in Brazil, Mexico, and the United States. However, the expiration of a concession in Spain has led to a decline in sales in this segment, indicating the importance of regularly renewing concessions to maintain revenue growth.

**Strategy**

**Reducing leverage:** Leverage can be both a powerful tool and a source of risk. Properly managed, it can boost profits and enable growth. However, if not managed carefully, it can lead to financial distress and even bankruptcy. In the current economic climate, with interest rates on the rise, ACS is reassessing its debt levels to reduce its overall risk and lower the cost of debt, making it easier to withstand the current economic headwinds

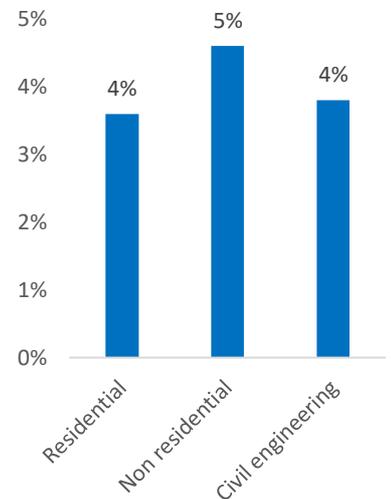
**Recurring revenue:** As a part of its strategic planning, the company recognizes that the cyclical nature of the business poses certain risks that need to be managed effectively. ACS has been heavily reliant on infrastructure building in the past, which has increased its exposure to risks

Figure 6- FY2022 Backlog per region



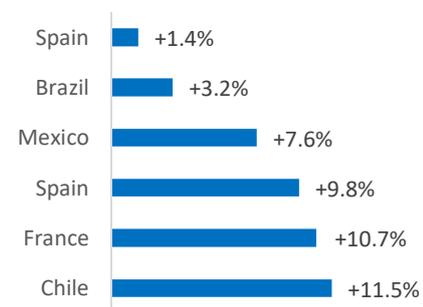
Source: Annual report

Figure 7- CAGR growth in Chinese construction market 2020-2030



Source: Oxford Economics

Figure 8- Traffic evolution (2022)



Source: Company information

associated with the construction industry. The company recognizes the importance of cash flow stability and predictability. Therefore, the shift towards concessions is also aimed at increasing the weight of its assets with recurring cash flows. This will enable the company to achieve greater financial stability and reduce the overall riskiness of its operations

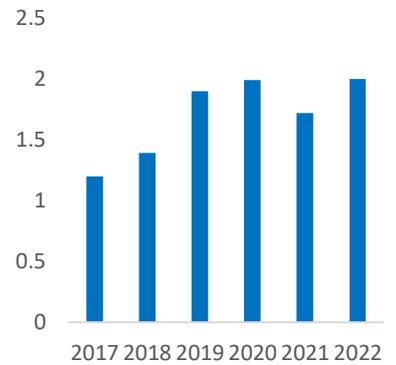
**ESG as a form of shareholder value:** Embracing sustainability yields a multitude of advantages for the company, encompassing an enhanced reputation and a distinctive edge over competitors, which is crucial for ACS to maintain its position as one of the leading industry players. By dedicating its efforts to sustainability, the firm can position itself as a pivotal participant in the burgeoning sustainable infrastructure market, thereby bolstering its influence and securing favorable conditions for its operations. This extends to tangible benefits like reduced borrowing costs through avenues such as green bonds, as well as potential tax incentives, exemplified by mechanisms like the EU taxonomy.

**Simplification of corporate structure:** To enhance the Group's efficiency and agility, there is a focus on simplifying its organizational structure while retaining its competitive edge and operational decentralization that distinguishes it from rivals. The goal is to create a more streamlined and nimble organization that can adapt quickly to changes in the market and make decisions more efficiently. This will allow the Group to remain competitive and thrive in the face of ongoing challenges in the industry.

**Shareholder remuneration**

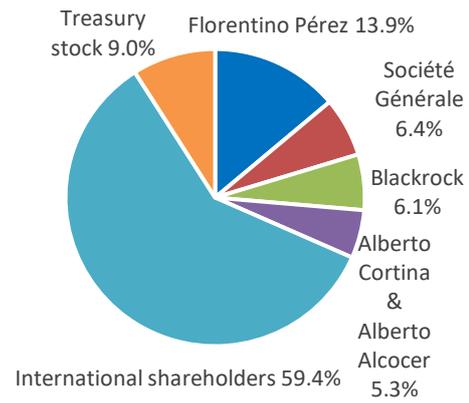
In the 2021 General Shareholder’s Meeting, the current dividend policy was approved, which translates into a fixed €2 per share dividend for its 278m shares outstanding. For 2022YE, it corresponds to an 80% payout ratio and 7.5% CAGR in the last 5 years. As of 14 April 2023, it represents a 6.8% current yield based on the closing price. During 2022, the group purchased €705m of treasury stock, representing 10% of its market capitalization.

Figure 9- Dividends per share



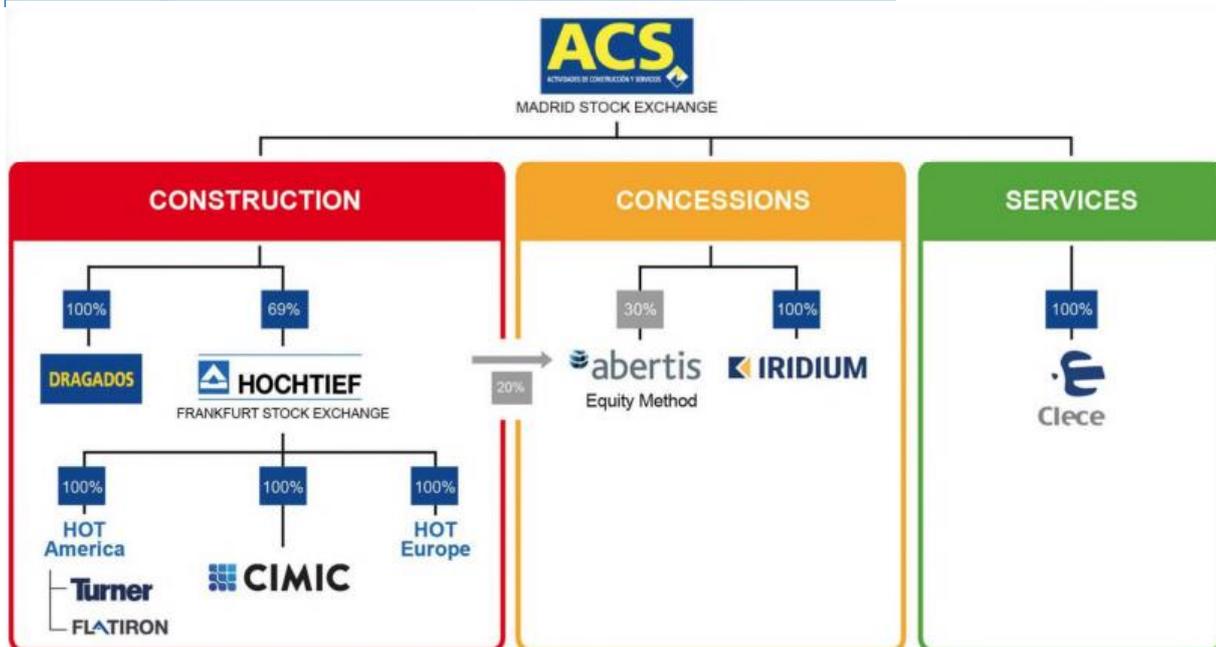
Source: Annual Report

Figure 10- Shareholder structure



Source: Annual report

**3. Management and ESG**



### A complex corporate structure

ACS has a total of 278 million shares outstanding, all in the same class with the same rights. Its largest shareholder is Florentino Perez, who owns 14% of the outstanding shares. Perez, who is better known for being the president of Real Madrid, is also the company's current Chairman and previous CEO. The company's structure is somewhat complex compared to a typical organization. ACS wholly or partially owns one or more companies to perform each of the three segments reported in its annual report. In the construction segment, ACS owns Dragados and 69% of Hochtief, which is publicly traded on the Frankfurt stock exchange. While Dragados and Hochtief have similar operational margins (3.1% and 2.8%, respectively, in 2022), Dragados is only responsible for around 17% of sales, while Hochtief accounts for the remaining 83% through itself and the companies it owns. Hochtief owns Turner, a US construction management company that focuses mainly on healthcare, data centers, commercial and office buildings, airports, and education. It also owns Flatiron, a US engineering contractor that focuses on transport infrastructure projects such as bridges, roads, railways, and airports, as well as other projects such as water storage and treatment facilities. In addition, Hochtief owns Cimic, an Australian company that was recently fully acquired by Hochtief, focused on construction, mining, mineral processing, services, infrastructure development, and engineering through itself and more than five subsidiaries. In the concession segment, Abertis and Iridium focus on toll road management and concessions involving roads, highways, subways, and railways. Finally, the services segment is represented by Clece's facility management activity, which includes building maintenance, public places, and organizations, as well as care assistance. ACS aims to simplify its corporate structure to become a more efficient and dynamic organization, which should result in increased transparency and better tracking of cash flows, leading to a higher stock valuation.

### Management Bodies

The ACS board of directors is responsible for making key strategic decisions about the company's direction. Meanwhile, each individual company within the group has its own management team, which enables a decentralized approach to management that aligns with each company's strategy. Each subsidiary has the autonomy to issue bonds and select the most appropriate financial plan for its operations. The board of directors comprises fifteen members, including a Chairman, a Deputy Chairman, a Secretary, and a coordinating director. In addition, the company relies on committees such as the Executive Committee, Audit Committee, Appointments Committee, and Remuneration Committee for other important activities. Juan Santamaría Cases was appointed CEO of the Group in May 2022. He spent his entire working career with the ACS group, holding various positions at Iridium and Dragados as Engineer and project manager (2002-2006), general manager of ACS Infrastructures in the North America region (2006-2013) and other positions within the group. Currently is serving as the CEO of CIMIC Group, Hochtief AG and the ACS Group, making him a key person in the organization, responsible for managing and grouping all the different units into the “big picture” strategy.

Table 1- ACS management bodies

Management Bodies
Board of Directors
Board Committees
Management Committee
Management Team

Source: Company information

Table 2- ACS BoD

Board of Directors	
Name	Independent
Florentino Pérez (Chairman)	✗
Juan Cases (CEO)	✗
Miquel Junyent	✗
María Beato	✓
Emilio Gallego	✓
Antonio Garcia	✓
Catalina Brugarolas	✓
Carmen Rozado	✓
José Domínguez	✓
Mariano Herreros	✗
Maria Rodriguez	✗
Javier Echenique	✗
Pedro Jiménez	✗
José Luis Pérez	✗
Antonio Ferrer	✗

Source: Company information

**The man behind the success**

Florentino Perez, previous CEO and current chairman of the group is a key person behind the group’s success and controversy. He joined the BoD in 1983 and became CEO between 1997-2022. In his time as CEO, he implemented several policies contributing to the current success of the company:

- **Diversification:** Under Perez's leadership, ACS diversified its operations by expanding into sectors such as energy, transportation, and environmental services. This strategic move allowed the company to reduce its reliance on the cyclical construction industry and better weather economic downturns. Today, the company's diversified portfolio of services has contributed significantly to its sustained success and financial stability.
- **Internationalization:** ACS made several strategic acquisitions to expand its operations into new markets, including Latin America, Europe, and Asia. The most significant acquisition to date was Hochtief. These expansions enabled the group to diversify its revenue streams and reduce its reliance on a single region.
- **Innovation:** While Pérez was in charge, ACS developed a culture of innovation, which led to the promotion of new technologies and construction methods. This helped the company secure and complete large infrastructure projects, including the Madrid-Barcelona high-speed rail line and the expansion of the Panama Canal. By investing in innovative solutions, ACS was able to gain a competitive advantage in the construction industry, which contributed to the company's success.

**There is no construction without controversy**

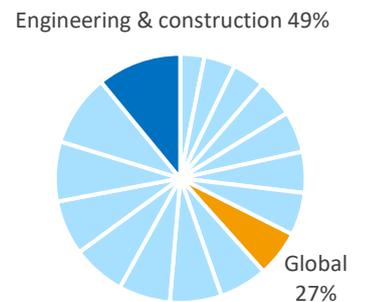
Although ACS has made significant progress under the leadership of Florentino Perez, there have also been several controversies and issues. One of the major concerns is the accusation of labor exploitation and poor working conditions, which have tarnished the company's reputation, even though it is a normalized practice in the construction industry. One of the latest significant controversies involved the construction of the 2022 Qatar World Cup stadium, where the group was involved, and several players from Perez's Real Madrid played. There are conflicting reports about the number of fatalities related to the construction of these stadiums between 2010-2022. While Qatari World Cup organizers stated that there were only three work-related fatalities, the World Cup Chief Hassan Al-Thawadi reported 400-500 deaths, and the International Trades Union Confederation claimed around 1,200 deaths. Amnesty International released a report claiming that employers withheld employees' documents and salaries as leverage to ensure that they would not leave. Corruption allegations are also a concern, and ACS has been fined multiple times by the Spanish regulator. For instance, in 2022, the company was fined €54M along with five other companies for colluding over 25 years in submitting bids for public projects. In August 2021, the regulator demanded €61M in fines for rigging the road construction and maintenance market, and in October of the same year, the company had to pay €30M for rigging public contracts related to rail-

Figure 11- Florentino Perez



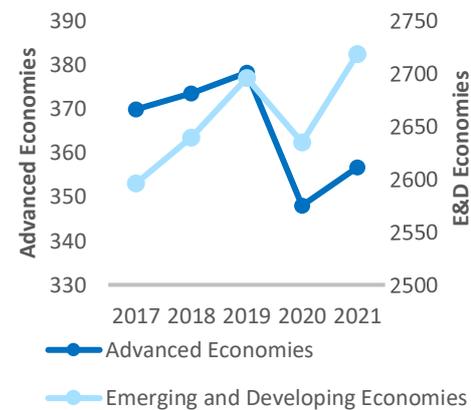
Source: Annual Report

Figure 12- Reported bribery and corruption by industry



Source: PWC

Figure 13- Construction industry annual greenhouse gas emissions



Source: OCDE

signaling systems. The CNMC, the Spanish regulator, has banned some of ACS's subsidiaries from public tenders.

### Master plan

On December 16th, 2021, ACS approved its sustainability plan, which includes clear objectives and commitments to environmental, social, and governance matters. Given the significant environmental impact of its business, ACS has set ambitious goals to reduce its carbon footprint and achieve climate neutrality by 2045. Additionally, the company aims to integrate circularity into its operations, further reducing its environmental impact. This move is not only commendable from an environmental perspective, but it can also benefit ACS in many ways. For instance, by enhancing its sustainable infrastructure practices, ACS can capture new markets, improve its reputation, and stand out as a leader in its industry. While ACS aims to become a reference in the industry in the way it treats and develops its workers, its track record on this front has been questionable. Hence, stakeholders are rightly skeptical about this claim and urge the company to follow through on its promises. To ensure accountability and transparency, the company's corporate governance should align with ESG metrics. A good approach would be to link part of the management team's remuneration to ESG performance. The focus on ESG policies is likely to have a positive impact on the company's profitability. Apart from reducing costs associated with circular economy practices, ACS can gain new contracts by leveraging its sustainable positioning. Additionally, this move is likely to boost the company's reputation, enabling it to capture a larger market share.

## 4. Industry Overview and Competitive

### Navigation through disruption

The company's main activity is facing challenges. The COVID-19 pandemic had a significant impact on the global construction industry, with many countries implementing strict lockdowns and social distancing measures to curb the spread of the virus. This resulted in a slowdown in construction activity worldwide, as many construction sites were forced to shut down temporarily or reduce their operations. Moreover, the pandemic also caused disruptions in the global supply chain, affecting the availability of construction materials and equipment (Fig. 15). Restrictions on international trade and transportation, coupled with factory shutdowns, led to shortages of raw materials, such as steel, wood, and cement. This, in turn, resulted in price increases and delays in project timelines. Furthermore, the pandemic also caused workforce shortages in the construction industry, as many workers were unable to travel to work due to travel restrictions or had to stay at home to care for their families. This resulted in delays in project timelines and increased costs for construction companies that had to pay overtime to their workers to compensate for lost time. Construction companies that had diversified operations and were involved in essential infrastructure projects, such as healthcare facilities and transportation infrastructure, performed better than those that relied solely on commercial and residential construction projects.

Figure 14- ACS Priority SDGs



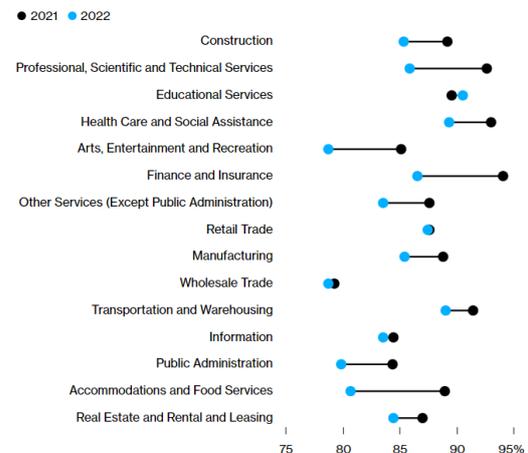
Source: Annual Report

Figure 15- KPMG supply chain stability index



Source: KPMG

Figure 16- Quiet quitters



Source: Qualtrics

### Changing population

The COVID-19 pandemic has not only disrupted supply chains but also had a significant impact on the workforce in the construction industry. The pandemic-induced phenomenon of the "great resignation" and "quiet quitting" has made the existing workforce even more unproductive than before. This has resulted in the need for businesses to either hire more people, pay their current employees more, or a combination of both, thereby affecting profitability. The demand for construction projects has been impacted by the widespread work-from-home policies implemented by many companies. With many employees continuing to work remotely even after the pandemic, businesses are reevaluating their need for large office spaces. In fact, according to Eurostat, the proportion of people who worked from home in Europe increased from 5.4% pre-COVID to 13.4% in 2021. This presents a significant challenge for the construction industry, as companies may not need to build large office spaces or, in some cases, may not need to build them at all. The pandemic has created a shortage of skilled workers in the construction industry, further exacerbating the productivity issue. Many construction workers have left the industry, either due to the risk of contracting the virus or to seek alternative employment. This shortage of skilled labor has increased the competition for the existing workforce, driving up wages and costs for construction businesses.

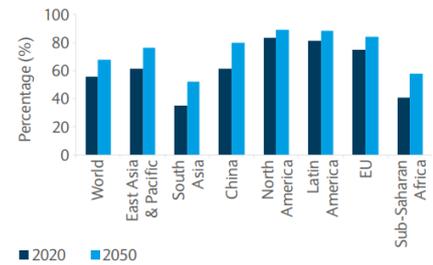
### Interest rate impact

In 2022, global monetary policy underwent a significant change, ending the era of cheap debt that many had grown accustomed to. The resulting increase in interest rates has had severe consequences for both the demand for construction and the capital structure and profitability of companies in the industry. Construction projects require substantial investments and are not taken lightly by individuals or corporations. As interest rates rise, the borrowing costs for clients increase, making it less feasible for them to take out a mortgage loan and purchase a new house, thereby decreasing the overall demand for new house construction. Higher interest rates also reduce the return on investment for corporations' new projects, thereby lowering the demand for new projects. The S&P Global Eurozone Construction Purchasing Managers' Index (PMI) in the final month of 2022 reached a low of 42.6 points, recovering to 46.1 points in January 2023, indicating that home building activity in the eurozone is still decreasing compared to the previous period, although the rate of decrease is starting to slow down. This trend is supported by the American Housing Market Index (NAHB), which showed a similar pattern, increasing from 31 points to 35 points in January. The change in monetary policy will affect construction players in several ways. As previously mentioned, the overall demand for construction will decline, and profitability will also decrease due to higher interest payments. This may lead companies to start deleveraging, which means they will have less cash on hand and will have to cut expenses or investments, making them less attractive and capable of fulfilling new projects in the future. Therefore, finding the right balance between deleveraging and investment is crucial at this moment.

### Smart cities

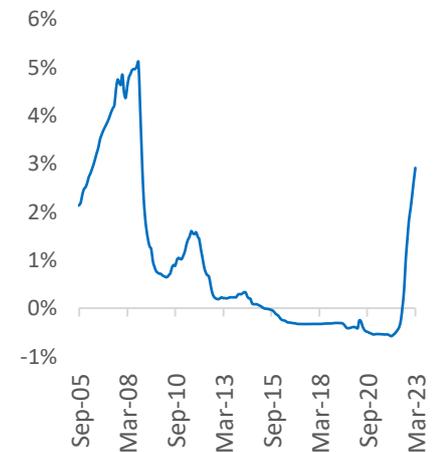
The increasing urbanization trend is a significant driver for the construction industry, as the population is projected to continue to grow in the upcoming

Figure 17- Share of urban population



Source: Barclays

Figure 18- Euribor 6-month



Source: ECB

Figure 19- American Housing Market Index



Source: NAHB

years. The United Nations estimates that the population in Europe and Northern America will increase from 1,120 million in 2022 to 1,129 million in 2030. However, with the world already congested, the need for smart cities has become more pressing than ever. Smart cities leverage technology and data to improve the quality of life of their inhabitants and businesses. The demand for smart cities is not only driven by population growth but also by the need to improve urban areas. These cities require extensive infrastructure to collect and analyze real-time data, which will enable city planners and decision-makers to make informed decisions. The use of IoT and AI technologies can help enhance transportation, utilities, waste management, and energy efficiency, which are crucial issues in urban areas. The construction industry is critical to the development of smart cities. The construction of infrastructure for smart cities involves the use of innovative materials and technologies to build sustainable and energy-efficient buildings, roads, and bridges. This presents an opportunity for the industry to adopt new practices, improve efficiencies, and create jobs. As such, construction companies must adapt to this trend to stay relevant and competitive in the long run.

### New technologies

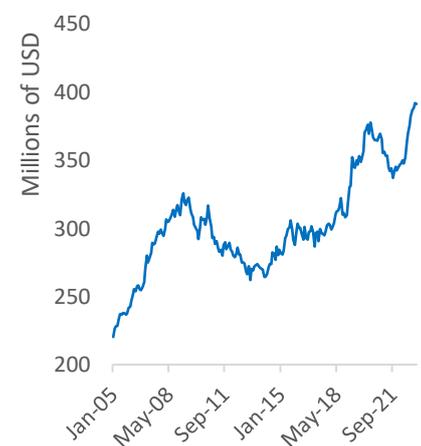
New technologies are revolutionizing the construction industry in several ways. One such technology is Building Information Modeling (BIM), which has become an integral part of the design and construction process. Autodesk, the industry leader in BIM technology, has made significant strides in improving efficiency and reducing costs by streamlining the design process, minimizing errors, and improving communication among stakeholders. BIM also enables project visualization and better communication with clients, thereby providing an accurate and comprehensive understanding of the project requirements. Another technology that is gaining traction is virtual and augmented reality (VR/AR), which is transforming the way clients experience projects. With VR/AR technology, clients can visualize the project in a 3D environment, providing a real-life experience of what the final project will look like. This immersive experience can help clients make informed decisions, identify potential design flaws, and reduce the need for rework. Workers can also use AR to increase productivity by providing guidance and real-time task management. Drones are also changing the construction industry by providing efficient and cost-effective solutions for various tasks. Drones can be used for delivering materials to hard-to-reach areas, conducting inspections in a faster way, improving progress by tracking projects in real-time using video, and conducting thermal imaging. Drones not only increase work safety, but they also reduce scheduling, providing a significant advantage for construction projects. Automation and robotics are other technologies that are transforming the construction industry. Although initial investments can be high, robotics and automation provide improved profitability in the long run. Robotics can be used to replace humans, reducing costs, and improving safety, as robots are more precise and accurate than humans. Robots can be used for bricklaying, 3D printing to create complex structures and shapes, and transporting and assembling materials in an automated way.

Figure 20- 5G IoT unit sales forecast



Source: Mckinsey

Figure 21- Total public construction spending in the US



Source: Federal Reserve

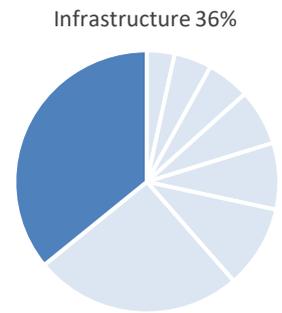
## 5G

The implementation of 5G technology will not only revolutionize mobile networks but also has the potential to transform the construction industry. The introduction of small-cell and microcell base stations for 5G will require the construction of thousands of new cellular sites in urban areas, increasing the demand for construction services. The installation and maintenance of fiber-optic cables, which are essential for high-speed data transmission, will also create a significant number of job opportunities for the construction industry. Upgrading the existing network infrastructure to support 5G technology will also be a major undertaking for the construction industry. This includes the installation of new antennas, radios, and other components necessary for 5G compatibility. These upgrades will not only require specialized knowledge and skills but also pose significant challenges such as working at heights and in difficult environments. The benefits of embracing 5G technology in the construction industry are substantial. With faster data transfer speeds, construction professionals can use the technology to streamline project management, improve communication between team members and clients, and reduce costs through increased efficiency. For example, drones equipped with 5G technology can be used to conduct site surveys, inspections, and real-time monitoring of project progress. The use of 5G also has the potential to improve safety on construction sites through the implementation of IoT devices that monitor worker activity and environmental conditions. This investment is likely to create new opportunities for construction companies and other infrastructure players in Europe, particularly in the areas of renewable energy, transportation, and digital infrastructure.

## The green transition

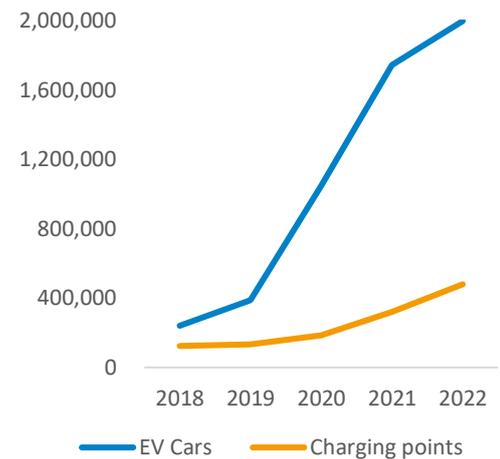
Climate change is an urgent issue that requires immediate action. It is a complex and global problem that needs to be addressed by all sectors of society, including the construction industry. Reducing the dependence on fossil fuels is an important step towards a more sustainable future, and construction companies have a significant role to play in this transition. The renewable energy sector is rapidly expanding, and it presents a tremendous opportunity for construction companies to participate in building and maintaining wind farms, solar energy plants, and geothermal facilities. The construction of these projects requires specialized knowledge and skills, and infrastructure companies that possess them can create a competitive advantage. In addition, the modernization of power grids, transmission lines, and energy storage systems is essential to support the integration of renewable energy into the grid, and infrastructure companies can provide these critical services. The demand for electric vehicles (EVs) is another major trend in the transportation industry. As more people transition to EVs, there is a need for the construction of new factories and charging stations. Infrastructure companies that can provide these services can benefit from the growing demand for sustainable transportation. The expansion of transportation infrastructure, such as roads and bridges, is also necessary to accommodate the growing number of EVs on the road. The industry can take advantage of this opportunity by providing upgrades and expansion of existing infrastructure. However, the transition to renewable energy and sustainable transportation presents challenges that

Figure 22- Drone usage by industry



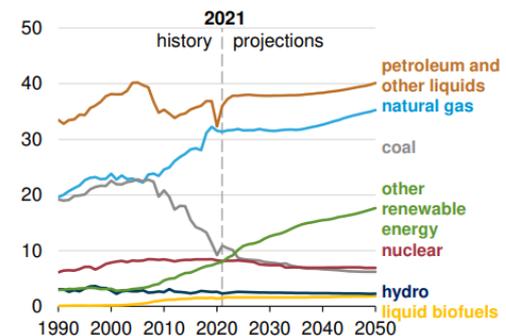
Source: Airpix

Figure 23- EV sales vs charging points constructed



Source: Acea

Figure 24- Energy consumption by fuel (quadrillion British thermal units)



Source: EIA

infrastructure companies must overcome. The adoption of new technologies and the need for specialized knowledge and skills can be expensive, and companies may need to make significant investments to adapt to these changes. Moreover, regulatory policies can significantly affect the industry, and companies must remain informed about changes to remain competitive. The industry has a significant role to play in reducing the dependence on fossil fuels and transitioning to more sustainable energy sources. The growing demand for renewable energy and sustainable transportation provides a substantial opportunity for infrastructure companies to generate revenue and contribute to a more sustainable future. However, companies must adapt to the new technologies and regulatory policies to remain competitive and capitalize on the opportunities presented by these trends.

### Porter's five forces

#### Industry rivalry – High

- High number of companies offering similar services. Companies usually compete based on price to attract customers, resulting in lower profit margins, and reputation, by showing a track record of high-quality work and by having a word-of-mouth marketing
- Companies differentiate themselves by offering unique services or focusing on specific niches within the market that other companies don't offer. Specializing in sustainable building practices, or in constructing healthcare facilities are some of the areas that ACS is focused for the next years

#### Threat of substitute products – Low

- There are few alternatives to building structures. While prefabricated buildings may offer an alternative to traditional construction, they may not be viable for all types of projects, and therefore, are not always a suitable substitute

#### Bargaining power of suppliers – Low-Medium

- The construction industry relies heavily on raw materials such as cement, steel, and lumber, which are supplied by many suppliers. This results in a fragmented supplier base, which reduces the bargaining power of individual suppliers. The price of raw materials is tied to market conditions
- Supply chain disruptions and instabilities can lead to temporary increases in the bargaining power of suppliers. For example, if there are natural disasters or geopolitical events that disrupt the supply of certain raw materials, suppliers may have more power to dictate prices and terms of delivery

#### Bargaining power of buyers – High

- The construction industry relies on a small number of large clients, such as multinational corporations and public institutions, who have significant bargaining power due to their size and influence in the market. These buyers can negotiate

Figure 25- SWOT Analysis

#### Strengths

- Strong financials and liquidity
- Track record proves its long-term market position
- Wide geographic presence

#### Weaknesses

- Significant exposure to the North America economy
- High reliance on infrastructure segment which is cyclical

#### Opportunities

- Further exposition into emerging markets
- Sustainable projects
- Government bills to modernize infrastructures

#### Threats

- Inflationary pressures and supply chain disruptions
- Government regulations
- Declining short term construction demand

Source: Author analysis

lower prices, extended payment terms, and other favorable terms and conditions, putting pressure on construction companies to accept their demands or risk losing their business

- Decreasing demand in the current macroeconomic outlook for infrastructure investment gives buyers additional leverage to negotiate lower prices and better contract terms

#### Threat of new entrants-Low

- Entering the construction industry requires compliance with strict governmental regulations that vary by region and country, which can be costly and time-consuming for new entrants.
- Highly capital-intensive industry, requiring significant investments in equipment, labor, and materials. This poses a significant barrier to entry for new companies, especially those that lack access to the same funding conditions as more established players in the market
- Economies of scale benefit larger and more established companies by lowering their supply costs, allowing them to offer competitive pricing to clients. This makes it challenging for smaller and new companies to enter the market and compete effectively

## 5. Investment Summary

ACS has a buy recommendation, with a 2023YE price target of €36.69, representing an upside potential of 19.5%, against the closing price of €30.70 on April 14<sup>th</sup>, 2023, with **medium risk**.

The Group seems to be undervalued due to:

- **Lack of excitement in the industry:** The construction industry can be uninteresting to investors due to its long project durations and thin profit margins, resulting in stock price stagnation over extended periods of time
- **Potential concerns about the new CEO:** Florentino Perez was the CEO of the company in the last 22 years. Replacing a key figure behind its success isn't an easy task and investors may be expressing their concerns about Juan Cases capability to maintain the same level of strong results achieved by his predecessor.
- **Cyclical business:** The current strong pessimism about the overall economy can make investors blind to the long-term prospectus across all industries.

In our view, ACS presents a compelling investment case. While the construction sector is inherently cyclical, its historic profitability and resilience underscore ACS's robust long-term prospects, which some investors might be overlooking amidst short-term market noise. Concerns about the new CEO are, in our opinion, unfounded. With over 20 years of multifaceted experience within ACS, including helming two group entities, his track record speaks to both competence and deep institutional knowledge. We remain bullish on ACS's future trajectory.

#### Valuation methods

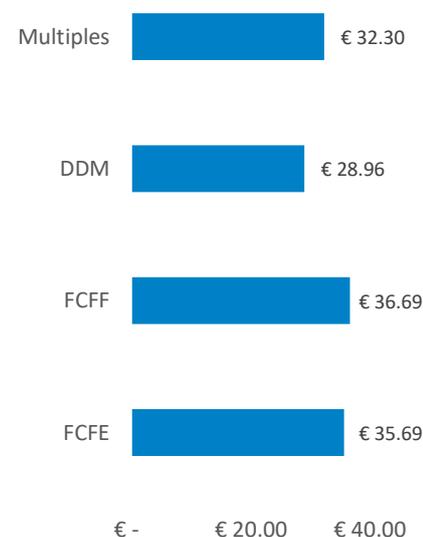
Relative and absolute models were used to compute a PT for ACS ranging from €28.96 (DDM) to €36.69 (FCFF).

Figure 26- Top International Contractors

Rank	Name	Country
1	Grupo ACS	
2	Vinci	
3	China Communications Construction Group	
4	Bouygues	
5	Strabag	
6	Power Construction	
7	China State Construction Engineering Corp	
8	Skanska	
9	Ferrovial	
10	China Railway Construction	

Source: Engineering News-Record

Figure 27- Valuation Methods summary



Source: Author Analysis

After several disruptions in the industry and changes in ACS business including the sale of its industrial services, we consider absolute methods that are forward-looking the best approach to estimate ACS' fair value.

The flow to equity (PT €35.69) isn't the best fit since the capital structure is expected to change (current book D/E of 1.63 vs 1.40 in 2028e). The fixed €2/share dividend used in the total payout model may not be the most accurate due to a substantial decrease in the payout ratio (100% in 2023 compared to 61% in 2028e). Multiples valuation gives a wide range of TP (€24.75 - €41.39). We consider the EV/EBITDA (€31.00) to be the most accurate valuation metric of the company, taking into consideration its operational performance, the large cash pile the company is hoarding and disregarding items from discontinued operations.

### Investment risks

Potential investors must understand several risks that could impact ACS operations outside of management's control. Economic risk is substantial in the industry. Deterioration of macroeconomic conditions could lead to lower demand for construction projects, decreasing the firm's revenues. Margins could be challenged by the fluctuation in raw materials (as recently observed with global shortages and inflation) and volatility in labor costs. Governments make a significant part of the industry's revenues and several risks can come from them. Expropriation and nationalism could happen, although ACS isn't too much exposed to countries where we believe this could happen. Regulations will affect the industry, particularly concerning ESG factors and companies should quickly adapt to it or face the consequences in the form of lower revenue, higher costs of debt and taxation. Interest rate risk is a special attention point for companies with a high D/E (1.63 in YE22), although the company benefits from strong liquidity.

## 6. Valuation

### Free Cashflow approach

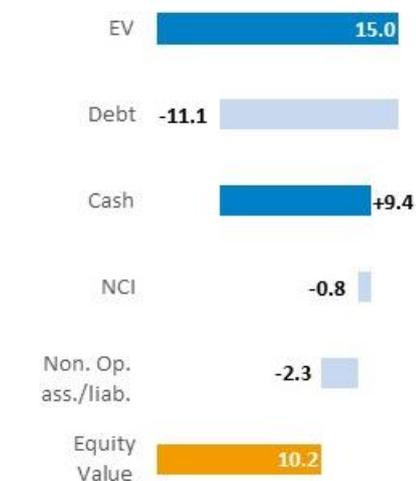
#### WACC Method

The first method used to compute the price target for ACS is a two-stage discounted cash flow to the firm model, using forecasts for the consolidated results between 2024-2028 and assuming a stable growth rate in the perpetual period after that.

#### Cashflow projections

Total sales are projected as a sum of the performance of each segment (Infrastructure, concessions and services). For construction, the biggest weight in top line, revenue was projected as a sum of each region forecasted growth for the following years using data from Euroconstruct and Oxford Economics, with a 3.03% CAGR between 2023-2028. For both concessions and services, revenue was projected according to the historical growth of each segment (2.94% CAGR and 3.56% CAGR respectively). EBITDA is projected to increase 7.3% CAGR following the same methodology of sum of the segments. EBITDA margin should return to normal (2.64% in 2022 vs 5.8% in 2028F) after the infrastructure segment recovers from the current

Figure 28- Equity value from FCFF approach (€bn)



Source: Author analysis

Figure 29- Price vs Fair Value



Source: Author analysis

disruptions in supply chain, inflation and decreasing demand. D&A was estimated using the historical 30% rate of PP&E and capital expenditures are projected to respect historical average capex/sales ratio of 2.1%. The components of working capital are calculated as mean reversion to its historical average as a percentage of sales.

### Discount rate

The discount rate used for the FCFF approach was the WACC method using a constant MV debt to capital ratio of 54.6%.

The cost of debt (5.29%) is estimated to be the current yield-to-maturity on the longest maturity outstanding bond, as it is perceived to be an approximation for the new coupon rate the company has to pay to refinance its debt. The CAPM model was used to compute the cost of equity. A weighted average of total sales in each region was used for both the RFR and the market risk premium. The risk-free rate corresponds to the current YTM of each region's 10-Y treasury bond deducted by a CDS (except for the US and Germany where its considered to be real risk free). The market risk premium is estimated using the current premium on the US/Germany market, adding a default spread for compensating the risk of investing in those regions. Concerning the beta, an industry average unlevered beta (0.64) was used, derived from the mean unlevered beta of European construction companies according to Damodaran's beta estimation list. Using the company's debt/equity structure (1.63) the cost equity is estimated to be 11.59%.

### Terminal growth rate

To estimate the terminal growth rate (g), the Return on Invested Capital (6.8%) on the firm's reinvestment rate (11.9%) was used on the terminal year, resulting in a perpetuity rate of 0.80%. The perpetual growth is responsible for 75% of ACS enterprise valuation.

After the calculation of the enterprise value per the WACC approach and adjusting for current debt, cash and other adjustments, ACS value per share is €36.69, representing an upside potential of 19.5% against the current stock price of €30.70.

### Flow to Equity

For the flow to equity method, the main assumptions remain the same with a few adjustments:

- Terminal growth rate of 1.6% as a result of Return on Equity multiplied by reinvestment rate
- Discount rate of 11.59% corresponding to the cost of equity
- Slight decrease in the company's forecasted debt/equity ratio (1.63x in 2022 vs 1.40x in 2028e) as per the company's strategy to deleverage

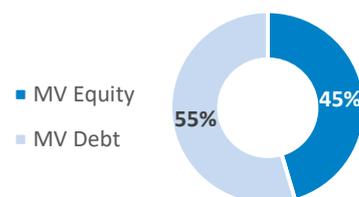
The value per share using this approach is equal to €35.69.

Figure 30- Cost of equity

Components	Estimation
MRP	5.99%
D/E	1.63
Unlevered Beta	0.64
Rf	3.08%
<b>Cost of equity</b>	<b>11.59%</b>

Source: Author analysis

Figure 31- Sources of capital



Source: Author analysis, Bloomberg

Figure 32- Sustainable growth rate

Components	Estimation
Capex	€1,018m
D&A	-€905m
Var NWC	€23m
EBIT(1-t)	€1,152m
Reinvestment Rate	11.9%
ROIC	6.8%
<b>g</b>	<b>0.8%</b>

Source: Author Analysis

### Dividend model

ACS recently started paying a fixed €2.00/share dividend and plans to keep it stable in the next few years. A two-stage dividend model was used to value the company under the DDM, assuming the fixed dividend for the next five years and a perpetuity growth of 1.6%, the sustainable long-term growth rate of the FCFE model, resulting in a fair value of €28.96.

### Market-based valuation

Through the application of the SARD model, six peers were chosen to perform a relative valuation methodology (Appendix 15) through market multiples. The multiples used generated the following results:

- The P/E, with a median of 8.0x, resulted in fair value price of €25.05/share
- The P/B, with a median of 1.1x, resulted in fair value price of €24.75/share
- The EV/Sales, with a median of 0.35x, resulted in fair value price of €39.31/share
- The EV/EBITDA, with a median of 4.9x, resulted in fair value price of €31.00/share
- The EV/EBIT, with a median of 9.4x, resulted in fair value price of €41.39/share

The average of these multiples was calculated to reach a final **price target** of **€32.30**, using a market-based valuation.

## 7. Financial Analysis

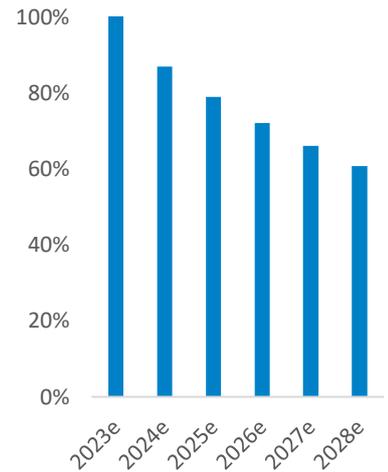
### Recovery in place

After a tribulate period, gross and adj. EBITDA margin are expected to gradually increase until it reaches its historical average between 2023-2028. EBITDA margin should increase to 5.8% in 2028e (vs 2.64% in 2022) after a normalization of inflation, which should lower their material costs (69.5% in 2022 vs 67.3% in 2028) and a more stable labor market (21.6% labor cost vs 20.9%). A more stable and certain economic landscape should also make way increase in margin by producing higher demand volume. Net profit is increasing by 10.7% 2023-2028 CAGR, with a respective margin increase of 66bps, as a result of the increased operational margin in the same period and an improvement of financial results (-€306m in 2023 compared to -€236m in 2028) as a result of the decrease cost of debt due to the company's deleverage plan.

### Healthy cash generation

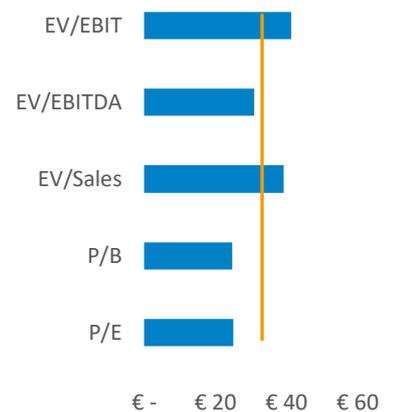
Cash from operations will increase at a 3.0% CAGR rate from €1.7bn in 2022 to €2.0bn in 2028e. The increase in EBITDA accompanied by the positive NWC flows helps the CFO/Sales to maintain at 5% in the same period. Cash ratio is expected to decrease to 0.39x in 2028e (vs 0.48x in 2028) as the company starts to deleverage and pay dividends to its shareholders, while at the same times the payables period approximates its historical average. Total liquidity (€14.7bn) in 2022YE is composed by €9.4bn in cash and €5.3bn in unused credit facilities.

Figure 33- Payout ratio



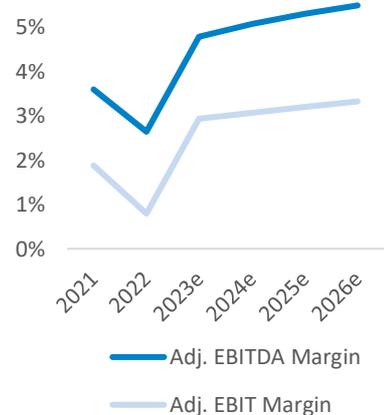
Source: Author analysis

Figure 34- Market-based valuation



Source: Author analysis, Bloomberg

Figure 35- Profit margins



Source: Author analysis

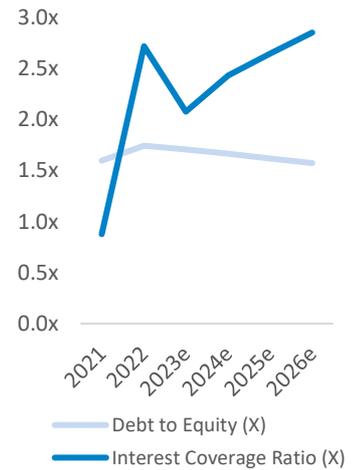
### Improving solvency

ACS' solvency is expected to decrease to 1.40x in 2028e (vs current 1.63x) as part of the current strategy to decrease leverage. Debt ratio is forecasted to decrease from 0.29x in 2022 to 0.25x in 2028e. Net debt to EBITDA will also see an uplift due to the previous described and an increase in EBITDA, causing a decrease in the overall bankruptcy risk of the Group. Interest coverage is expected to slowly improve until it reaches 3.22x (compared to 2.71x in 2022), meaning the company will have further capacity to cover its interest expenses.

### Focus on efficiency

After a strong increase in turnover in 2022 (0.92x vs 0.76x in 2021) due to the spectacular growth in sales in that year, the ratio should slowly increase to 0.98x in 2028e as sales are expected to return to a modest growth while assets should remain stable. EBITDA/CFO will improve from 0.51x (2022) to 1.14x (2028e), translating into a better capacity of converting operational earnings into cashflow. Additionally, the cash cycle components are expected to revert to their historical average. The company currently benefits from a recurring negative cash cycle, with suppliers effectively financing ACS' operations (102 days in 2022YE) while the company maintains a negative cash cycle of -13 days in 2022YE.

Figure 36- Solvency Ratios



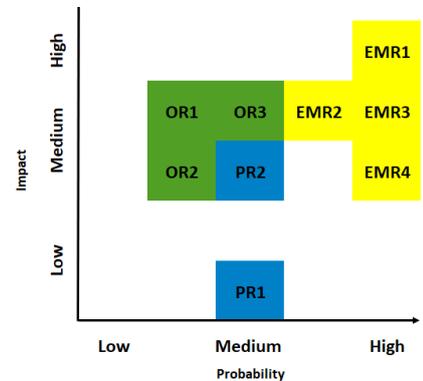
Source: Author Analysis

## 8. Risks

### Operational Risks

- Work Force (OR1)**  
 Difficulties in hiring and retaining skilled personnel can lead to severe disruption and delays of projects, while at the same time can cause an increase in costs of labor. Labor shortage may also lead to compromises in the overall quality of the project, compromising its reputation. Companies should create a positive work environment and increase compensation to improve employee attraction/retention
- Global Shortages (OR2)**  
 Supply chain issues, including material shortages and transportation delays, pose significant challenges to construction projects as it will make material prices rise, lowering the overall profitability. Contracts often include clauses that penalize project delays, resulting in additional fees and potential litigation. The risk can be mitigated by managing well its supply chain, develop contingency plans and exploring alternative sourcing options
- Fierce Competition (OR3)**  
 The industry is characterized by its fierce competition, with a high concentration of players possessing extensive knowledge and expertise, where a small increase in costs can push profitability into negative territory. Its crucial to implement cost management strategies, diversify services and explore new markets to mitigate the impact from competition and maintain/increase its profitability

Figure 37- Risk matrix



Source: Author analysis

## Political & Environmental Risks

- **Expropriation and Nationalism (PR1)**  
Governments in certain regions could seize or nationalize private assets, resulting in significant financial losses, as their investments and potential future revenue streams may be compromised. It is important to conduct a thorough risk assessment, evaluating the political stability, legal protections and other factors (ex: corruption) before navigating into newer territories
- **Changes in Industry Regulation (PR2)**  
The construction industry is increasingly facing scrutiny and regulatory changes related to environmental, social, and governance (ESG) concerns. Stricter emission rules, labor laws, and other ESG-focused regulations are receiving more attention, leading to additional costs and compliance burdens for construction companies. As governments and regulatory bodies implement new taxes and regulations, construction firms are compelled to invest in greener solutions and sustainable practices. This shift towards sustainability can strain their financial reserves as they allocate resources to upgrade equipment, adopt new technologies, and implement environmentally friendly construction methods

## Economic and Market risks

- **Interest Rate risk (EMR1)**  
High interest rates pose a significant risk to the construction company, affecting both its interest expenses and overall demand for projects. When interest rates are high, the cost of borrowing increases, leading to higher interest expenses for the company. Higher borrowing costs for individuals and businesses can lead to reduced demand for new construction, resulting in a slowdown in project opportunities for the company. Strategies such as locking in lower fixed-rate financing, carefully managing debt levels, and diversifying project portfolios across different market segments or regions are ways to mitigate this risk
- **Exchange Risk (EMR2)**  
Fluctuations in exchange rates, if not hedged, could significantly impact on the company's financials. Hedging strategies, such as forward contracts or currency options can help reduce the risk of financial losses due to exchange rate fluctuations and enhance overall financial stability
- **Commodity price risk (EMR3)**  
Players are exposed to commodity price fluctuation, particularly when there is an increase in the key commodities used in the activity. A significant rise in commodity prices in an already low profit margin industry is a challenge that could lead to financial difficulties if not properly hedged. Using derivative instruments to lock in prices for key commodities is a way to mitigate this risk

Figure 38- EUR/USD



Source: Yahoo Finance

Figure 39- S&P Commodity Index

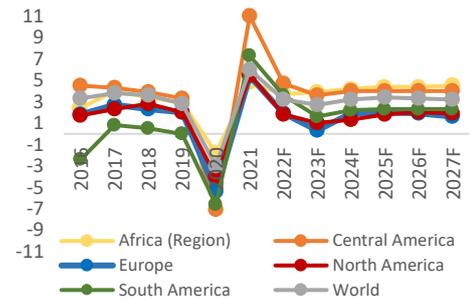


Source: Refinitiv

• **Economic Slowdown risk (EMR4)**

Economic downturns can have a cascading effect on the construction sector. Reduced government spending on infrastructure projects and public works, as well as decreased private sector investment in commercial and residential construction, can result in a decline in project opportunities. This, in turn, impacts the construction company's revenue streams and profitability. Diversification on project portfolios across different sectors or geographic regions helps reduce the overreliance on specific segments that may be more susceptible to economic downturns

Figure 40- Real GDP growth (Annual %)



Source: IMF Economic Outlook Oct. 2022

**Price Target Sensitivity**

**Long-Term Sustainable Growth Rate (g) vs Cost of Capital (WACC)**

Two important variables were chosen to perform sensitivity analysis: **Cost of capital (WACC)** and **long-term sustainable growth rate (g)**. Upon stressing the WACC rate by **50bps increase (decrease)**, it's expected a **€1.7 decrease (increase)** in **current PT**, all other factors remaining the same.

When facing an **increase (decrease)** on the **long-term sustainable growth rate** by **25bps**, the **PT changes** by **~€1.3**, all other factors remaining stable.

Table 3- Sensitivity Analysis Table

		Cost of capital (WACC)						
		8.94%	8.44%	7.94%	7.44%	6.94%	6.44%	5.94%
Terminal growth (g)	1.55%	37.10	38.43	39.80	41.21	42.67	44.18	45.74
	1.30%	35.26	36.54	37.86	39.22	40.62	42.07	43.56
	1.05%	33.57	34.80	36.07	37.38	38.73	40.12	41.56
	0.80%	32.01	33.20	34.42	35.69	36.99	38.33	39.72
	0.55%	30.57	31.72	32.90	34.12	35.38	36.68	38.02
	0.30%	29.23	30.34	31.49	32.67	33.89	35.14	36.44
	0.05%	27.99	29.07	30.18	31.32	32.50	33.71	34.97

**Monte Carlo simulation**

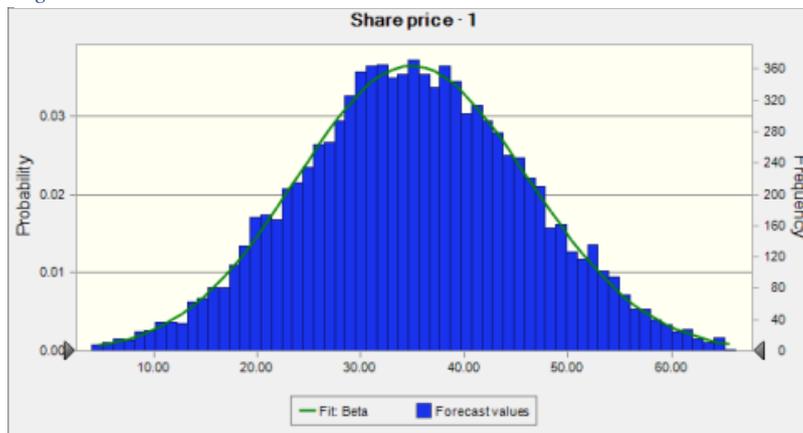
A complementary analysis on the sensitivity of the price target was made through the Monte Carlo simulation, changing the following key drivers:

- a) Sales growth (2023, 2024, 2025, 2026, 2027 and 2028)
- b) Long-term sustainable growth rate
- c) WACC rate

Source: Author Analysis

After 10,000 trials, the simulation returned an average price target of €35.10 and a median value of €34.96, both values are congruent with our buy recommendation and TP (€36.69). Sales growth was the most important metric in the sensitivity, especially sales growth in 2023, responsible for 19% of the price formation.

Figure 41- Monte Carlo Simulation



Source: Author Analysis

# Appendices

## Appendix 1: Statement of Financial Position

Balance Sheet	2020	2021	2022	2023e	2024e	2025e	2026e	2027e	2028e
<b>Non-Current Assets</b>	<b>13,018,795</b>	<b>11,010,031</b>	<b>12,420,992</b>	<b>12,291,829</b>	<b>12,490,705</b>	<b>12,653,833</b>	<b>12,792,947</b>	<b>12,916,347</b>	<b>13,029,950</b>
Intangible assets	3,659,179	3,279,412	3,283,899	3,283,899	3,283,899	3,283,899	3,283,899	3,283,899	3,283,899
Goodwill	2,863,053	2,672,253	2,716,197	2,716,197	2,716,197	2,716,197	2,716,197	2,716,197	2,716,197
Other intangible assets	796,126	607,159	567,702	567,702	567,702	567,702	567,702	567,702	567,702
Tangible assets - property, plant and equipment	1,764,077	1,464,868	1,572,180	1,823,974	2,022,850	2,185,978	2,325,092	2,448,492	2,562,095
Non-current assets in projects	406,151	72,853	281,746	281,746	281,746	281,746	281,746	281,746	281,746
Investment property	42,298	41,003	68,561	-274,732	-274,732	-274,732	-274,732	-274,732	-274,732
Investments accounted for using the equity method	4,479,551	4,524,229	4,828,089	4,790,425	4,790,425	4,790,425	4,790,425	4,790,425	4,790,425
Non-current financial assets	760,556	765,707	1,434,655	1,434,655	1,434,655	1,434,655	1,434,655	1,434,655	1,434,655
Long term deposits	283	987	405	405	405	405	405	405	405
Derivative financial instruments	17,847	11,577	112,190	112,190	112,190	112,190	112,190	112,190	112,190
Deferred tax assets	1,888,853	849,395	839,267	839,267	839,267	839,267	839,267	839,267	839,267
<b>Current Assets</b>	<b>24,314,925</b>	<b>24,654,314</b>	<b>25,159,308</b>	<b>24,747,419</b>	<b>24,952,322</b>	<b>25,671,744</b>	<b>26,605,439</b>	<b>27,748,209</b>	<b>29,750,048</b>
Inventories	715,241	742,092	828,968	860,359	887,260	920,086	954,395	990,312	1,032,812
Trade and other receivables	10,498,289	8,380,356	8,564,653	9,179,354	9,466,368	10,124,177	10,817,725	11,549,650	12,713,324
Trade receivables for sales and services	8,500,244	6,686,487	7,383,175	7,845,329	8,090,631	8,583,350	9,102,113	9,648,881	10,482,974
Other receivable	1,762,431	1,400,815	1,006,282	1,130,392	1,165,736	1,299,963	1,442,037	1,592,510	1,858,704
Current tax assets	235,614	293,054	175,196	203,633	210,000	240,865	273,575	308,259	371,646
Other current financial assets	1,354,982	1,280,079	1,180,617	1,180,617	1,180,617	1,180,617	1,180,617	1,180,617	1,180,617
Derivative financial instruments	251,316	200,875	252,839	-90,454	-90,454	-90,454	-90,454	-90,454	-90,454
Other current assets	233,154	202,839	226,771	246,662	266,188	286,833	308,349	330,811	354,311
Cash and cash equivalents	8,080,808	11,253,419	9,419,987	8,685,409	8,556,870	8,565,011	8,749,334	9,101,799	9,873,964
Non-current assets held for sale and discontinued operations	3,181,135	2,594,654	4,685,473	4,685,473	4,685,473	4,685,473	4,685,473	4,685,473	4,685,473
<b>Total Assets</b>	<b>37,333,720</b>	<b>35,664,345</b>	<b>37,580,300</b>	<b>37,039,248</b>	<b>37,443,027</b>	<b>38,325,577</b>	<b>39,398,385</b>	<b>40,664,556</b>	<b>42,779,999</b>
Equity	4,275,907	7,028,203	6,375,877	5,989,473	6,072,687	6,220,023	6,434,218	6,719,074	7,078,582
<b>SHAREHOLDER'S EQUITY</b>	<b>4,197,251</b>	<b>6,505,222</b>	<b>5,166,439</b>	<b>5,032,413</b>	<b>4,966,354</b>	<b>4,949,450</b>	<b>4,983,800</b>	<b>5,072,318</b>	<b>5,218,065</b>
Share capital	155,332	152,332	142,082	142,082	142,082	142,082	142,082	142,082	142,082
Share premium	495,226	366,379	366,379	366,379	366,379	366,379	366,379	366,379	366,379
Reserves	3,608,699	3,633,014	4,625,358	4,723,819	4,589,793	4,523,733	4,506,830	4,541,180	4,629,698
(Treasury share and equity interests)	-636,011	-691,916	-622,170	-622,170	-622,170	-622,170	-622,170	-622,170	-622,170
Profit for the period of the parent	574,005	3,045,413	668,227	422,303	490,270	539,426	590,679	644,847	702,076
Interim dividend	0	0	-13,437	0	0	0	0	0	0
ADJUSTMENTS FOR CHANGES IN VALUE	-668,772	-170,918	380,957	0	0	0	0	0	0
Financial assets with changes in other comprehensive	-27,547	-6,847	-60,016	0	0	0	0	0	0
Hedging instruments	-159,383	-73,150	343,293	0	0	0	0	0	0
Translation differences	-481,842	-90,921	97,680	0	0	0	0	0	0
EQUITY ATTRIBUTED TO THE PARENT	3,528,479	6,334,304	5,547,396	5,032,413	4,966,354	4,949,450	4,983,800	5,072,318	5,218,065
NON-CONTROLLING INTERESTS	747,428	693,899	828,481	957,060	1,106,333	1,270,573	1,450,418	1,646,755	1,860,517
<b>NON-CURRENT LIABILITIES</b>	<b>10,605,990</b>	<b>11,444,846</b>	<b>11,484,229</b>	<b>10,628,501</b>	<b>10,423,023</b>	<b>10,294,008</b>	<b>10,234,573</b>	<b>10,239,088</b>	<b>10,556,986</b>
Grants	3,485	2,099	2,039	2,039	2,039	2,039	2,039	2,039	2,039
Non-current provisions	1,276,375	1,835,267	1,549,091	1,549,091	1,549,091	1,549,091	1,549,091	1,549,091	1,549,091
Non-current financial liabilities	8,370,036	8,717,354	8,878,681	8,007,432	7,786,717	7,641,593	7,565,369	7,552,356	7,851,916
Banks borrowings, debt instruments and other marketable securities	8,179,726	8,570,163	8,565,069	7,724,594	7,511,676	7,371,677	7,298,146	7,285,593	7,574,572
Project finance with limited recourse	73,318	51,069	205,476	131,921	128,284	125,893	124,638	124,423	129,359
Other financial liabilities	116,992	96,122	108,136	150,917	146,757	144,022	142,586	142,340	147,986
Long term lease liabilities	472,836	401,430	550,746	566,267	581,504	597,613	614,402	631,930	650,267
Derivative financial instruments	49,791	33,050	23,569	23,569	23,569	23,569	23,569	23,569	23,569
Deferred tax liabilities	320,488	227,112	294,346	294,346	294,346	294,346	294,346	294,346	294,346
Other non-current liabilities	112,979	228,534	185,757	185,757	185,757	185,757	185,757	185,757	185,757
<b>CURRENT LIABILITIES</b>	<b>22,451,823</b>	<b>17,191,296</b>	<b>19,720,194</b>	<b>20,421,274</b>	<b>20,947,317</b>	<b>21,811,546</b>	<b>22,729,595</b>	<b>23,706,394</b>	<b>25,144,431</b>
Current provisions	921,378	996,564	926,631	926,631	926,631	926,631	926,631	926,631	926,631
Current financial liabilities	2,885,808	1,808,491	1,498,323	1,468,113	1,544,117	1,632,564	1,735,346	1,854,347	2,058,099
Bank borrowings, debt instruments and other marketable securities	2,781,175	1,751,296	1,445,417	1,405,912	1,478,695	1,563,395	1,661,823	1,775,781	1,970,900
Project finance with limited recourse	16,123	18,472	33,666	18,285	19,231	20,333	21,613	23,095	25,633
Other financial liabilities	88,510	38,723	19,240	43,917	46,190	48,836	51,911	55,470	61,565
Short term lease liabilities	192,173	150,765	155,055	159,425	163,714	168,250	172,977	177,911	183,074
Lease liability adjustment				101,175	101,175	101,175	101,175	101,175	101,175
Derivative financial instruments	155,460	172,791	131,537	131,537	131,537	131,537	131,537	131,537	131,537
Trade and other payables	15,824,034	11,738,435	13,192,884	13,903,343	14,338,063	15,091,904	15,884,174	16,717,838	17,920,421
Suppliers	8,619,276	5,940,236	7,126,000	7,547,074	7,783,051	8,231,192	8,702,714	9,199,393	9,942,096
Other payables	6,983,515	5,637,192	5,898,483	6,183,170	6,376,500	6,677,373	6,993,111	7,324,885	7,780,318
Current tax liabilities	221,243	161,007	168,401	173,100	178,512	183,339	188,349	193,560	198,007
Other current liabilities	226,888	266,700	356,288	352,749	363,778	381,184	399,453	418,654	445,193
Liabilities relating to non-current assets held for sale and discontinued operations	2,246,082	2,057,550	3,479,476	3,479,476	3,479,476	3,479,476	3,479,476	3,479,476	3,479,476
<b>TOTAL EQUITY AND LIABILITIES</b>	<b>37,333,720</b>	<b>35,664,345</b>	<b>37,580,300</b>	<b>37,039,248</b>	<b>37,443,027</b>	<b>38,325,577</b>	<b>39,398,385</b>	<b>40,664,556</b>	<b>42,779,999</b>

## Appendix 2: Income Statement

Income Statement	2020	2021	2022	2023e	2024e	2025e	2026e	2027e	2028e
<b>Revenue</b>	29,304,697	27,836,658	33,615,234	34,721,081	35,806,715	36,954,502	38,150,692	39,399,542	40,706,063
Changes in inventories of finished good and work in progress	-611	19,437	10,242	0	0	0	0	0	0
Capitalised expenses of in-house work on assets	1,205	556	250	0	0	0	0	0	0
Procurements	-20,502,276	-19,019,818	-23,375,215	-23,612,541	-24,277,819	-24,995,710	-25,752,728	-26,549,219	-27,386,783
Other operating income	344,443	105,529	170,138	171,865	176,708	181,933	187,443	193,240	199,336
Personnel expenses	-6,777,423	-6,239,286	-7,249,882	-7,323,489	-7,529,827	-7,752,482	-7,987,274	-8,234,307	-8,494,080
Other operating expenses	-1,747,791	-1,680,762	-2,272,551	-2,295,624	-2,360,303	-2,430,096	-2,503,694	-2,581,129	-2,662,558
Depreciation and amortisation	-876,318	-479,446	-620,750	-641,729	-717,503	-777,166	-826,104	-867,838	-904,858
Allocation of grants relating to non-financial assets and others	306	299	299	0	0	0	0	0	0
Impairment and gains or losses on the disposal of non-current assets	1,077,070	-199,642	692,646	0	0	0	0	0	0
Other results	1,921	-246,790	-277,597	0	0	0	0	0	0
Ordinary results of companies accounted for using the equity method	155,298	272,745	380,918	0	0	0	0	0	0
Financial income	143,030	102,555	178,369	206,248	206,973	203,910	204,104	208,497	216,896
Financial costs	-376,653	-362,517	-484,152	-491,301	-452,221	-446,671	-445,074	-447,205	-452,899
Changes in the fair value of financial instruments	77,635	-91,821	219,220	0	0	0	0	0	0
Exchange differences	-42,233	24,858	9,583	0	0	0	0	0	0
Impairments and gains or losses on the disposal of financial instruments	111,411	14,267	7,345	0	0	0	0	0	0
Non-ordinary results of companies accounted for using the equity method	10,712	680	4,554	0	0	0	0	0	0
<b>PROFIT BEFORE TAX</b>	904,423	57,502	1,008,651	734,510	852,724	938,220	1,027,366	1,121,580	1,221,117
Income tax	-255,121	-789,372	-201,200	-183,627	-213,181	-234,555	-256,841	-280,395	-305,279
<b>PROFIT FOR THE PERIOD FROM CONTINUING OPERATIONS</b>	649,302	-731,870	807,451	550,882	639,543	703,665	770,524	841,185	915,838
Profit after tax from discontinued operations	279,188	3,958,104	65,333	0	0	0	0	0	0
<b>Profit FOR THE PERIOD</b>	928,490	3,226,234	872,784	550,882	639,543	703,665	770,524	841,185	915,838
(Profit) / loss attributed to non-controlling interests	-319,455	-169,481	-204,557	-128,579	-149,273	-164,240	-179,845	-196,337	-213,762
(Profit) / loss from discontinued operations attributable to non-control	-35,030	-11,340	0	0	0	0	0	0	0
<b>PROFIT ATTRIBUTABLE TO THE PARENT</b>	574,005	3,045,413	668,227	422,303	490,270	539,426	590,679	644,847	702,076

## Appendix 3: Cash Flow Statement

CF Statement	2020	2021	2022	2023e	2024e	2025e	2026e	2027	2028
<b>Cash flow from operating activities</b>	<b>1,141,688</b>	<b>203,141</b>	<b>1,743,338</b>	<b>1,901,786</b>	<b>1,734,128</b>	<b>1,804,202</b>	<b>1,920,282</b>	<b>2,032,754</b>	<b>2,079,648</b>
EBIT				1,019,563	1,097,971	1,180,981	1,268,336	1,360,289	1,457,121
Income Tax				-183,627	-213,181	-234,555	-256,841	-280,395	-305,279
D&A				641,729	717,503	777,166	826,104	867,838	904,858
NWC				424,121	131,835	80,610	82,683	85,022	22,948
<b>Cash Flow from investing activities</b>	<b>292,311</b>	<b>3,397,643</b>	<b>-198,099</b>	<b>-893,523</b>	<b>-916,379</b>	<b>-940,294</b>	<b>-965,218</b>	<b>-991,239</b>	<b>-1,018,461</b>
Capex + Intangibles				-893,523	-916,379	-940,294	-965,218	-991,239	-1,018,461
Other investments				0	0	0	0	0	0
<b>Cash Flow for Financing activities</b>	<b>-1,059,358</b>	<b>-770,952</b>	<b>-3,537,774</b>	<b>-1,742,841</b>	<b>-946,288</b>	<b>-855,768</b>	<b>-770,741</b>	<b>-689,050</b>	<b>-289,021</b>
Financial Income/Expenses				-285,053	-245,248	-242,761	-240,970	-238,709	-236,004
Dividends				-556,329	-556,329	-556,329	-556,329	-556,329	-556,329
Treasury buyback				0	0	0	0	0	0
Net Debt received				-901,459	-144,711	-56,677	26,558	105,988	503,312
Initial Cash				9,419,987	8,685,409	8,556,870	8,565,011	8,749,334	9,101,799
Cash Generated				-734,578	-128,538	8,141	184,323	352,465	772,166
Ending Cash Balance				8,685,409	8,556,870	8,565,011	8,749,334	9,101,799	9,873,964

## Appendix 4: Balance Sheet (common size)

Balance Sheet	2020	2021	2022	2023e	2024e	2025e	2026e	2027e	2028e
<b>Non-Current Assets</b>	<b>35%</b>	<b>31%</b>	<b>33%</b>	<b>33%</b>	<b>33%</b>	<b>33%</b>	<b>32%</b>	<b>32%</b>	<b>30%</b>
Intangible assets	10%	9%	9%	9%	9%	9%	8%	8%	8%
Goodwill	8%	7%	7%	7%	7%	7%	7%	7%	6%
Other intangible assets	2%	2%	2%	2%	2%	1%	1%	1%	1%
Tangible assets - property, plant and equipment	5%	4%	4%	5%	5%	6%	6%	6%	6%
Non-current assets in projects	1%	0%	1%	1%	1%	1%	1%	1%	1%
Investment property	0%	0%	0%	-1%	-1%	-1%	-1%	-1%	-1%
Investments accounted for using the equity method	12%	13%	13%	13%	13%	12%	12%	12%	11%
Non-current financial assets	2%	2%	4%	4%	4%	4%	4%	4%	3%
Long term deposits	0%	0%	0%	0%	0%	0%	0%	0%	0%
Derivative financial instruments	0%	0%	0%	0%	0%	0%	0%	0%	0%
Deferred tax assets	5%	2%	2%	2%	2%	2%	2%	2%	2%
Current Assets	65%	69%	67%	67%	67%	67%	68%	68%	70%
Inventories	2%	2%	2%	2%	2%	2%	2%	2%	2%
Trade and other receivables	28%	23%	23%	25%	25%	26%	27%	28%	30%
Trade receivables for sales and services	23%	19%	20%	21%	22%	22%	23%	24%	25%
Other receivable	5%	4%	3%	3%	3%	3%	4%	4%	4%
Current tax assets	1%	1%	0%	1%	1%	1%	1%	1%	1%
Other current financial assets	4%	4%	3%	3%	3%	3%	3%	3%	3%
Derivative financial instruments	1%	1%	1%	0%	0%	0%	0%	0%	0%
Other current assets	1%	1%	1%	1%	1%	1%	1%	1%	1%
Cash and cash equivalents	22%	32%	25%	23%	23%	22%	22%	22%	23%
Non-current assets held for sale and discontinued operations	9%	7%	12%	13%	13%	12%	12%	12%	11%
<b>Total Assets</b>	<b>100%</b>								
<b>Equity</b>	<b>11%</b>	<b>20%</b>	<b>17%</b>	<b>16%</b>	<b>16%</b>	<b>16%</b>	<b>16%</b>	<b>17%</b>	<b>17%</b>
<b>SHAREHOLDER'S EQUITY</b>	<b>11%</b>	<b>18%</b>	<b>14%</b>	<b>14%</b>	<b>13%</b>	<b>13%</b>	<b>13%</b>	<b>12%</b>	<b>12%</b>
Share capital	0%	0%	0%	0%	0%	0%	0%	0%	0%
Share premium	1%	1%	1%	1%	1%	1%	1%	1%	1%
Reserves	10%	10%	12%	13%	12%	12%	11%	11%	11%
(Treasury share and equity interests)	-2%	-2%	-2%	-2%	-2%	-2%	-2%	-2%	-1%
Profit for the period of the parent	2%	9%	2%	1%	1%	1%	1%	2%	2%
Interim dividend	0%	0%	0%	0%	0%	0%	0%	0%	0%
<b>ADJUSTMENTS FOR CHANGES IN VALUE</b>	<b>-2%</b>	<b>0%</b>	<b>1%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>
Financial assets with changes in other comprehensive income	0%	0%	0%	0%	0%	0%	0%	0%	0%
Hedging instruments	0%	0%	1%	0%	0%	0%	0%	0%	0%
Translation differences	-1%	0%	0%	0%	0%	0%	0%	0%	0%
<b>EQUITY ATTRIBUTED TO THE PARENT</b>	<b>9%</b>	<b>18%</b>	<b>15%</b>	<b>14%</b>	<b>13%</b>	<b>13%</b>	<b>13%</b>	<b>12%</b>	<b>12%</b>
<b>NON-CONTROLLING INTERESTS</b>	<b>2%</b>	<b>2%</b>	<b>2%</b>	<b>3%</b>	<b>3%</b>	<b>3%</b>	<b>4%</b>	<b>4%</b>	<b>4%</b>
<b>NON-CURRENT LIABILITIES</b>	<b>28%</b>	<b>32%</b>	<b>31%</b>	<b>29%</b>	<b>28%</b>	<b>27%</b>	<b>26%</b>	<b>25%</b>	<b>25%</b>
Grants	0%	0%	0%	0%	0%	0%	0%	0%	0%
Non-current provisions	3%	5%	4%	4%	4%	4%	4%	4%	4%
Non-current financial liabilities	22%	24%	24%	22%	21%	20%	19%	19%	18%
Banks borrowings, debt instruments and other marketable securities	22%	24%	23%	21%	20%	19%	19%	18%	18%
Project finance with limited recourse	0%	0%	1%	0%	0%	0%	0%	0%	0%
Other financial liabilities	0%	0%	0%	0%	0%	0%	0%	0%	0%
Long term lease liabilities	1%	1%	1%	2%	2%	2%	2%	2%	2%
Derivative financial instruments	0%	0%	0%	0%	0%	0%	0%	0%	0%
Deferred tax liabilities	1%	1%	1%	1%	1%	1%	1%	1%	1%
Other non-current liabilities	0%	1%	0%	1%	0%	0%	0%	0%	0%
<b>CURRENT LIABILITIES</b>	<b>60%</b>	<b>48%</b>	<b>52%</b>	<b>55%</b>	<b>56%</b>	<b>57%</b>	<b>58%</b>	<b>58%</b>	<b>59%</b>
Current provisions	2%	3%	2%	3%	2%	2%	2%	2%	2%
Current financial liabilities	8%	5%	4%	4%	4%	4%	4%	5%	5%
Bank borrowings, debt instruments and other marketable securities	7%	5%	4%	4%	4%	4%	4%	4%	5%
Project finance with limited recourse	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other financial liabilities	0%	0%	0%	0%	0%	0%	0%	0%	0%
Short term lease liabilities	1%	0%	0%	0%	0%	0%	0%	0%	0%
Lease liability adjustment	0%	0%	0%	0%	0%	0%	0%	0%	0%
Derivative financial instruments	0%	0%	0%	0%	0%	0%	0%	0%	0%
Trade and other payables	42%	33%	35%	38%	38%	39%	40%	41%	42%
Suppliers	23%	17%	19%	20%	21%	21%	22%	23%	23%
Other payables	19%	16%	16%	17%	17%	17%	18%	18%	18%
Current tax liabilities	1%	0%	0%	0%	0%	0%	0%	0%	0%
Other current liabilities	1%	1%	1%	1%	1%	1%	1%	1%	1%
Liabilities relating to non-current assets held for sale and discontinued operations	6%	6%	9%	9%	9%	9%	9%	9%	8%
<b>TOTAL EQUITY AND LIABILITIES</b>	<b>100%</b>								

## Appendix 5: Income Statement (common size)

Income Statement	2020	2021	2022	2023e	2024e	2025e	2026e	2027e	2028e
<b>Revenue</b>	100%	100%	100%	100%	100%	100%	100%	100%	100%
Changes in inventories of finished good and work in progress	0%	0%	0%	0%	0%	0%	0%	0%	0%
Capitalised expenses of in-house work on assets	0%	0%	0%	0%	0%	0%	0%	0%	0%
Procurements	-70%	-68%	-70%	-68%	-68%	-68%	-68%	-67%	-67%
Other operating income	1%	0%	1%	0%	0%	0%	0%	0%	0%
Personnel expenses	-23%	-22%	-22%	-21%	-21%	-21%	-21%	-21%	-21%
Other operating expenses	-6%	-6%	-7%	-7%	-7%	-7%	-7%	-7%	-7%
Depreciation and amortisation	-3%	-2%	-2%	-2%	-2%	-2%	-2%	-2%	-2%
Allocation of grants relating to non-financial assets and others	0%	0%	0%	0%	0%	0%	0%	0%	0%
Impairment and gains or losses on the disposal of non-current assets	4%	-1%	2%	0%	0%	0%	0%	0%	0%
Other results	0%	-1%	-1%	0%	0%	0%	0%	0%	0%
Ordinary results of companies accounted for using the equity method	1%	1%	1%	0%	0%	0%	0%	0%	0%
Financial income	0%	0%	1%	1%	1%	1%	1%	1%	1%
Financial costs	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%
Changes in the fair value of financial instruments	0%	0%	1%	0%	0%	0%	0%	0%	0%
Exchange differences	0%	0%	0%	0%	0%	0%	0%	0%	0%
Impairments and gains or losses on the disposal of financial instruments	0%	0%	0%	0%	0%	0%	0%	0%	0%
Non-ordinary results of companies accounted for using the equity method	0%	0%	0%	0%	0%	0%	0%	0%	0%
<b>PROFIT BEFORE TAX</b>	3%	0%	3%	2%	2%	3%	3%	3%	3%
Income tax	-1%	-3%	-1%	-1%	-1%	-1%	-1%	-1%	-1%
<b>PROFIT FOR THE PERIOD FROM CONTINUING OPERATIONS</b>	2%	-3%	2%	2%	2%	2%	2%	2%	2%
Profit after tax from discontinued operations	1%	14%	0%	0%	0%	0%	0%	0%	0%
<b>Profit FOR THE PERIOD</b>	3%	12%	3%	2%	2%	2%	2%	2%	2%
(Profit) / loss attributed to non-controlling interests	-1%	-1%	-1%	0%	0%	0%	0%	0%	-1%
(Profit) / loss from discontinued operations attributable to non-control	0%	0%	0%	0%	0%	0%	0%	0%	0%
<b>PROFIT ATTRIBUTABLE TO THE PARENT</b>	2%	11%	2%	1%	1%	1%	2%	2%	2%

## Appendix 6: Cash Flow Statement (common size)

CF Statement	2020	2021	2022	2023e	2024e	2025e	2026e	2027	2028
<b>Cash flow from operating activities</b>	100%	100%	100%	100%	100%	100%	100%	100%	100%
EBIT				54%	63%	65%	66%	67%	70%
Income Tax				-10%	-12%	-13%	-13%	-14%	-15%
D&A				34%	41%	43%	43%	43%	44%
NWC				22%	8%	4%	4%	4%	1%
<b>Cash Flow from investing activities</b>	26%	1673%	-11%	-47%	-53%	-52%	-50%	-49%	-49%
Capex + Intangibles				-47%	-53%	-52%	-50%	-49%	-49%
Other investments				0%	0%	0%	0%	0%	0%
<b>Cash Flow for Financing activities</b>	-93%	-380%	-203%	-92%	-55%	-47%	-40%	-34%	-14%
Financial Income/Expenses				-15%	-14%	-13%	-13%	-12%	-11%
Dividends				-29%	-32%	-31%	-29%	-27%	-27%
Net Debt received				-47%	-8%	-3%	1%	5%	24%

## Appendix 7: Key Financial Ratios

Key Financial Ratios	2020	2021	2022	2023e	2024e	2025e	2026e	2027e	2028e
<b>Efficiency Ratios</b>									
Total Assets Turnover (x)	0.8	0.8	0.9	0.9	1.0	1.0	1.0	1.0	1.0
Accounts Receivables Turnover (x)	3.3	3.7	4.8	4.6	4.5	4.4	4.3	4.2	4.0
Collection Period (days)	109	100	76	80	81	82	85	87	90
Inventory Turnover (x)	25.9	26.1	29.8	28.0	27.8	27.7	27.5	27.3	27.1
Days in Inventory (days)	14.1	14.0	12.3	13.1	13.1	13.2	13.3	13.4	13.5
Payables Turnover	2.3	2.6	3.6	3.2	3.2	3.1	3.0	3.0	2.9
Payables Period (days)	162	140	102	113	115	117	120	123	127
Cash Cycle	-39	-26	-13	-20	-21	-21	-22	-23	-24
<b>Liquidity Ratios</b>									
Current Ratio	1.08	1.43	1.28	1.2	1.2	1.2	1.2	1.2	1.2
Quick Ratio	0.82	1.13	0.90	0.9	0.9	0.8	0.8	0.9	0.9
Cash Ratio	0.36	0.65	0.48	0.4	0.4	0.4	0.4	0.4	0.4
<b>Profitability Ratios</b>									
Gross Profit Margin	30.04%	31.67%	30.46%	32.0%	32.2%	32.4%	32.5%	32.6%	32.7%
Adj. EBITDA Margin	2.12%	3.60%	2.64%	4.8%	5.1%	5.3%	5.5%	5.7%	5.8%
Adj. EBIT Margin	-0.87%	1.88%	0.79%	2.9%	3.1%	3.2%	3.3%	3.5%	3.6%
Net Profit Margin	3.17%	11.59%	2.60%	1.6%	1.8%	1.9%	2.0%	2.1%	2.2%
ROE	22%	46%	14%	9.2%	10.5%	11.3%	12.0%	12.5%	12.9%
ROA	2.5%	8.8%	2.4%	1.5%	1.7%	1.9%	2.0%	2.1%	2.2%
<b>Solvency Ratios</b>									
Debt to Equity (X)	2.8x	1.6x	1.7x	1.7x	1.7x	1.6x	1.6x	1.5x	1.4x
Debt / Asset	32%	31%	29%	28%	27%	26%	26%	25%	25%
NET Debt to EBITDA (X)	6.2x	-0.2x	1.9x	0.9x	0.8x	0.8x	0.6x	0.5x	0.4x
Interest Coverage Ratio (X)	3.0x	0.9x	2.7x	2.1x	2.4x	2.6x	2.8x	3.0x	3.2x
Long-term Debt Ratio (%)	22.4%	24.4%	23.6%	21.6%	20.8%	19.9%	19.2%	18.6%	18.4%

## Appendix 8: Main assumptions

Assumptions	2021	2022	2023	2024	2025	2026	2027	2028	Explanation
D&A % PPE + Intangibles	18.7%	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%	Average depreciation rate of PPE
Inventories % Sales	2.7%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	Calculated as a % of sales. Each year the ratio will approach its historical average
Trade Receivables % sales	24.0%	22.0%	22.6%	23.2%	23.9%	24.5%	25.1%	25.8%	Calculated as a % of sales. Each year the ratio will approach its historical average
Other Receivables % Sales	5.0%	3.0%	3.3%	3.5%	3.8%	4.0%	4.3%	4.6%	Calculated as a % of sales. Each year the ratio will approach its historical average
Current Tax assets % Sales	1.1%	0.5%	0.6%	0.7%	0.7%	0.8%	0.8%	0.9%	Calculated as a % of sales. Each year the ratio will approach its historical average
Suppliers % Sales	21.3%	21.2%	21.7%	22.3%	22.8%	23.3%	23.9%	24.4%	Calculated as a % of sales. Each year the ratio will approach its historical average
Other payables	20.3%	17.5%	17.8%	18.1%	18.3%	18.6%	18.9%	19.11%	Calculated as a % of sales. Each year the ratio will approach its historical average
Current tax liabilities	0.6%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.49%	Calculated as a % of sales. Each year the ratio will approach its historical average
Other current liabilities	1.0%	1.0%	1.0%	1.0%	1.0%	1.1%	1.1%	1.09%	Calculated as a % of sales. Each year the ratio will approach its historical average
D/E (excl. leases)	1.50	1.63	1.58	1.54	1.49	1.45	1.40	1.40	Decrease of leverage in the next five years as planned by the strategy
<b>LT Debt / Debt</b>									Calculated as a % of Total Debt. Each year the ratio will approach its historical average
Financial instruments, debt instruments and other marketable securities	82.8%	85.6%	84.5%	83.5%	82.4%	81.3%	80.3%	79.2%	
Project finance with limited recourse % LT Debt	96.5%	96.5%	96.5%	96.5%	96.5%	96.5%	96.5%	96.5%	Calculated as a % of LT Debt. Each year each ratio will approach its respective historical average
Other financial liabilities % LT Debt	2.3%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	
Other financial liabilities % LT Debt	1.2%	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%	Calculated as a % of Total Debt. Each year the ratio will approach its historical average
<b>ST Debt/Debt</b>									Calculated as a % of Total Debt. Each year the ratio will approach its historical average
Financial instruments, debt instruments and other marketable securities	17.2%	14.4%	15.5%	16.5%	17.6%	18.7%	19.7%	19.7%	
Project finance with limited recourse % ST Debt	96.5%	95.8%	95.8%	95.8%	95.8%	95.8%	95.8%	95.8%	Calculated as a % of LT Debt. Each year each ratio will approach its respective historical average
Other financial liabilities % ST Debt	2.2%	1.2%	1.2%	1.2%	1.2%	1.2%	1.2%	1.2%	
Other financial liabilities % ST Debt	1.3%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	
Lease Growth			3.3%	3.1%	3.2%	3.2%	3.3%	3.3%	Leases will growth as the growth in sales
Sales Growth	-5.01%	20.76%	3.29%	3.13%	3.21%	3.24%	3.27%	3.32%	Industry forecasts for each region are used to predict EBITDA is calculated by the sum of each segment EBITDA
EBITDA	3.60%	2.64%	4.78%	5.07%	5.30%	5.49%	5.66%	5.80%	
Financial Income									Interest received on the risk-free rate
Financial Income	1.59%	2.19%	2.38%	2.38%	2.38%	2.38%	2.38%	2.38%	
Financial Expenses									Cost of debt includes lease interest and traditional debt interest. Traditional debt interest is calculated by the ytm on the longest bond. Lease is calculated by its historical rate added a spread for adapting the current rising interest rate
Tax rate	4.7%	4.4%	4.4%	4.4%	4.4%	4.4%	4.4%	4.4%	Nominal Tax rate in Spain
Non controlling interests	19.9%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	Average historical rate
Capex % Sales	-23.4%	-23%	-23%	-23%	-23%	-23%	-23%	-23%	Average capex % sales
Capex % Sales	-1.39%	-0.85%	-2.1%	-2.1%	-2.1%	-2.1%	-2.1%	-2.1%	Intangibles are added to replace its ammortization rate
Intangibles additions	0.04%	0.17%	0.17%	0.17%	0.17%	0.17%	0.17%	0.17%	
Dividend per share		€ 2.00	€ 2.00	€ 2.00	€ 2.00	€ 2.00	€ 2.00	€ 2.00	Fixed €2/share dividend announced in 2022 from now on

## Appendix 9: Cost of debt

Method 1	2017	2018	2019	2020	2021	Average
Interest expenses	486,216	451,491	376,653	362,517	484,152	
Total Debt	8,039,783	8,427,258	11,255,844	10,525,845	10,377,004	
Cost of debt	6.05%	5.36%	3.35%	3.44%	4.67%	4.57%

Method 2	Method 3
Risk Free Rate	YTM bond
ACS Credit spread	
Spain risk spread	
Cost of debt	5.3%

## Appendix 10: Cost of debt (MV in thousands)

WACC calculation	
MV Equity	8,539,653
MV Debt	10,249,606
Cost of equity	11.59%
% Equity	45%
Cost of debt	5.29%
% Debt	55%
Tax Rate - Nominal	25%
WACC	7.44%

## Appendix 11: Beta estimation

Method 1 - CAPM Beta Damodaran	
Unlevered Beta -Europe Engineering/Construction	0.64
D/E company	1.63
Tax Rate	25%
Levered Beta	1.42
Cost of equity	11.59%

Method 2 - CAPM Beta Blume Adjusted	
Adjusted Beta	1.28
Cost of equity	10.75%

Method 3 - CAPM Beta Regression	
Beta	1.24
Cost of equity	10.50%

## Appendix 12: WACC Method

FCFF Method	2023e	2024e	2025e	2026e	2027e	2028e	Terminal Value
EBIT*(1-t)	835,935	884,790	946,426	1,011,494	1,079,894	1,151,841	
Var Working Capital	-424,121	-131,835	-80,610	-82,683	-85,022	-22,948	
D&A	-641,729	-717,503	-777,166	-826,104	-867,838	-904,858	
Capex	-893,523	-916,379	-940,294	-965,218	-991,239	-1,018,461	
FCFF	1,008,263	817,749	863,908	955,064	1,041,515	1,061,186	16,731,587
Discount factor		0.93	0.87	0.81	0.75	0.70	0.67
Discounted CFs		761,157	748,473	770,184	781,775	741,416	11,158,570

EV	14,961,576
Debt	-10,377,004
Leases	-705,801
Provisions	-2,475,722
Minority Interest	-828,481
Non-op. Asset(liab	209,923
Cash	9,419,987
Equity Value	10,204,478
Share price	€ 36.69

### Appendix 13: FTE Method

FCFE Method	2023e	2024e	2025e	2026e	2027e	2028e	Terminal Value
Net income	550,882	639,543	703,665	770,524	841,185	915,838	
Var Working Capital	-424,121	-131,835	-80,610	-82,683	-85,022	-22,948	
D&A	-641,729	-717,503	-777,166	-826,104	-867,838	-904,858	
Capex	-893,523	-916,379	-940,294	-965,218	-991,239	-1,018,461	
Net borrowings	-901,459	-144,711	-56,677	26,558	105,988	503,312	
FCFE	-178,249	427,791	564,470	740,652	908,795	1,328,495	14,449,260
Discount factor	1	0.90	0.80	0.72	0.64	0.58	0.50
Discounted CFs		383,346	453,272	532,956	586,005	767,634	7,205,697

Equity value	9,928,910
Share price	€ 35.69

### Appendix 14: DDM Method

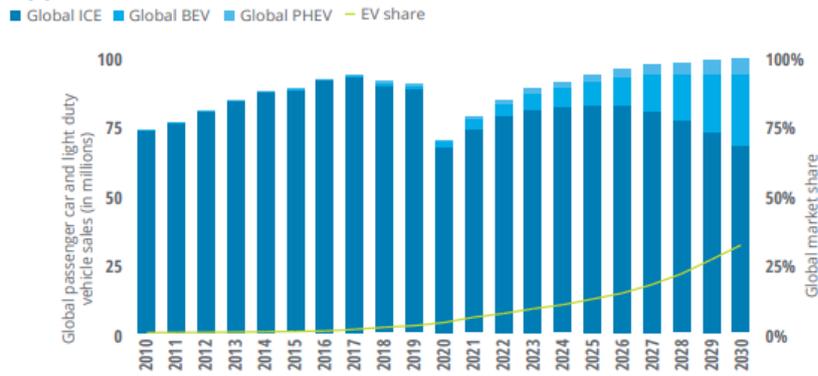
	2024	2025	2026	2027	2028	Terminal
Dividend	556,329	556,329	556,329	556,329	556,329	10,096,047
Discount Factor	0.90	0.81	0.73	0.66	0.60	0.60
Discounted dividend	499,115	448,837	404,575	365,539	331,049	6,007,757

Fixed dividend	€2/share
Perpetual growth	1.60%
<b>Share price</b>	<b>€ 28.96</b>

### Appendix 15: Market-based Valuation

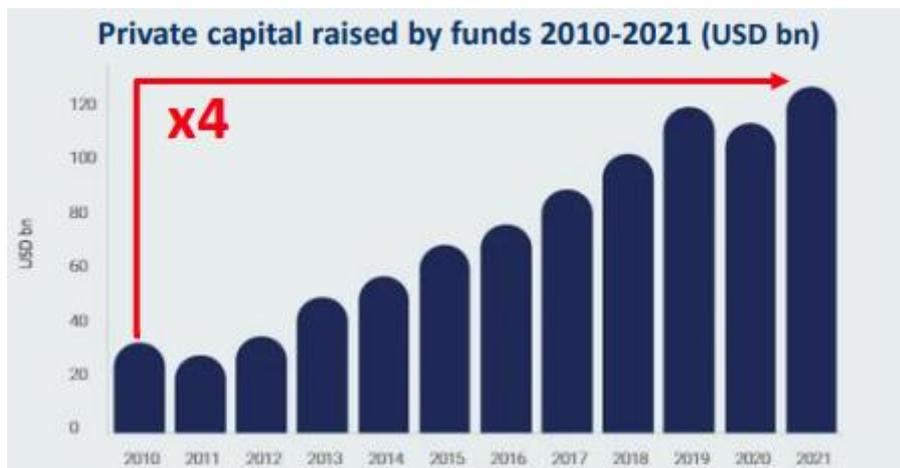
Peer Name	Country	P/E	P/B	EV/Sales	EV/EBITDA	EV/EBIT
PEAB AB-CLASS B	Sweden	7.5x	1.0x	0.52x	8.3x	13.6x
CFE	Belgium	6.4x	1.2x	0.25x	4.5x	7.9x
NCC AB-B SHS	Sweden	7.2x	1.3x	0.24x	4.6x	8.1x
BOUYGUES SA	France	9.3x	0.9x	0.45x	5.1x	10.7x
STRABAG SE-BR	Austria	8.5x	1.0x	0.16x	2.2x	3.9x
AF GRUPPEN ASA	Norway	16.3x	5.9x	0.52x	8.4x	11.4x

### Appendix 16: Global EV Sales



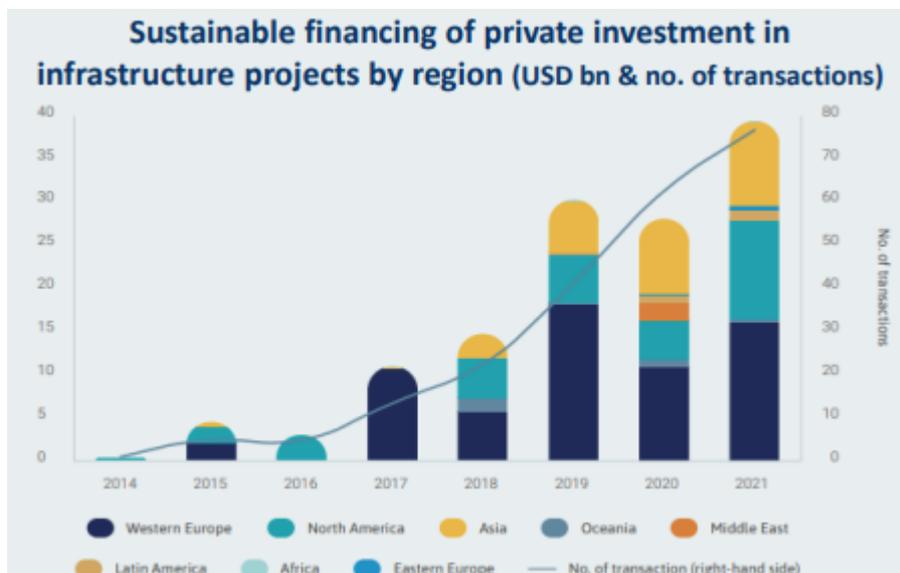
Source: Deloitte

### Appendix 17: Private capital raised by funds



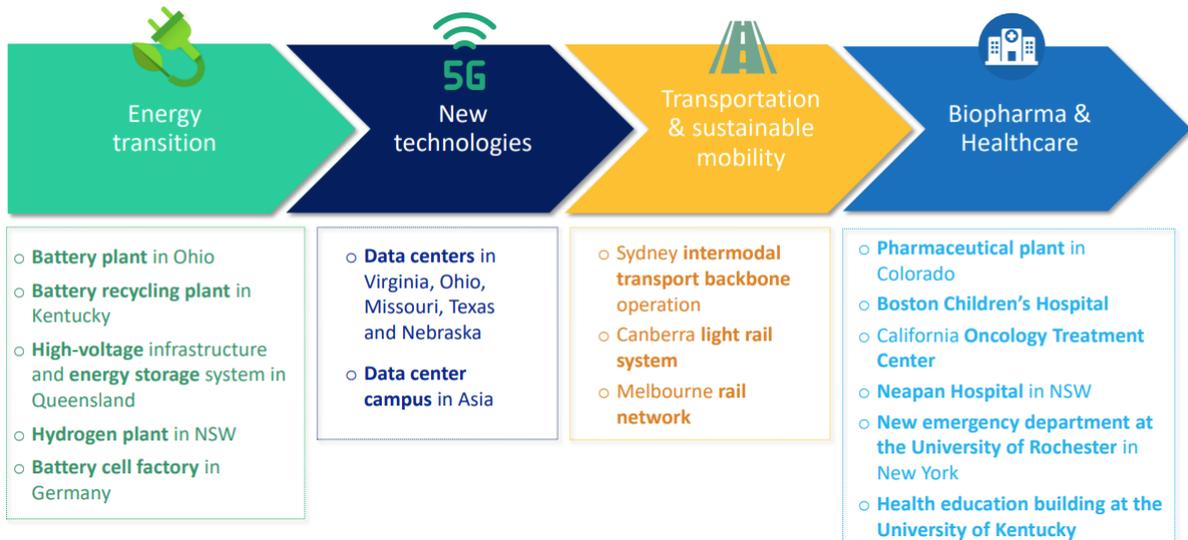
Source: ACS

### Appendix 18: Sustainable financing projects by region



Source: ACS

## Appendix 19: ACS Focus Markets



Source: ACS

## Appendix 20: ACS History

1983		Founded in 1968 Construction company based in Badalona, Spain, which was restructured following its acquisition and relaunched. It is the seed from which the ACS Group grew into what it is today.
1986		Founded in 1942 Spanish construction company, the acquisition of which represented a large expansion for the Group in the 1980s.
1992		Founded in 1992 Industrial services company; a leader in Spain and Latin America, it was a stock exchange acquisition that led the Group's expansion in this area.
1996		Founded in 1945 A state-owned construction company, it increased the Group's national presence.
1997		Founded in 1930 One of the most important construction companies in Spain, specialising in civil engineering projects.
1997		Founded in 1928 One of the most experienced railway development companies in Spain, with more than 80 years of experience. It joined the ACS Group as a subsidiary of Ginés Navarro.
1997		Founded in 1997 World leader in infrastructure development. It was the result of a merger between OCP and Ginés Navarro in 1997.
2003		Founded in 1941 Leader in Spain and a very diversified company. By merging with ACS, it created one of the five largest companies in the world and laid the foundation for the Group's future growth.
2003		Founded in 1992 Initially focused on providing cleaning services to public entities, it has become the benchmark multi-service company in Spain.
2011		Founded in 1873 A leading company in Germany with a presence in over 50 countries, it is the ACS Group's international growth platform.
2011		Founded in 1902 A HOCHTIEF subsidiary since 1999, America's leading general contractor is present practically throughout the entire country, developing large, non-residential building projects.
2011		Founded in 1949 A HOCHTIEF subsidiary that was acquired in 1983. It is Australia's leading construction company and a world leader in mining concessions. In May 2022, the takeover bid launched by HOCHTIEF to obtain a 100% shareholding was completed, which led to its delisting from the Sydney stock exchange.
2018		Founded in 2003 Abertis is one of the leading operators in toll road management, with almost 8,000 kilometres (5,300 miles) of roads in 15 countries, in which the ACS Group has approximately a 50% interest.

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### Recommendation System

Level of Risk	SELL	REDUCE	HOLD/NEUTRAL	BUY	STRONG BUY
High Risk	0%≤	>0% & ≤10%	>10% & ≤20%	>20% & ≤45%	>45%
Medium Risk	-5%≤	>-5% & ≤5%	>5% & ≤15%	>15% & ≤30%	>30%
Low Risk	-10%≤	>-10% & ≤0%	>0% & ≤10%	>10% & ≤20%	>20%