

TIE Kinetix

Initiation of coverage

Pure SaaS player in e-invoicing

TIE Kinetix is focused on 100% digitalisation of document streams in the supply chain. FY22 will be a transformative year as it is heavily investing in accelerating growth and improving margins in the next few years. While this will put short-term pressure on profitability, the company has set targets to accelerate organic growth in software-as-a-service (SaaS) revenues to more than 20% per year by FY25, with an EBITDA margin of up to 20%. Now fully focused on SaaS, recurring revenues are expected to increase from more than 80% to more than 90% over the next few years, further improving the predictability of its results.

Year end	Revenue (€m)	EBITDA* (€m)	EPS* (€)	DPS (€)	EV/Sales (x)	P/E (x)
09/20	15.6	2.3	(0.04)	0.00	1.3	N/A
09/21	14.9	1.5	0.11	0.00	1.9	171.8
09/22e	14.4	0.2	(0.55)	0.50	1.9	N/A
09/23e	16.5	2.3	0.29	0.50	1.7	65.2

Note: *EBITDA and EPS are normalised, excluding amortisation of acquired intangibles, exceptional items and share-based payments.

100% focus on SaaS

Over the past few years, TIE Kinetix has divested several activities to focus on its roots, which are electronic data interchange (EDI) and e-invoicing. It offers a SaaS platform that can be implemented easily into the different enterprise resource planning (ERP) systems of its customers and partners. SaaS revenues currently represent 65% of total revenue and we expect this to increase towards 90% in 2025, leading to a higher predictable stream of subscription income. TIE Kinetix's financial position has significantly improved in recent years, partly due to the proceeds from divestments. Backed by net cash of €9.2m, it will pay a dividend of €0.50, which underpins management confidence in future growth.

Investing in accelerating growth

TIE Kinetix held its first capital markets day on 2 March 2022 and published its financial ambitions for FY25 on the same day. Management expects profitability in FY22 to be temporarily lower due to additional investments, which should start to pay off from FY23. Its ambition is to significantly accelerate organic growth in SaaS revenues to more than 20% pa by FY25, up from 12-15% over the past few years, while M&A could add to this growth. Due to this higher revenue growth and scalability of its business, EBITDA margins could reach 20% in FY24/25 compared to 9.8% in FY21. Our estimates anticipate a CAGR in overall revenues of 12% in FY21-25 and an EBITDA CAGR of 34%.

Valuation: Discount to European and US peers

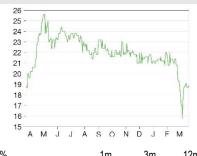
TIE Kinetix is entirely focused on SaaS solutions, which should increase predictable recurring revenues over the next few years and in turn underpin its valuation. The company is trading on EV/sales of 1.9x in FY22e compared to an average of 3.1x for European peers and 9.2x for US peers. Our DCF points to a fair value of €26 per share, ie 36% upside to the current share price.

Software & comp services

22 March 2022

Price	€18.90
Market cap	€36m
Net cash (€m) at 30 Septemb	per 2021 9.2
Shares in issue	1.9m
Free float	30%
Code	TIE
Primary exchange	Euronext Amsterdam
Secondary exchange	N/A

Share price performance



%	1m	3m	12m
Abs	(9.1)	(12.5)	(3.1)
Rel (local)	(7.7)	(5.6)	(8.0)
52-week high/low		€25.60	€15.80

Business description

TIE Kinetix is a Dutch IT software company delivering SaaS solutions to companies, governmental institutions and their suppliers, to help them exchange business documents electronically and simplify supply chain processes.

Next events

AGM 25 March 2022 H122 results 11 May 2022

Analyst

Johan van den Hooven +44 (0)20 3077 5700

tech@edisongroup.com

Edison profile page

TIE KinetixTIE Kinetix is a research client of Edison Investment Research Limited



Investment summary

Company description: Pure SaaS player

TIE Kinetix is a Dutch company focused on EDI, which is the exchange of business documents and data such as invoices, orders, order responses, dispatching and receiving documents across different platforms via electronic messages between the IT systems of two business partners. EDI is effectively translation and communication in one. TIE Kinetix offers a SaaS platform that can be implemented easily across all ERP systems at its customers and partners; all software is proprietary. To accelerate the pace at which it can sign up and onboard new customers, the company is expanding its network of channel partners, which should trigger higher revenues.

Financials: Net cash position offers room for dividend

Over the past few years, the company has realised organic growth of 12–15% per annum in its SaaS revenues with an overall positive EBITDA. At its recent capital markets day (CMD), TIE Kinetix communicated the growth plan for its SaaS activities over the next few years. According to management, it is planning additional investments of around €1m in FY22, in the form of adding staff, further optimising the onboarding of customers and increased marketing efforts. These additional investments and the reclassification of consultancy revenues to SaaS revenues (related to IFRS 15) will result in a net loss in FY22, but the company should quickly return to net profit in FY23, driven by increasing revenue growth and a normalised investment level. For FY24 and FY25, the company expects a significant acceleration to more than 20% organic growth in SaaS revenues and for the EBITDA margin to improve to 20%, driven by the scalability of its software products. As we expect the other product segments to show slower growth or even decline, we estimate that overall revenue growth will improve from a small decline in FY22 to 14% growth in FY23, 17% in FY24 and more than 20% in FY25. In the same period, we expect a CAGR in EBITDA of 34%.

TIE Kinetix has a strong financial position and had net cash of €9.2m at the end of September 2021. As it is confident in its potential growth over the next few years, it is proposing to pay a dividend of €0.50 per share, which is to be approved at the AGM on 25 March.

Valuation: Discount to larger peers

TIE Kinetix is currently trading on EV/sales of 1.9x in FY22e, which compares to an average of 9.2x for US peers and 3.1x for European peers. Some aspects that may account for TIE Kinetix's lower valuation compared to peers include its smaller size, below average profitability and the low liquidity in the shares. If the company manages to address some or all of these factors, its valuation could move towards those of its international peers.

Sensitivities

Our forecasts and TIE Kinetix's share price are sensitive to the following factors:

- Currency: According to the company, a 10% change in the US\$/€ rate would have an impact of around €0.3m on net income.
- Competition: TIE Kinetix competes with many software companies and will need to keep its technology up to date.
- Partner strategy: expanding indirect sales depends on the success of signing up new channel partners and the pace at which those partners sign up new customers for FLOW.
- Legacy business: as the company is now focusing on SaaS, the rate of decline in licence revenues and associated maintenance will influence overall growth.
- Regulation: one of the major drivers of market growth, but timing could influence growth.



Company description: SaaS player in niche market

After several divestments over the past few years, TIE Kinetix is fully focused on EDI and e-invoicing with its SaaS platform FLOW Partner Automation. This solution manages the digital transfer of all kinds of documents, including invoices. Scalability of the product should result in stronger growth in SaaS revenues and bring a higher level of recurring revenues from the current 80%+ to an estimated 90%+. TIE Kinetix's products handle more than 1bn documents per annum.

Exhibit 1: The exchange of documents between two companies



Source: TIE Kinetix

Some of the benefits of digital document interchange are listed below:

- Cost savings related to paper, printing, copy, storage, filing, postage and document retrieval.
- Quicker document processing by eliminating the manual handling and time-consuming postage of documents, thereby enhancing efficiency.
- High accuracy by avoiding errors caused by unreadable faxes, lost orders and incorrectly administrated orders. This saves valuable time on the part of employees.
- Increases sustainability and lowers CO₂ emissions by reducing the use of paper and ink.

Company background

TIE Kinetix was founded in 1987 with a focus on EDI. It started in the food sector but soon expanded to several other industries and then through acquisitions beyond EDI into e-commerce. In 2016, the company launched its FLOW Partner Automation platform, which at the time consisted of 45 applications, including demand generations, e-commerce, EDI and analytics. In 2016–19, it turned itself from a hosted/outsourcing and EU-funded operation into a dedicated SaaS company and phased out non-core SaaS products, eg hosting German portals and custom work for T-Mobile shops in the Netherlands. In 2019, there were further discontinuations and at the end of the year all non-FLOW activities were discontinued.

More recently, TIE Kinetix decided to return to its roots of EDI and e-invoicing with a strategic focus on the complete digitalisation of documents. As a result, it divested two subsidiaries in 2020: Demand Generation in an asset sale (staff and intellectual property rights) and Google AdWords for Channel for €6m (including intellectual property rights, customer contracts and staff). With effect from 1 October 2021, the company is positioning itself as a 100% SaaS company with a focus on long-term subscription contracts and annual recurring revenues.

In FY21, TIE Kinetix realised €14.9m in revenues from continuing operations. It has 104 employees and offices in the Netherlands, France, Germany and the United States.

Activities

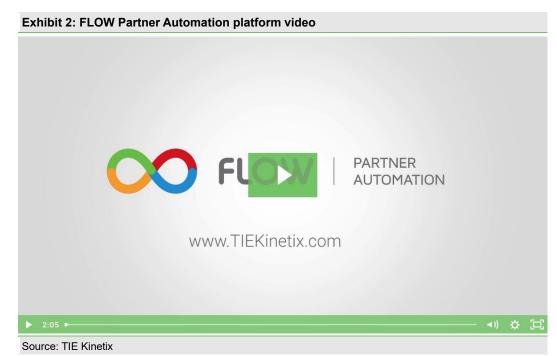
TIE Kinetix provides solutions for digitalising the supply chains of its customers via its in-house developed software platform FLOW Partner Automation, which converts documents into a digital format that can be easily distributed. The platform covers data mapping, validation, conversion, enrichment, monitoring, electronic archiving (e-archiving), reporting and error handling. The typical pricing structure for TIE Kinetix's SaaS solutions is a fixed component in maintaining the system



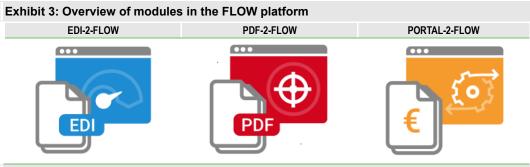
and keeping it up and running, and a pay-as-you-go component for the volume of documents processed on the platform. The FLOW Partner Automation platform can be tailored to a company's specific needs and has the following features:

- ERP-agnostic, connect and integrate any ERP with any other ERP (eg SAP, Oracle, Microsoft, Exact, Syspro). TIE Kinetix uses a standard application programming interface which connects its cloud-based EDI solution to many back-end ERPs.
- Connect and integrate any standard with any other standard (eg Edifact, Peppol, ANSI X12, UBL, Tradacoms, EESPA, Chorus, Fattura).
- Compliant: technical compliance, tax compliance, legal compliance and data compliance.
- Cloud solutions deliver a higher security level than on-premise solutions.
- Reliable platform with many industry certifications.

The FLOW Partner Automation platform is explained in the following video.



The FLOW platform helps companies of all sizes to achieve their respective digitalisation goals and consists of the following three modules for document exchange between companies, which are aimed at different customer groups.



Source: TIE Kinetix

- EDI-2-FLOW: documents are directly exchanged through EDI, which is suitable for larger companies that are already familiar with EDI and use more than 2,500 documents per year.
- PDF-2-FLOW: documents are processed automatically (importing and exporting documents),
 which is suitable for smaller companies using 50–2,500 documents per year.

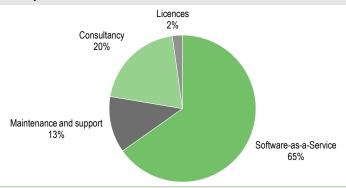


PORTAL-2-FLOW: added to the FLOW platform in 2019 and suitable for companies that send not many documents digitally (up to 50 documents pa). In this solution, the customer uploads the document to the portal for converting documents into a digital standard.

Product segments

Over the last few years, TIE Kinetix has transformed its business model from a traditional software licence-based one to a SaaS one, changing from one-off licence revenues to a subscription model, paid monthly. There is still some licence income in the US, which is lagging in the switch to cloud solutions. In FY21, licence income represented only 2% of revenues. The different product segments of the company can be divided as follows: SaaS (subscription and transaction-based revenue), maintenance & support (largely related to the US), consultancy (eg implementation, including onboarding work and after service) and licences (see Exhibit 4).

Exhibit 4: Revenues per business line FY21



Source: TIE Kinetix

In FY22, the company will reclassify certain consultancy revenues under SaaS revenues, to be recognised over a period of 36 months while the related cost will be amortised (in compliance with IFRS 15). This will affect reported results in FY22 but will not have an impact on the contract's lifetime revenues and margins. In Q122, of the €1.2m invoiced to customers on active consultancy contracts, €0.8m will be reallocated to SaaS revenues (versus €0.9m and €0.08m respectively in Q121).

Market focus

In the large market for electronic documents, TIE Kinetix focuses on the business segment and has no plans to enter the consumer segment.

- Business to business (B2B): TIE Kinetix offers its products to a wide range of companies from small to large entities, with a focus on the mid-market (companies with 50–250 staff). Contracts are typically subscriptions for three or five years.
- Business to government (B2G): TIE Kinetix has activities in the Netherlands and Germany and we also expect revenue growth to come from France and the US. Contracts are for four years and are normally extended by three years twice, bringing the total to 10 years, as governments tend not to want to change much. After the 10-year period, the order will be tendered again. In February 2021, TIE Kinetix's largest customer, the City of Amsterdam, extended its four-year contract by three years with the possibility of extending it again in 2024.

Sales strategy

TIE Kinetix realises revenues via both direct and indirect sales.

Direct sales: TIE Kinetix has local sales teams in its four countries for tailored customer care. Since it has fully focused on SaaS (from 1 October 2021), it has divided its sales department in two: 1) a new sales team fully focusing on new business; and 2) the existing customer success



- teams, which help customers to digitalise their supply chain and optimise pay-as-you-go revenues for the company.
- Indirect sales: TIE Kinetix sells its products via its partner network, which includes Microsoft, Oracle, SAP, Exact, Unit4, Epicor, AFAS and Syspro. For the next few years, the company aims to increase the importance of indirect sales.

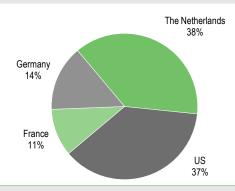
TIE Kinetix works together with its major customers, such as Bunzl, Rabobank and City of Amsterdam, to help their trading partners to digitalise their document streams. These trading partners are potential new FLOW customers.

The company has more than 2,500 customers, including Bunzl, HDA Truck Pride, the City of Amsterdam, GIZ, LEM, Clopay, Revlon and Nite Ize. The top 10 customers represented 16% of total revenues at end September 2021 with an average value of c €235k pa. The average deal size of smaller suppliers is €500–2,500 pa. Customer churn is relatively low at 1.5–2.0% as it is complex for customers to switch to another platform for all their documents. When customers have only digitalised one document it is relatively easy to move software providers.

Geographical focus

TIE Kinetix is active in four countries, the Netherlands, United States, France and Germany. Revenue by geography is shown in Exhibit 5 below. Looking at EBITDA per geography, the Netherlands is the main contributor with 63%, followed by the US with 37%. France added 5% to group EBITDA, while Germany was loss-making in FY21, lowering overall EBITDA by 5%. At the recent CMD, management commented that it sees ample growth opportunities in the existing countries and that there is no reason yet to expand to other countries.

Exhibit 5: Geographical spread of revenues FY21



Source: TIE Kinetix

Mission and strategy

TIE Kinetix's mission statement is as follows: 'TIE Kinetix offers a SaaS solution to digitalise the exchange of all business documents between two independent companies acting as trading partners in the supply chain.' Exhibit 1 shows the document stream between two companies.

At its first CMD on 2 March, the company revealed its strategic plan for the medium term until FY25, the different building blocks of which are described below.

- Unburden customers with document flow: by using TIE Kinetix's SaaS platform, documents are automatically prepared to be sent digitally, saving customers a lot of time and significantly enhancing administrative accuracy.
- Reduce customers' carbon footprint: digital document exchange significantly reduces the use of paper and ink, which improves the ESG profile of the company's customers. With more than one billion documents sent digitally, 100,000 trees are saved each year.

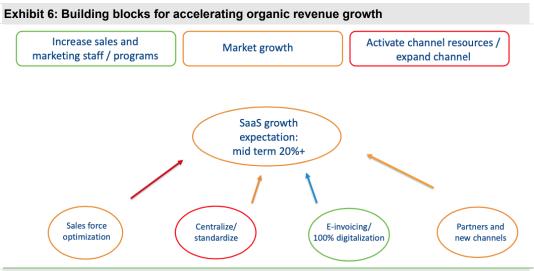


- Continued innovation in solutions: the company regularly adds new modules and functionality to its products. It has added machine learning algorithms to its FLOW Partner Automation platform to realise more efficient processes, including algorithms for translation, mapping creation, configuration and maintenance. For example, the onboarding process for customers has been made far more efficient, as well as easier and quicker over the years.
- Capture growth in the EDI/e-invoicing market: in the chosen geographical markets, estimated growth in e-invoicing is 20–30%, with government regulations pushing for the use of digital document exchange (for detailed market information, see pages 9–11).

Accelerating revenue growth to 20%+

TIE Kinetix stated that it has grown its SaaS revenues organically by 12–15% pa over the past few years, with 14% growth in FY21. Its medium-term strategy to FY25 is focused on accelerating growth in SaaS revenues to more than 20% per year, with the following selected building blocks to achieve this ambition (see Exhibit 6).

- Salesforce: investing in people to add new customers and new business, while also increasing customer success by optimising the use of the FLOW platform. The company is hiring developers from abroad into the Netherlands, and marketing and sales staff are hired locally.
- Standardisation: over the past few years, TIE Kinetix has standardised back office functions in marketing and finance, and plans to standardise the operational functions which are required to connect customers and suppliers to the platform.
- **E-invoicing/100% digitalisation:** TIE Kinetix will benefit from the fast-growing e-invoicing market, where mandates in the different countries boost document traffic.
- Partners and new channels: the company is adding new partners to generate more channel sales in addition to its direct sales channel.



Source: TIE Kinetix

Recurring revenues are a key feature of SaaS solutions, currently making up more than 80% of TIE Kinetix's total revenues. Management believes this could grow to more than 90% over the next few years now that the company is fully focused on its SaaS business.

An improvement in the EBITDA margin to up to 20% in FY25

The second financial target is an improvement in EBITDA margin from 9.8% in FY21 (normalised) to 20% in FY25. Growth drivers will be the accelerating revenue growth and the scalability of its products. The FLOW Platform is built in the Azure Cloud; many more customers and suppliers can be added without many more additional costs. Several peers of TIE Kinetix, such as Pagero, Unifiedpost and Esker, have similar margin targets, which seem achievable levels in this market.



Investments affect short-term profitability

Now that the company has returned to its roots of EDI and e-invoicing, it is speeding up investments to accelerate revenue growth to the ambition of 20%+ per annum, after having suppressed investments in FY20 due to the pandemic. To set itself apart from its competitors, the company is investing c €1m in people (sales and marketing), products, infrastructure and its sales pipeline in FY22, of which the largest part will be expensed. This will result in a net loss in FY22 compared to the normalised net profit in FY21 of €0.2m (corrected for the pandemic-related US government grant of €0.45m). TIE Kinetix expects a quick return to net profit in FY23, with rapidly building profitability afterwards.

Dividend policy

On 2 February 2022, the company introduced its new dividend policy after not paying a dividend for many years. The company strives for a stable dividend and will start with a pay-out ratio of 40% of net profit, increasing to 50% over the next few years. As FY22 will be loss-making, the announced dividend of €0.50 per share will be paid out of the company's reserves. Shareholders can choose between a cash dividend and a stock dividend. The announced dividend reflects a maximum amount of €0.96m, which can be easily paid out of the net cash position of €9.2m. Future dividend payments are conditional on the company's equity remaining at least equal to the book value of the intangible and tangible fixed assets and its cash position being sufficient for working capital volatility. Within TIE Kinetix's peer group, few other companies pay a dividend, so the company stands out on this.

Possible M&A in current footprint...and beyond

As part of its new strategic plan, the company will also look at acquisitions in its current footprint, being the Netherlands, the United States, France and Germany. As the company expects strong growth in France and Germany over the next few years, these countries are obvious targets for acquisitions. The company is not looking for new products; instead, the focus is on adding new customers, which can be easily migrated to the FLOW platform to trigger the positive effect of scalability on its profitability. To further optimise the scalability of its FLOW platform, acquisitions outside its current footprint could be expected at a later stage. TIE Kinetix had €9.2m in net cash at end September and based on a maximum gearing ratio (net debt/EBITDA) of 2.0x, the company could finance a further €4.6m for acquisitions, based on our estimates for FY23, bringing the total towards €14m (without needing additional equity). Taking an EV/sales range for acquisition targets of 2–4x, this might add revenues in the range of €3.5–7.0m or 21–42% to our FY23 revenue estimate.

Management

TIE Kinetix has a two-tier management board with the executive board consisting of a CEO and CFO, and a three-member supervisory board.

Mr Jan Sundelin was appointed a member of the executive board of TIE Kinetix in 2007, interim CEO in the summer of 2008 and CEO in March 2009. Jan has more than 30 years of executive experience in supply chain software. Before TIE Kinetix he was CEO at TallyGenicom EMEA and senior vice president of strategic planning and international sales and marketing for Minolta-QMS Mobile.

Dr Michiel Wolfswinkel has been CFO since November 2013 and brings more than 30 years' executive finance leadership in software/tech. Previously Michiel was CFO of Dutch-listed company Qurius and fulfilled financial management roles at Eneco and MatrixOne (Product Lifecycle Management software, Nasdaq listed).



Shareholders

There are currently 1.9m TIE Kinetix shares outstanding and this number has increased over the years, partly due to the exercise of warrants. Exhibit 7 below shows the shareholders with a stake of more than 3%. Most of the shareholders are private investors and have been invested in the company for many years. More recently, two institutional investors were added to the list. Mr Van Schaick was a supervisory board member for the period 2007–14.

Shareholders	Stake	Date of last filing	Type of investor
			·
Mr Van Schaick	27.2%	16-Jun-20	Private
Mr Komen	21.8%	25-Feb-22	Private
Partinc Capital	9.2%	29-Dec-21	Institutional
Axxion	7.8%	30-Aug-21	Institutional
Mr Van Lookeren Campagne	3.2%	02-Dec-15	Private

Related to the acquisition of TFT in 2013, TIE Kinetix issued 388,846 warrants, which can be converted to a newly issued TIE Kinetix share for €7.00 until 2 December 2023. According to the FY21 annual report there were 295,708 warrants outstanding as at 30 September 2021. In a press release on 21 March 2022, TIE Kinetix reported that in the period 1 February to 18 March 2022, 228,568 warrants were converted into new TIE Kinetix shares, leaving the number of warrants outstanding at 67,160 (or 3% of the number of shares outstanding). According to a filing update on 25 February 2022, Mr Komen has exercised 71,428 warrants. According to the company, Mr Van Schaick currently has a 27.2% stake after the conversion of warrants.

TIE Kinetix has a performance share plan for the executive board. In 2021, 23,169 shares were granted (subject to transfer restrictions) with a fair value of €23.40 per share. Operating expenses in FY21 included an employee benefits expense of €0.5m related to these two grants. The executive board members are shareholders: the CEO holds 46,598 shares, or 2.7%, and 11,428 warrants, or 0.7% (based on the annual report FY21) and the CFO 12,661 shares (or 0.7%). Shareholder Partinc Capital is linked to supervisory board member Mr Per Nordling, who was appointed three years ago and has supported the strategy change towards 100% digitalisation.

The market is increasingly turning to e-invoicing

The e-invoicing market has been around for over 30 years, with electronic documents gradually replacing paper-based invoices, first via email and increasingly via software platforms. According to Gartner, 23% of supply chain leaders expect to have a digital ecosystem by 2025, up from currently only 1%. Climate change is on the radar of many corporates and digitalisation helps in achieving this. The pandemic has proven the efficiency of having a digital working environment, although it has slowed down overall business activities.

According to a sample set of TIE Kinetix's customers, invoices represent over 20% of all documents going through FLOW. The market consists of hundreds of documents and once customers see the benefit of e-invoicing, they want to digitalise all other documents. According to Billentis, the maturity of the e-invoicing market differs between continents and countries. It started in Latin America and Scandinavia, while Italy also has a well-developed market. In Europe, the EU has mandated that paper and digital invoices should be treated equally and lays out ways that documents can be authenticated. EU member states have been subject to the 2014/55/EU directive since April 2019: businesses selling to government entities must use e-invoicing based on specified interoperability standards. These governmental mandates are an important boost to local e-invoicing markets. Exhibit 8 shows the impact of the mandate in Italy in 2019, which delivered the Italian government €2bn in VAT income at the cost of an estimated €10m. The US market is different from Europe as



there are no e-invoicing B2B or B2G mandates. Traditional EDI is still big in the US and expected to move gradually to 100% digitalisation, but it is unclear whether this will happen via mandates.

B2B/B2G/G2B: Electronic invoice volume transferred directly or via service providers Overall negative 6000 **COVID** impact 5000 million electronic invoices 4000 3000 2000 Jump due to mandate in Italy 1000 0 2014 2017 2019 2021 (E) 2022 (E) 2015 2020

Exhibit 8: Channels used for electronic invoices, B2B/B2G/G2B volume (Europe)

Source: Billentis 2022

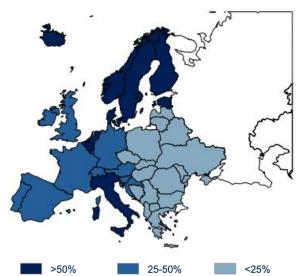
Looking at TIE Kinetix's core market, B2B and B2G, the market penetration per country in Europe differs according to Billentis (Exhibit 9). In 2022, the Netherlands appeared in the >50% range for the first time, with France and Germany still in the 20–50% range, offering ample room for growth. Looking at customers of TIE Kinetix, the City of Amsterdam for instance has currently digitalised 46% of its customer base, offering plenty of upside towards the targeted 100% digitalisation.

B2B via Service Provide

Source: Billentis, 2022

Exhibit 9: B2B/B2G/G2B – estimated market penetration 2022 per country

B2B Supplier/Buyer Direct



Source: Billentis 2022

After the negative impact of the pandemic on the e-invoicing market, Billentis expects an overall positive impact in 2022 and beyond, driven by 1) forced home-office requirements paving the way for accelerating digitalisation and e-invoicing, and 2) the pandemic-related increase in government debt accelerating the fight against VAT fraud by governments making e-invoicing mandatory.

According to Billentis, the value of the global e-invoicing solution, service provider & enabling market is expected to increase from €7.5bn in 2022 to €23bn in 2026, reflecting a CAGR of 25%. For Europe, it expects that 2022 will be a transitional year with average growth and a lot of

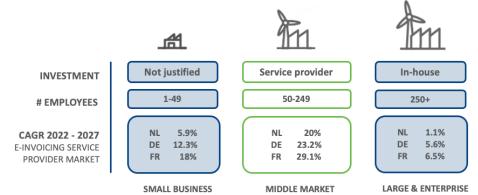
TIE Kinetix | 22 March 2022 10



preparatory work for the period after that. Over the next five to six years, more European countries are expected to introduce nationwide B2B mandates, which will lead to a significant boost. Looking at the countries where TIE Kinetix is active, B2B e-invoicing mandates are in place for 2023 in France, are predicted for Germany in 2026 and are predicted for the Netherlands in 2028.

Exhibit 10 shows the expected growth rates in the European countries where TIE Kinetix is active for the period 2022–27. While overall growth in Europe is expected to be below the global rate of 25% per annum, the mid-market in Europe is showing the highest growth within the region. This is the focus market segment of TIE Kinetix and the company should benefit from the expected growth in the Netherlands (20%), Germany (23%) and France (29%). Growth in the Netherlands is lower than in the other countries because the B2B mandate is expected in 2028, which falls outside of the forecasting period of Billentis.

Exhibit 10: Growth in the e-invoicing service provider market B2B, B2G, G2B



Source: Billentis, E-Invoicing Service Provider Market B2B, B2G & G2B 2022-2027

The US is a large market for invoicing as there are 25bn invoices exchanged every year, of which 75% still need manual processing. Gartner expects a CAGR of 17% in the period 2020–25 in automated invoice management and e-invoicing for suppliers.

Competitive environment

According to Billentis, there are more than 2,000 players active in the supply chain software market, and they vary in size and also in product portfolio, geographical coverage and market sector. TIE Kinetix believes it is different from its competitors because, as a traditional EDI player, it has moved new functionalities in the cloud, which include e-invoicing and the latest generation of digitalisation standards. According to TIE Kinetix, most players in the US are still traditional EDI.

The peer group for TIE Kinetix can be divided into US players and European players, which is shown in Exhibit 11, although we note that these companies may also have activities outside their home areas. According to TIE Kinetix, the closest peers in Europe are Esker (also covered by Edison Group), Pagero and Unifiedpost, and in the US, SPS Commerce and TrueCommerce.

European peers	US peers	
Basware	Coupa	
Esker	Descartes	
Generix	E2Open	
Pagero	Manhattan Associates	
Tungsten plc	OpenText	
Unifiedpost	SPS Commerce	
	TrueCommerce (private)	

TIE Kinetix | 22 March 2022 11



Sensitivities

Our forecasts and the TIE Kinetix share price are sensitive to the following factors:

- Currency: while TIE Kinetix has some natural hedging, R&D and central functions are based in the Netherlands, resulting in exposure to the US\$/€ exchange rate (37% of revenues are realised in the US while 24% of its staff are located there). According to the company, a 10% change in this exchange rate would have an impact of around €0.3m on net income.
- Competition: TIE Kinetix competes with many other software companies and will need to maintain its technology to compete.
- Partner strategy: the rate at which TIE Kinetix will be able to successfully sign-up new channel partners for indirect sales and the pace at which those partners sign up new customers for FLOW will influence revenue growth and headcount requirements.
- Legacy business: licence income and the associated maintenance and support still represent 15% of revenues and the rate at which these businesses decline will have an impact on the overall revenue growth and profitability going forward.
- Regulation: the timing of mandates in Europe will influence growth in the respective countries.

Financials

Earnings

Over the past few years, the company has realised organic growth of 12–15% per annum in its SaaS revenues with an overall positive EBITDA. The company has invested in further optimising the FLOW platform and has centralised its back office with the standardisation of several back-office functions, such as marketing, finance and accounting. This has resulted in an efficient go to market and delivery model with a low total cost of ownership. The next step for the company is to also standardise front-office functions.

In the period 2018–21, the total revenues of TIE Kinetix declined from €16.9m to €14.9m, which was completely caused by the impact of several divestments with annual revenues of around €3m. During FY20 and FY21, TIE Kinetix coped relatively well with the COVID-19 pandemic as employees were easily able to work remotely from their homes. The food sector performed relatively well, while manufacturing felt the impact of the pandemic (temporary plant closures). Reported revenues in FY21 were €15.7m but included revenue of €0.8m from divestments during the year. Revenue from continuing businesses increased 1% y-o-y to €14.9m in FY21 with a normalised EBITDA margin at 9.8%, which was down 500bp y-o-y. Net profit of €0.6m included a US government grant of €0.45m related to the pandemic. Adjusted for this, net profit in FY21 would have been €0.2m.

SaaS revenues increased 14% in FY21 to €9.7m. Order intake in SaaS (annual recurring revenues, ARR) was up 8% y-o-y to €6.8m despite the below average level of investments due to the pandemic. The total order intake of the company increased 12% y-o-y to €11.4m.

Exhibit 12: Q122 results						
€m	Q121	Q122	Change y-o-y			
Total revenues	3.9	3.6	-7%			
SaaS revenues	2.4	2.6	9%			
EBITDA	0.6	0.2	-60%			
EBITDA margin	23.8%	8.6%				
Source: TIF Kinetix						

TIE Kinetix | 22 March 2022 12



In Q122, TIE Kinetix changed the way of reporting to adapt to IFRS accounting rules related to SaaS revenues. The company has reclassified part of the consultancy revenues to SaaS revenues this year, which now must be spread out over three years, which is the average length of a SaaS contract, instead of fully falling in FY22. This accounting change will not have an impact on the contract's lifetime value, but will have a negative impact on revenues in FY21, which was already shown in the Q1 results (see Exhibit 12). SaaS revenue showed good growth of 9% in the quarter and the company's order book showed a promising increase of 43% to €2.8m.

In addition, TIE Kinetix is experiencing price increases from its suppliers and wage inflation, but most contracts allow the company to increase prices in line with CPI and management expects to continue to be able to do so. According to management, FY22 will be a transformative year, with additional investments to accelerate growth from FY23. At the recent CMD, management commented that it expects to spend an additional €1m on staff, products, infrastructure and its sales pipeline, of which a large part will be expensed. Together with the change in accounting as a pure SaaS player, this will temporarily have a negative impact on results and TIE Kinetix is anticipating realising a very modest EBITDA and a net loss in FY22 (compared to the normalised EBITDA of €1.5m and normalised net profit of €0.2m in FY21).

TIE Kinetix expects to quickly return to net profit in FY23, driven by accelerating revenue growth in SaaS towards 20% and lower expenses when compared to FY22. EBITDA margin could return to levels that we have seen in recent years. For FY24 and FY25, management expects an acceleration in revenue growth to 20%+ in SaaS and an improvement in EBITDA margin up to 20%.

The company is also looking for M&A in the countries in which it is currently active and potentially beyond its current footprint at a later stage, but we have not included any activity into our model yet.

Looking at the product segments, the strongest growth will come from SaaS revenues, which has the full focus of the company. Due to lower licence revenues over the past few years, we expect the associated maintenance and support revenues to steadily decline by around 20% per annum. Licence revenues will stay around for a while, because not all companies have made the switch to cloud yet. Consultancy revenues will show a significant decline in FY22 due to the transfer of revenues to SaaS revenues (based on IFRS 15), and we expect modest growth of 5% in the years thereafter. Exhibit 13 summarises our estimates for the different product lines, which result in accelerating overall revenue growth from a modest decline in FY22 to more than 20% in FY25.

Gross margin is expected to increase over the next few years driven by the higher weighting of SaaS revenues. We expect an improvement of around 200bp per annum from the FY21 base of 61.3%. EBITDA is expected to recover quickly from FY23 as the one-off investments of €1m in FY22 will not recur in FY23. Driven by accelerating revenue growth and the scalability of the software business, we expect the EBITDA margin to improve to 20% by FY25.

Exhibit 13: Development of product segments and EBITDA								
€m	FY20	FY21	FY22e	FY23e	FY24e	FY25e		
SaaS	8.5	9.7	11.1	13.4	16.3	20.4		
Maintenance & Support	2.6	1.8	1.5	1.2	0.9	0.8		
Consultancy	3.0	3.0	1.5	1.6	1.6	1.7		
Licences	0.6	0.3	0.3	0.3	0.3	0.3		
Total revenues, continued operations	14.8	14.9	14.4	16.5	19.2	23.2		
Revenue growth								
SaaS		14%	15%	20%	22%	25%		
Maintenance & Support		-30%	-20%	-20%	-20%	-20%		
Consultancy		0%	-50%	5%	5%	5%		
Licences		-49%	0%	0%	0%	0%		
Total revenue growth y-o-y		1.0%	-2.8%	13.9%	16.9%	20.6%		
EBITDA, continued operations	2.1	1.9	0.2	2.3	3.5	4.7		
EBITDA margin	14.5%	12.9%	1.5%	13.8%	18.4%	20.4%		
Source: TIE Kinetix, Edison Investment	ent Researc	h						



Cash flow set to improve as from FY23

Development costs are expected to stay in the range of €0.8–1.0m over the next few years and these costs are capitalised and amortised over five years. As we do not expect these costs to significantly increase, the amount of amortisation is also expected to maintain stable. Investments in tangible fixed assets are expected to remain low at around €0.5m per annum as the company does not own any buildings (mainly lease related).

Working capital needs are estimated in the range of €1.5–2.0m, which can be easily paid out of the company's own resources. TIE Kinetix has unused tax losses carried forward for an amount of €9.1m as at September 2021, which can be used against future profits realised in the Netherlands. This will result in a low tax rate for the next few years.

In FY21, the company generated an operating cash flow of €2.1m, which was slightly down from the €2.7m in the year before. Due to the additional investments in growth of around €1m, we expect the cash flow generation to be temporarily lower in FY22 at below €0.5m. We expect a clear improvement again to more than €2m from FY23 and a further building up towards €5m in FY25.

As previously discussed, the company is starting to pay a dividend and the maximum amount for this year's dividend of €0.96m can also be paid out of its own resources.

Balance sheet is strong with a net cash position

The divestment of two subsidiaries that did not fit the company's strategy any longer has significantly improved the company's financial position. The Google AdWords business was sold for €6m, which was paid in cash of €3m and in a one-year 10% secured loan (repaid in May 2021 and the interest due on the vendor loan was paid in monthly instalments). At the end of FY21, the company had a net cash position of €9.2m. The company has no debt and has lease obligations of only €0.7m. We do not expect major changes in the company's liabilities over the next few years.

Intangible assets amount to €4.9m of a balance sheet total of €18.7m and about half of this amount is related to R&D costs, which are capitalised. Goodwill amounts to €2.3m. Tangible assets are relatively low as the company does not own the buildings it uses.

The equity ratio is a strong 60%. The conversion of the warrants will increase equity and bring in additional cash of around €2m, with the largest part falling in FY22 (due to recent conversions).

Valuation

TIE Kinetix is entirely focused on SaaS solutions; the resulting increase in more predictable recurring revenues should underpin its valuation. For the valuation of TIE Kinetix we look at peer multiples and discounted cash flow. Peer multiples show the company's relative position to the larger peers in the market for digital document exchange. Looking at the peer valuation, there is a distinctive positive relation between size and valuation, which emphasises the importance of scalability of the software business. Now that the company has changed to a more predictable SaaS model, the use of discounted cash flow might be very helpful as the company's cash generation will be more predictable due to the higher level of recurring revenues.

At a discount to peer multiples

There are no exact copies of TIE Kinetix as a listed company. Mostly larger listed companies are involved in document exchange, which might also include e-invoicing. We have split the peer group into US and European peers (see Exhibit 14). The US peers are mostly larger in size when compared to their European peers and due to this scale benefit, their profitability tends to be higher. Several peers are currently loss-making thus it makes more sense to look at EV/sales, which is the



most used multiple when looking at SaaS specialists. TIE Kinetix is trading on an EV/sales multiple of 1.9x in FY22e, which compares to the average of 9.2x for US peers and 3.1x for European peers. There might be several reasons for explaining the lower valuation when compared to peers, such as the smaller size, the below-average profitability, the low liquidity in the shares, the recent track record and the lower share of SaaS revenues. If the company manages to tackle several or even all these factors, its own valuation might tend towards those of its international peers.

	Currency	Share	Market	Revenue	growth	EBITD/	margin	EBI	Γ margin	E	V/sales	P/E	
		price	cap (m)	CY	NY	CY	NY	CY	NY	CY	NY	CY	NY
TIE Kinetix	€	19.00	36.6	-2.8%	13.9%	1.5%	13.8%	4.3%	10.4%	1.9	1.7	N/A	57.5
Basware	€	22.40	325	5%	9%	15.0%	17.0%	5.3%	8.7%	2.3	2.1	305	52
Esker	€	201.00	1191	19%	17%	21.2%	20.6%	13.9%	13.8%	8.8	7.5	78	67
Generix	€	6.32	144	7%	9%	12.2%	12.0%	8.8%	8.6%	1.9	1.7	29	24
Pagero	SEK	13.70	2114	36%	26%	0.8%	6.3%	-22.1%	-13.8%	3.2	2.5	N/A	N/A
Tungsten plc	GBp	30.60	39	7%	3%	12.4%	13.8%	1.5%	3.3%	1.1	1.0	61	29
UnifiedPost	€	7.58	254	76%	16%	3.8%	14.0%	-8.1%	6.6%	1.6	1.4	N/A	49
European average				25.4%	13.4%	10.9%	13.9%	-0.1%	4.5%	3.1	2.7	73.5	32.9
European median				13.2%	12.7%	12.3%	13.9%	3.4%	7.6%	2.1	1.9	45.0	39.3
Coupa	US\$	90.66	6805	16%	22%	9.4%	12.9%	4.1%	7.1%	8.1	6.7	359	145
Descartes	C\$	97.34	8235	13%	12%	43.8%	44.2%	29.3%	31.8%	13.0	11.6	88	71
E2open	US\$	9.42	2839	41%	32%	34.0%	35.5%	9.5%	20.5%	8.2	6.2	188	46
Kinaxis	C\$	170.21	4677	35%	14%	17.0%	18.5%	7.8%	9.3%	10.0	8.7	165	116
Manhattan Associates	s US\$	140.51	8874	7%	12%	24.5%	25.7%	22.3%	23.2%	11.7	10.4	69	59
Opentext	C\$	54.64	14791	4%	4%	36.2%	38.0%	33.5%	35.3%	4.0	3.9	17	15
SPS Commerce	US\$	134.11	4829	15%	15%	28.4%	29.7%	24.5%	25.6%	9.7	8.4	66	55
US average				18.8%	16.0%	27.6%	29.2%	18.7%	21.8%	9.2	8.0	127.2	68.4
US median				15.4%	14.3%	28.4%	29.7%	22.3%	23.2%	9.7	8.4	87.9	57.0

Discounted cash flow offers upside

Our discounted cash flow model is based on the following assumptions and the outcome suggests a fair value for TIE Kinetix of €26 per share. The sensitivity analyses in Exhibit 15 show the fair value outcome under different sales growth and WACC scenarios.

- We only consider organic revenue growth although we do expect some M&A in future years.
- A terminal revenue growth rate of 1.5% as the proportion of recurring revenues is increasing.
- A terminal EBITA margin of 14% as TIE Kinetix is at the verge of margin improvement driven by the scalability of its software products. This corresponds to an EBITDA margin of around 20%, which is the company's target for 2025.
- An effective tax rate of 25%, which reflects TIE Kinetix's country mix. We added an amount of €3m to the equity value to reflect the net value of the tax losses carry forward of €9m.
- We use a Beta of 1.5 to reflect the relatively low liquidity of the shares and the operational risk of executing its new strategy.
- Risk-free rate and equity risk premium are set at 2.5% and 5.0%, delivering an 8.5% WACC.

Value pe	r share, €	Terminal growth rate						
		0.5%	1.0%	1.5%	2.0%	2.5%		
	7.5%	28	29	30	32	34		
	8.0%	26	27	28	30	31		
WACC	8.5%	24	25	26	28	29		
	9.0%	23	24	25	26	27		
	9.5%	22	23	23	24	25		



€m	9/2020	9/2021	2022e	2023e	2024e	2025
30-September	IFRS	IFRS	IFRS	IFRS	IFRS	IFR
INCOME STATEMENT						
Revenue (reported)	15.6	14.9	14.4	16.5	19.2	23.
Gross Profit	9.4	9.1	8.9	10.5	12.7	15
EBITDA normalised	2.3	1.5	0.2	2.3	3.5	4.
EBITDA reported	2.3	1.9	0.2	2.3	3.5	4.
Depreciation & Amortisation	(1.9)	(1.7)	(1.6)	(1.6)	(1.5)	(1.
EBIT normalised	0.4	(0.2)	(1.4)	0.7	2.0	3
Amortisation of acquired intangibles	0.0	0.0	0.0	0.0	0.0	0
Exceptionals (Edison definition)	(0.3)	0.5	0.0	0.0	0.0	0
EBIT reported	0.1	0.2	(-1.4)	0.7	2.0	3
Net Interest	(0.0)	0.3	0.1	0.1	0.1	0
Results of associates	0.0	0.0	0.0	0.0	0.0	0
Profit Before Tax	0.1	0.5	(1.3)	0.8	2.1	3
Reported tax	(0.2)	0.1	0.3	(0.2)	(0.5)	(0.
Profit After Tax (norm)	0.2	0.2	(1.0)	0.6	1.6	2
Profit After Tax	(0.1)	0.6	(1.0)	0.6	1.6 0.0	2
Minority interests Discontinued operations	0.0 6.6	0.0	0.0	0.0	0.0	0
Discontinued operations Net income (normalised)	(0.1)	0.0	(1.0)	0.0	1.6	2
Net income (normalised) Net income (reported)	6.5	0.2	(1.0)	0.6	1.6	2
<u>` ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '</u>			, ,			
Average number of shares (m)	1.6	1.6	1.8	2.0	2.0	2
EPS normalised (€)	(0.04)	0.11	(0.55)	0.29	0.78	1.2
EPS reported (€)	4.01	0.38	(0.55)	0.29	0.78	1.2
DPS (€)	0.00	0.00	0.50	0.50	0.50	0.0
Revenue growth	1.7%	-4.5%	-2.8%	13.9%	16.9%	20.6
Gross Margin	60.5%	61.3%	61.5%	64.0%	66.0%	68.0
Normalised EBITDA Margin	14.8%	9.8%	1.5%	13.8%	18.4%	20.4
Normalised Operating Margin	2.7%	-1.4%	-9.7%	4.3%	10.4%	13.8
Reported EBIT margin	0.8%	1.7%	-9.7%	4.3%	10.4%	13.8
BALANCE SHEET						
Fixed Assets	6.7	6.5	6.3	6.1	6.0	5
Intangible Assets	5.3	4.9	4.7	4.5	4.4	4
Tangible Assets	1.0	0.8	0.8	0.8	0.8	(
nvestments & other	0.4	0.7	0.7	0.7	0.7	(
Current Assets	11.3	12.2	12.0	13.1	14.6	17
Stocks	0.0	0.0	0.0	0.0	0.0	
Debtors	1.5	1.4	1.4	1.5	1.8	2
Other current assets	3.9	0.8	0.8	0.9	1.0	1
Cash & cash equivalents	5.9	9.9	9.8	10.6	11.8	14
Current Liabilities	6.8	6.3	6.6	7.2	7.6	(
Creditors	0.9	0.8	0.8	0.9	1.1	1
Other current liabilities	5.6	5.1	5.4	5.9	6.2	6
Short term borrowings	0.4	0.4	0.4	0.4	0.4	(
Long Term Liabilities	1.3	1.1	1.1	1.1	1.1	1
Long term borrowings	0.6	0.4	0.4	0.4	0.4	(
Other long term liabilities	0.7	0.8	0.8	0.8	0.8	(
Shareholders' equity	9.9	11.2	10.5	10.8	11.8	12
Minority interests	0.0	0.0	0.0	0.0	0.0	(
Balance sheet total	18.0	18.7	18.3	19.2	20.6	23
CASH FLOW						
Op Cash Flow before WC and tax	2.3	2.3	0.2	2.3	3.5	4
Working capital	0.5	(0.4)	0.4	0.3	0.1	(
Гах	(0.1)	(0.1)	0.0	0.0	(0.1)	(0
Net interest	(0.0)	0.2	0.1	0.1	0.1	(
Net operating cash flow	2.7	1.9	0.7	2.7	3.5	(1
Capex	(1.0)	(0.9)	(1.5)	(1.4)	(1.4)	(1
Acquisitions/disposals	2.2	3.0	0.0	0.0	0.0	
Equity financing	0.0	0.2	1.6	0.5	0.0	/4
Dividends	0.0	0.0	(1.0)	(1.0)	(1.0)	(1
Other	(1.1)	0.1	0.0	0.0	0.1	(0
Net Cash Flow	2.8	4.3	(0.1)	0.8	1.2	///
Opening net debt/(cash)	(2.0)	(4.9)	(9.2)	(9.1)	(9.9)	(11
Closing net debt/(cash)	(4.9)	(9.2)	(9.1)	(9.9)	(11.0)	(13

TIE Kinetix | 22 March 2022



Contact details Revenue by geography De Corridor 5d 38% 37% 14% 11% 3621 ZA Breukelen Netherlands ■ Netherlands ■ Sermany France +31-88-369-8000 France ■ Netherlands ■ Netherlands

Management team

CEO: Jan Sundelin CFO: Michiel Wolfswinkel

Mr Jan Sundelin was appointed member of the executive board of TIE Kinetix in 2007, interim CEO in the summer of 2008 and CEO in March 2009. Jan has 30+ years of executive experience in supply chain software. Before TIE Kinetix he was CEO at TallyGenicom EMEA and senior vice president of strategic planning and international sales and marketing for Minolta-QMS Mobile.

Dr Michiel Wolfswinkel was appointed CFO in November 2013 and has 30+ years executive finance leadership in software/tech. Previously he was CFO of Dutch listed company Qurius and fulfilled financial management roles at Eneco and MatrixOne (Product Lifecycle Management software, Nasdaq listed).

07.00/
27.2%
21.8%
9.2%
7.8%
3.2%



General disclaimer and copyright

This report has been commissioned by TIE Kinetix and prepared and issued by Edison, in consideration of a fee payable by TIE Kinetix. Edison Investment Research standard fees are £60,000 pa for the production and broad dissemination of a detailed note (Outlook) following by regular (typically quarterly) update notes. Fees are paid upfront in cash without recourse. Edison may seek additional fees for the provision of roadshows and related IR services for the client but does not get remunerated for any investment banking services. We never take payment in stock, options or warrants for any of our services.

Accuracy of content: All information used in the publication of this report has been compiled from publicly available sources that are believed to be reliable, however we do not guarantee the accuracy or completeness of this report and have not sought for this information to be independently verified. Opinions contained in this report represent those of the research department of Edison at the time of publication. Forward-looking information or statements in this report contain information that is based on assumptions, forecasts of future results, estimates of amounts not yet determinable, and therefore involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of their subject matter to be materially different from current expectations.

Exclusion of Liability: To the fullest extent allowed by law, Edison shall not be liable for any direct, indirect or consequential losses, loss of profits, damages, costs or expenses incurred or suffered by you arising out or in connection with the access to, use of or reliance on any information contained on this note.

No personalised advice: The information that we provide should not be construed in any manner whatsoever as, personalised advice. Also, the information provided by us should not be construed by any subscriber or prospective subscriber as Edison's solicitation to effect, or attempt to effect, any transaction in a security. The securities described in the report may not be eligible for sale in all jurisdictions or to certain categories of investors.

Investment in securities mentioned: Edison has a restrictive policy relating to personal dealing and conflicts of interest. Edison Group does not conduct any investment business and, accordingly, does not itself hold any positions in the securities mentioned in this report. However, the respective directors, officers, employees and contractors of Edison may have a position in any or related securities mentioned in this report, subject to Edison's policies on personal dealing and conflicts of interest.

Copyright: Copyright 2022 Edison Investment Research Limited (Edison).

Australia

Edison Investment Research Pty Ltd (Edison AU) is the Australian subsidiary of Edison. Edison AU is a Corporate Authorised Representative (1252501) of Crown Wealth Group Pty Ltd who holds an Australian Financial Services Licence (Number: 494274). This research is issued in Australia by Edison AU and any access to it, is intended only for "wholesale clients" within the meaning of the Corporations Act 2001 of Australia. Any advice given by Edison AU is general advice only and does not take into account your personal circumstances, needs or objectives. You should, before acting on this advice, consider the appropriateness of the advice, having regard to your objectives, financial situation and needs. If our advice relates to the acquisition, or possible acquisition, of a particular financial product you should read any relevant Product Disclosure Statement or like instrument.

New Zealand

The research in this document is intended for New Zealand resident professional financial advisers or brokers (for use in their roles as financial advisers or brokers) and habitual investors who are "wholesale clients" for the purpose of the Financial Advisers Act 2008 (FAA) (as described in sections 5(c) (1)(a), (b) and (c) of the FAA). This is not a solicitation or inducement to buy, sell, subscribe, or underwrite any securities mentioned or in the topic of this document. For the purpose of the FAA, the content of this report is of a general nature, is intended as a source of general information only and is not intended to constitute a recommendation or opinion in relation to acquiring or disposing (including refraining from acquiring or disposing) of securities. The distribution of this document is not a "personalised service" and, to the extent that it contains any financial advice, is intended only as a "class service" provided by Edison within the meaning of the FAA (i.e. without taking into account the particular financial situation or goals of any person). As such, it should not be relied upon in making an investment decision.

United Kingdom

This document is prepared and provided by Edison for information purposes only and should not be construed as an offer or solicitation for investment in any securities mentioned or in the topic of this document. A marketing communication under FCA Rules, this document has not been prepared in accordance with the legal requirements designed to promote the independence of investment research and is not subject to any prohibition on dealing ahead of the dissemination of investment research.

This Communication is being distributed in the United Kingdom and is directed only at (i) persons having professional experience in matters relating to investments, i.e. investment professionals within the meaning of Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005, as amended (the "FPO") (ii) high net-worth companies, unincorporated associations or other bodies within the meaning of Article 49 of the FPO and (iii) persons to whom it is otherwise lawful to distribute it. The investment activity to which this document relates is available only to such persons. It is not intended that this document be distributed or passed on, directly or indirectly, to any other class of persons and in any event and under no circumstances should persons of any other description rely on or act upon the contents of this document.

This Communication is being supplied to you solely for your information and may not be reproduced by, further distributed to or published in whole or in part by, any other person

United States

Edison relies upon the "publishers' exclusion" from the definition of investment adviser under Section 202(a)(11) of the Investment Advisers Act of 1940 and corresponding state securities laws. This report is a bona fide publication of general and regular circulation offering impersonal investment-related advice, not tailored to a specific investment portfolio or the needs of current and/or prospective subscribers. As such, Edison does not offer or provide personal advice and the research provided is for informational purposes only. No mention of a particular security in this report constitutes a recommendation to buy, sell or hold that or any security, or that any particular security, portfolio of securities, transaction or investment strategy is suitable for any specific person.