



# NORTH AMERICAN TESTING, INSPECTION, CERTIFICATION & COMPLIANCE (TICC)

2023 OVERVIEW

# Understanding the North American TICC landscape

Companies in the TICC sector provide a wide range of essential services, from auditing and inspection, to testing, verification, quality assurance and certification. The TICC sector is supported by strong secular tailwinds that will drive long-term growth across end markets.

## North America Testing, Inspection, Certification & Compliance Market Overview

Services	Value Proposition	Key Trends	
<b>Testing</b> <ul style="list-style-type: none"> <li>Laboratory- or field-based testing that involves testing materials, components and finished goods in order to assess compliance with specifications set by customers, accreditation bodies or regulatory authorities.</li> </ul>	<b>Cost Efficiency</b> <ul style="list-style-type: none"> <li>Maintaining in-house expertise capable of managing and servicing complex equipment is costly for companies.</li> <li>Outsourcing TICC solutions enables clients to service their products/services/systems while minimizing costs.</li> </ul>	<b>Increasing End-User Demand</b>	End users are increasingly focused on quality and transparency, demanding that companies produce and trade high-quality products in an ethical manner.
<b>Inspection</b> <ul style="list-style-type: none"> <li>On-site examination of products, components or the built environment to determine compliance with specifications set by customers, accreditation bodies or regulatory authorities.</li> </ul>		<b>Aging Infrastructure</b>	Aging infrastructure across the built environment is driving the need for predictive monitoring/inspection to verify asset integrity and maintain safety.
<b>Certification</b> <ul style="list-style-type: none"> <li>The provision by an independent body of written assurance (a certificate) that the product, service or system in question meets specific requirements. Certification is also known as third-party conformity assessment.</li> </ul>		<b>Increasing Regulations</b>	New or evolving government regulations and industry standards often create the need for new or more frequent testing and/or inspection and associated TICC activities.
<b>Compliance</b> <ul style="list-style-type: none"> <li>Services to assist companies in establishing practices and monitoring status of or progress toward being in accordance with existing regulations, guidelines, or specifications.</li> </ul>	<b>Liability Management</b> <ul style="list-style-type: none"> <li>As companies attempt to reduce environmental, personnel-related and financial liabilities, they are increasingly outsourcing to specialists.</li> </ul>	<b>Outsourcing and Privatization</b>	Cost and risk management pressures drive outsourcing efforts and increase appreciation for the independence, expertise and integrity inherent in third-party TICC providers.
	<b>Access to Specialized Workforce</b> <ul style="list-style-type: none"> <li>TICC service customers across end markets are subject to an aging and retiring workforce, limiting their abilities to perform solutions in-house.</li> </ul>	<b>Shift to Larger Service Providers</b>	Universal geographic service coverage is increasingly desired given customers' scaled operations and realization of the TICC company value proposition.
		<b>Market Fragmentation</b>	M&A has been a consistent growth driver historically with significant remaining market fragmentation across sub-verticals.

# TICC taxonomy

The following groupings can include activity across various sub-sectors/end markets, each with a varying level of attractiveness and fragmentation.

## TICC Industry Market Segments

	Buildings & Infrastructure	<ul style="list-style-type: none"> <li>Commercial, Residential and Civil Inspection</li> <li>Outsourced Building Management</li> <li>Construction Materials Testing</li> </ul>	<ul style="list-style-type: none"> <li>Design Review</li> <li>Structure Integrity Analysis</li> <li>Project and Construction Management</li> </ul>
	Consumer	<ul style="list-style-type: none"> <li>Consumer Products Testing</li> <li>Environmental Impact Testing</li> <li>Expert Witness Services</li> </ul>	<ul style="list-style-type: none"> <li>Product Failure Analysis</li> <li>Trade Certification and Auditing</li> </ul>
	Energy	<ul style="list-style-type: none"> <li>Oil, Fuel, Liquids and Chain of Custody Testing</li> <li>Energy Infrastructure Inspection and Testing</li> <li>Corrosion Monitoring</li> </ul>	<ul style="list-style-type: none"> <li>Production Analytics and Measurement</li> <li>Integrity Management</li> </ul>
	Food & Agriculture	<ul style="list-style-type: none"> <li>Chemical and Nutritional Testing</li> <li>FDA Audit and Compliance</li> <li>Food Contaminant Testing</li> </ul>	<ul style="list-style-type: none"> <li>Food Production Assessments</li> <li>Pesticide, Soil and Seed/Crop Testing</li> </ul>
	Environmental	<ul style="list-style-type: none"> <li>Emissions Monitoring and Testing</li> <li>Environmental Consulting</li> <li>Industrial Hygiene</li> </ul>	<ul style="list-style-type: none"> <li>Soil, Water and Air Testing</li> <li>Stormwater Management</li> </ul>
	Life Sciences	<ul style="list-style-type: none"> <li>Antibody Drug Conjugate Testing</li> <li>Ecological Toxicology</li> <li>Medical Device Testing</li> </ul>	<ul style="list-style-type: none"> <li>Pharmaceuticals Testing</li> <li>Residue and Analytical Chemistry</li> <li>Soil, Plant and Animal Metabolism</li> </ul>
	Power & Utilities	<ul style="list-style-type: none"> <li>Electrical Inspection and Testing</li> <li>In-Plant Inspection</li> <li>Reliability Services</li> </ul>	<ul style="list-style-type: none"> <li>T&amp;D Inspection and Testing</li> <li>Renewables Testing and Inspection</li> </ul>
	Transportation/ Aerospace	<ul style="list-style-type: none"> <li>Third-Party Assessments</li> <li>Aerospace and Automotive Parts Testing</li> <li>Manufacturing Inspection</li> </ul>	<ul style="list-style-type: none"> <li>Performance Management Services</li> <li>Supplier and Supply Chain Audits</li> </ul>

# Key themes

## Essential, Recurring, and Growing



- TICC services are typically nondiscretionary, regulation driven, recession resistant, and predictable, which makes this sector a priority investment opportunity for private capital and strategic investment from current market participants
- As government regulations have become increasingly stringent over the past several years, businesses are more likely to outsource TICC activities, as it is expensive, inefficient, and difficult for them to perform this work in-house
- As end customers become increasingly focused on quality and transparency, the need for complex and efficient TICC capabilities are in high demand

## Interest Rates



- In December, the Fed raised benchmark interest rates by half of a percentage point and indicated it will continue hiking rates well above the current level
- The Fed sees higher interest rates, slower growth, and softer labor market conditions as the catalyst to bring down inflation, but also recognizes the corresponding pain that households and businesses will experience
- In order to achieve price stability, a sustained period of below-trend growth may ensue, and businesses will need to make strategic organic and inorganic investments to achieve outsized growth

## Supply Chain Disruptions



- Initial supply chain impacts stemming from COVID-19 disruptions have been followed by additional issues tied to the war in Ukraine, trade wars and protectionism, and extended pandemic-related lockdowns
- Supply chain relocation has been an area of focus as the global economy seeks new supply sources to meet the demand for goods and services that have been impacted by the current geopolitical landscape
- Given the complex and disjointed nature of the current global supply chain, TICC services are of increased importance as providers must ensure imported equipment and products are safe and dependable, particularly with alternative or new suppliers

## New Technologies



- The trend toward digitalization is acting as a disruptor across the TICC landscape as large industry players are increasing investment in this area to achieve better efficiency and profit potential
- COVID-19 aided the market shift toward digital adoption as lockdowns and restrictions forced essential industries to pursue alternative measures and break the mold to stay in compliance and operate safely
- Digital maturity within TICC lags many other industries but impacts from COVID-19 in the short-term and a greater desire for digital integration from clients have been key themes as the TICC sector advances technologically

## M&A

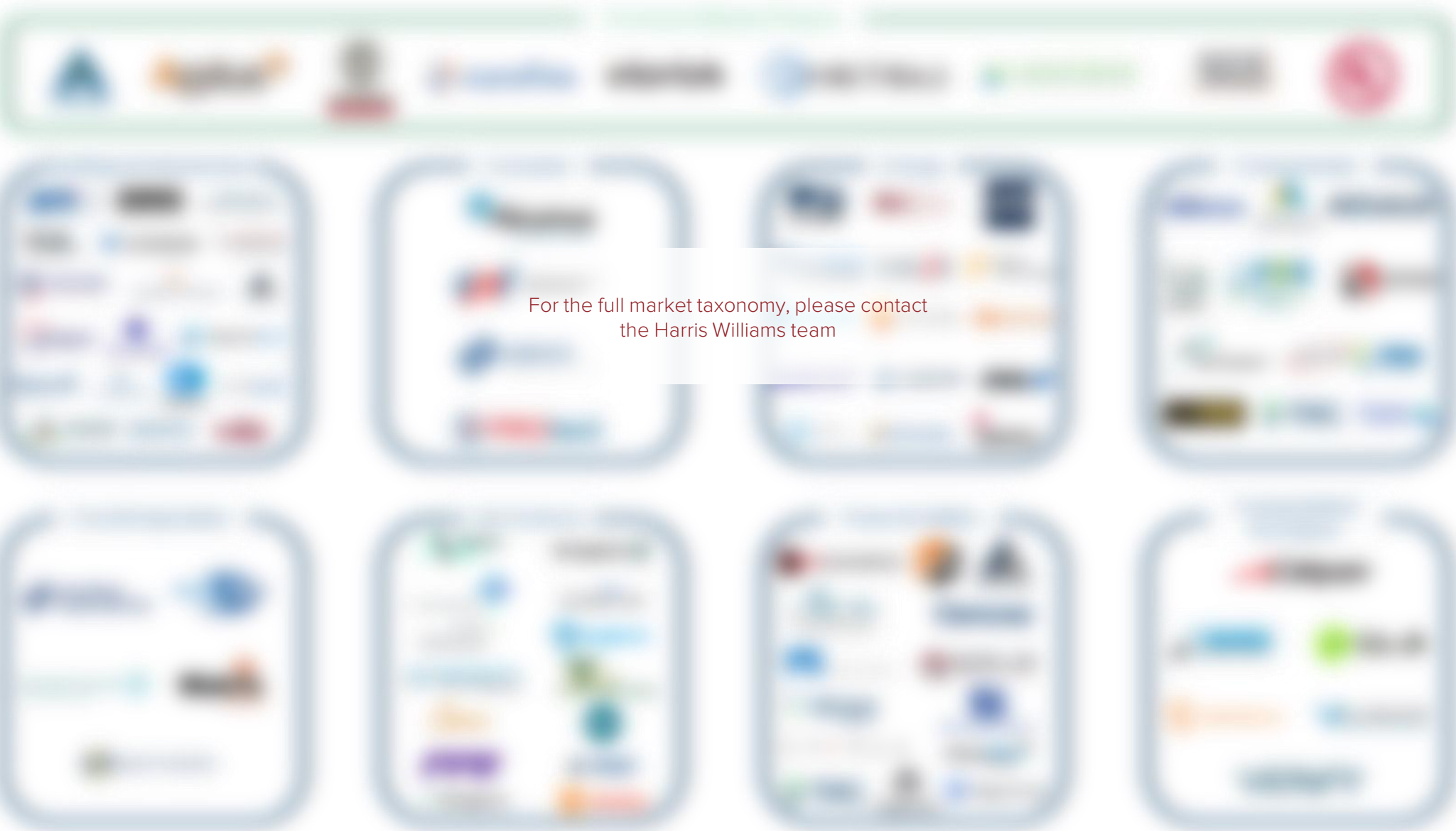


- Numerous deals in the privately owned or private equity-backed space have been announced in 2022, and it is expected that M&A momentum will continue through 2023 and beyond
- Acquirers are increasingly targeting businesses that will perform well during times of economic uncertainty. Given the nondiscretionary and recurring nature of the TICC market, this sector remains popular among a vast universe of buyers and maintains characteristics that will continue to be desired by M&A participants

# Current market landscape

Market participants provide industry-specific testing, inspection and certification-based services across a wide range of industry verticals.

## TICC Market Participant Taxonomy

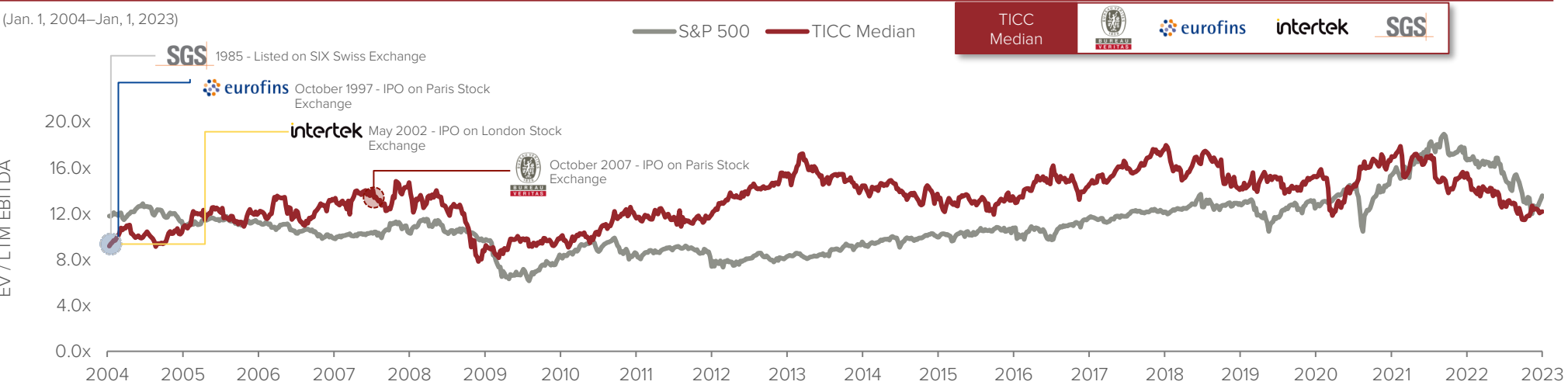


For the full market taxonomy, please contact the Harris Williams team

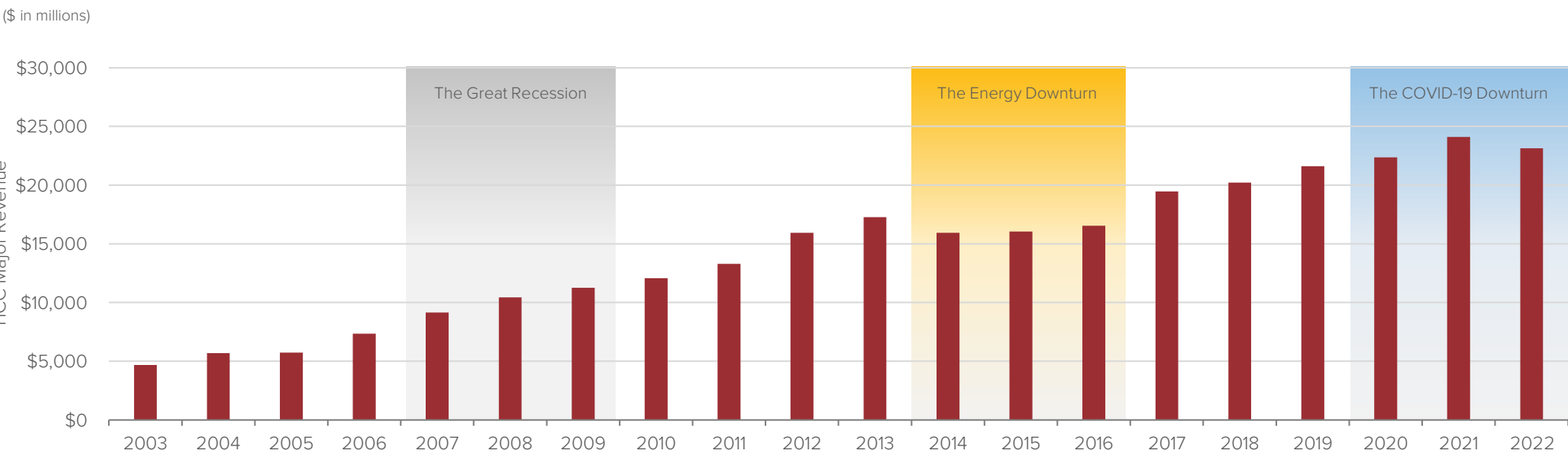


# In the last two decades, the TICC majors have displayed resilience through economic and commodity cycles

Historical Trading Performance (2003–2022)<sup>1</sup>



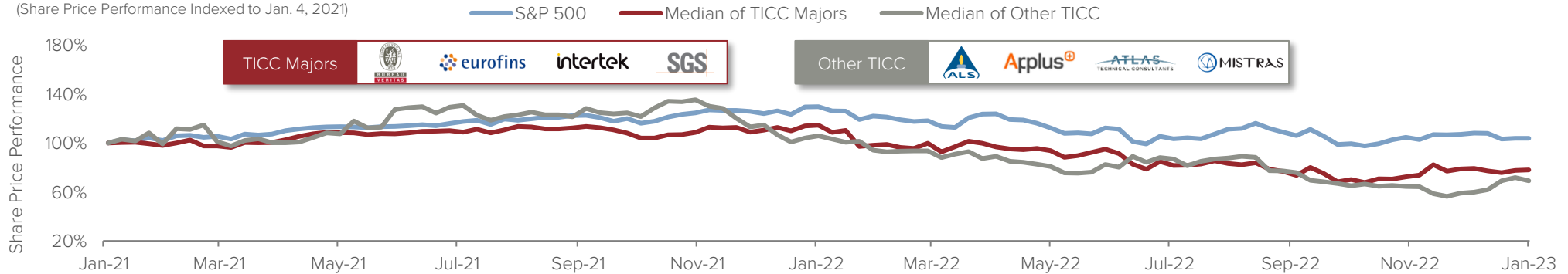
Historical Financial Performance (2003–2022)<sup>1</sup>



# Market performance shows TICC is reflective of the current global economic pressures

## Market Performance (2021-2022 YTD)<sup>1</sup>

(Share Price Performance Indexed to Jan. 4, 2021)



## What have the TICC majors said about the current macroeconomic shifts?



- In a continuing volatile macro and geopolitical environment, Bureau Veritas has maintained a strong growth trajectory in the third quarter. The diversity of its portfolio, solid sales pipeline, and leadership in terms of sustainability and ESG solutions, position BV well to grow in a sustained manner in the medium term.



- Due to inflationary pressures and broader economic uncertainty, Eurofins is working diligently on pricing initiatives and productivity measures while aiming to continue providing the best quality of services to their clients. COVID-19 has provided a hedge to compensate for the slight underperformance due to geopolitical disruptions.



- Notwithstanding the impact of lockdown restrictions in China, Intertek delivered strong revenue growth of 9.5% in 1H 2022. For the year, they are expecting strong top line growth, but margin to be slightly below 2021 reflecting the impact of the lockdowns in China.



- Through the investment and acquisitions SGS is making in its areas of focus, the company is becoming an even more resilient, sustainable and data-driven company delivering on its strategic objectives to combat global macroeconomic pressures.

## What have other TICC providers said about current macroeconomic shifts?



- ALS has again delivered strong organic growth, margin accretion, and made several strategic acquisitions during 1H 2022. Volumes have continued to grow despite the challenging economic backdrop and earnings were supported by pricing strategies that offset inflationary challenges.



- Despite record inflation, the company has been successful in passing on higher costs to customers, driving higher margins for three of four business units in 1H 2022 compared to 1H 2021. Inorganic growth is essential to Applus's growth, and management is focused on finding new acquisition targets that fit within their strategic vision.



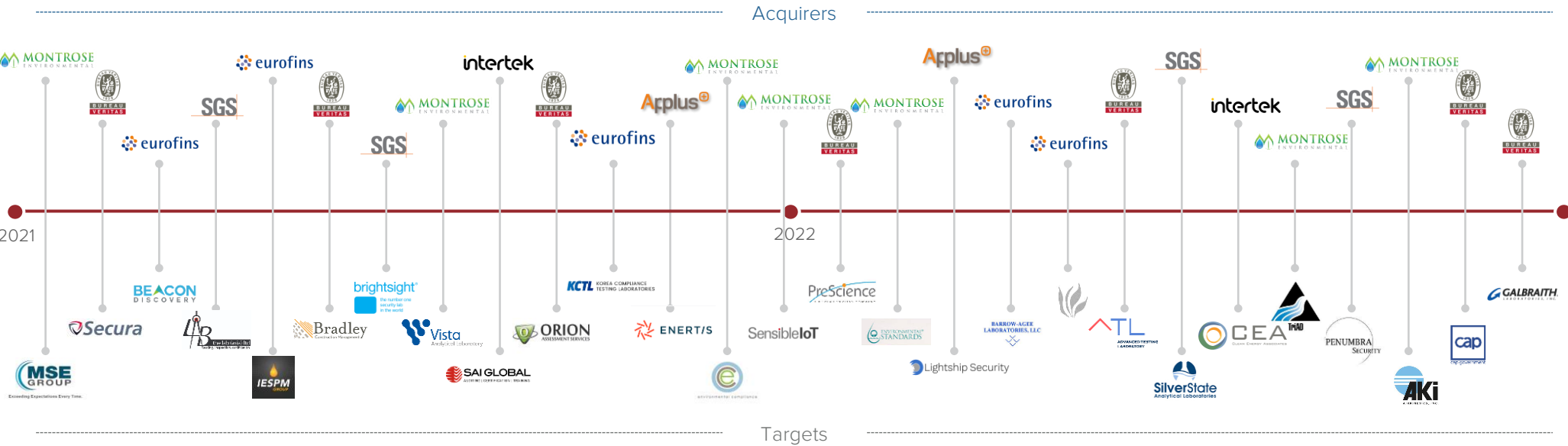
- Atlas continues to closely monitor the factors impacting the broader macroeconomic environment and how they would impact demand for services. Nearly 2/3 of the business is tied to services that are nondiscretionary in nature, including regulatory compliance, ongoing testing and maintenance of existing infrastructure.



- Mistras is taking a hard look at company-wide overhead to identify efficiency and productivity improvements that accompany price increases to help the business achieve its financial projections given the difficult macroeconomic backdrop.

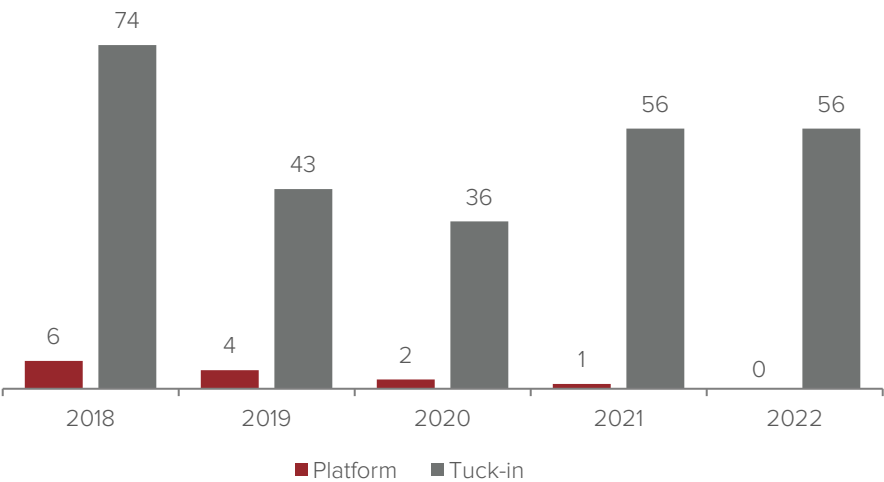
# Strategic buyers have relied heavily on inorganic growth, focusing primarily on smaller tuck-in acquisitions

Select Strategic TICC Investments since 2021<sup>1</sup>

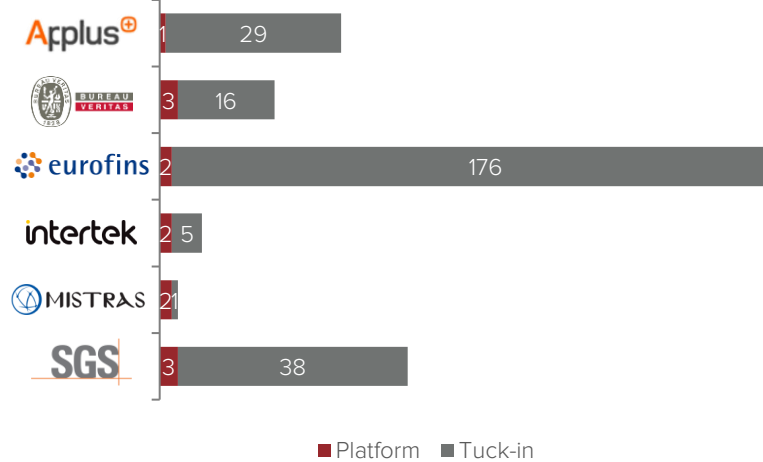


## Strategies Predominantly Focused on Tuck-in Acquisitions<sup>1</sup>

(2018-2022 Tuck-in vs. Platform Acquisitions)



(2018-2022 Aggregate Acquisition Type by Buyer)





# M&A has remained a consistent growth driver for TICC majors

Number of M&A Acquisitions (2000–2022)<sup>1</sup>

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total
<b>harris williams</b>	NA	NA	5	3	6	6	5	16	15	1	8	11	14	7	8	9	9	9	6	5	0	3	5	151
<b>eurofins</b>	3	3	1	1	1	8	10	3	6	3	1	2	20	10	17	21	27	60	50	26	26	38	38	375
<b>intertek</b>	7	5	1	2	2	12	7	16	14	3	7	5	6	7	3	4	3	2	4	1	0	1	0	112
<b>SGS</b>	1	2	3	5	5	7	8	7	14	2	10	22	18	12	10	10	19	12	8	11	6	9	3	2014
Total	11	10	10	11	14	33	30	42	49	9	26	40	58	36	38	44	58	83	68	43	32	51	46	842

M&A Acquisition Spend (2000–2022)<sup>1</sup>

(\$ in millions)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022 <sup>2</sup>	Total
<b>harris williams</b>	NA	NA	\$99	\$18	\$49	\$202	\$63	\$287	\$467	\$39	\$752	\$97	\$317	\$220	\$792	\$111	\$210	\$186	\$168	\$78	\$0	\$41	\$60	\$4,256
<b>eurofins</b>	6	10	4	3	9	49	73	97	48	31	12	211	102	116	387	695	222	1,730	1,480	192	204	550	203	\$6,434
<b>intertek</b>	3	1	1	13	49	85	68	200	147	48	63	738	63	191	71	353	47	35	517	22	0	660	0	\$3,375
<b>SGS</b>	7	28	37	27	171	76	195	67	181	10	325	117	188	111	118	107	196	41	62	186	576	113	18	\$2,957
Total	\$16	\$39	\$141	\$61	\$278	\$412	\$399	\$651	\$843	\$128	\$1,152	\$1,163	\$670	\$638	\$1,368	\$1,266	\$675	\$1,992	\$2,227	\$478	\$780	\$1,364	\$281	\$17,022

Early 2000s Recession

The Great Recession

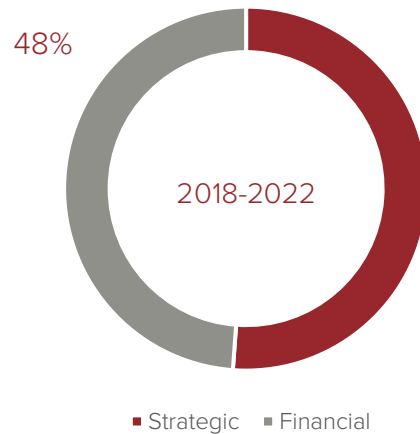
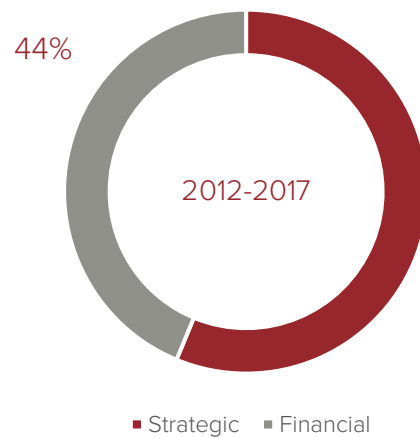
The Energy Downturn

The COVID-19 Pandemic

# Private equity continues to increase its presence in the sector in recent years...

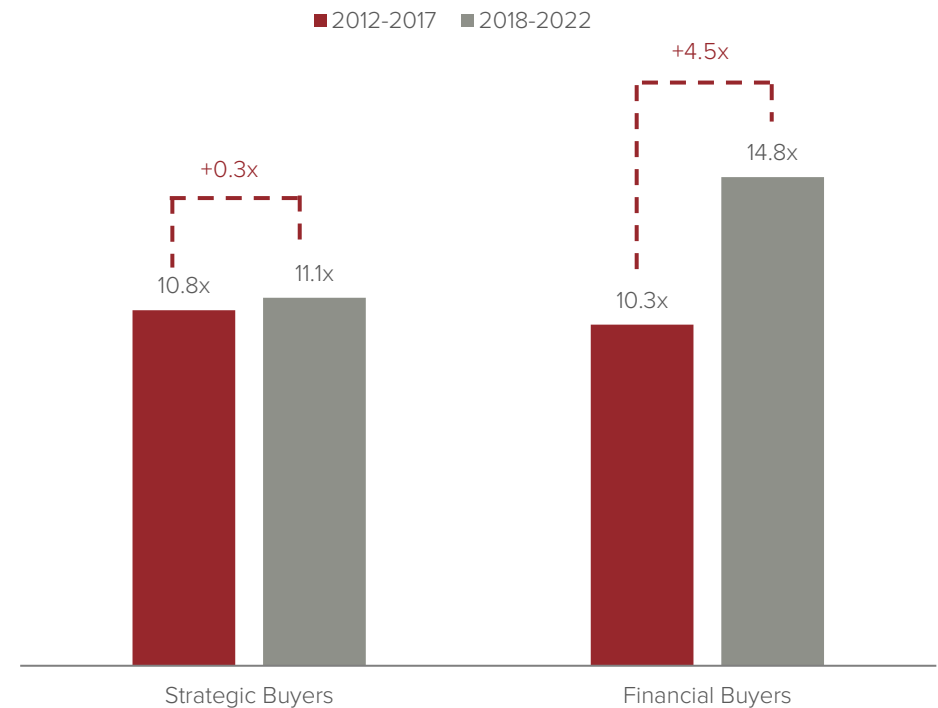
## Robust Private Equity Interest in TICC Platforms<sup>1</sup>...

(% of deals over \$100MM in TEV by buyer type)

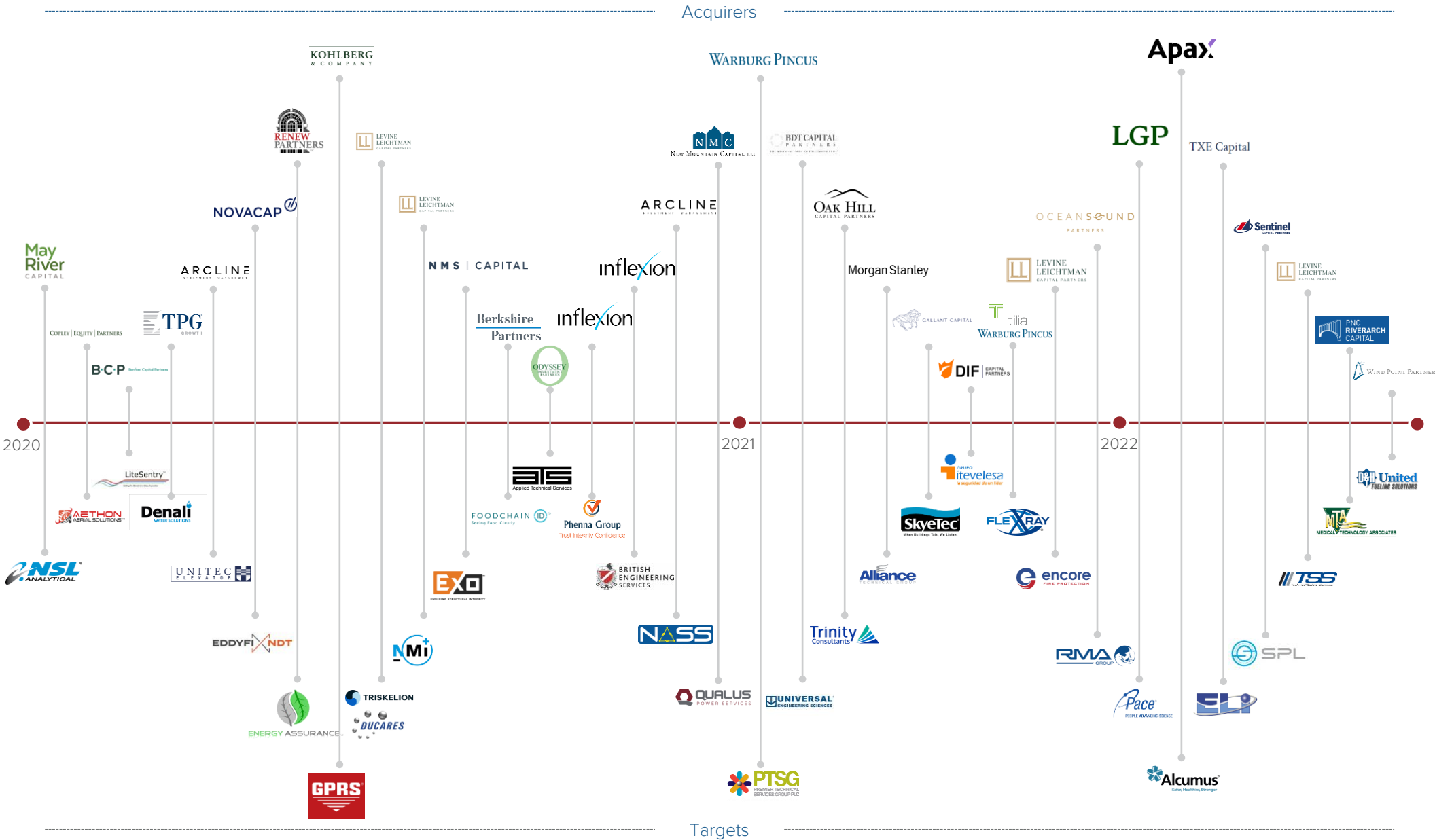


## ...and More Aggressive Valuations<sup>1</sup>

- Financial buyers have been more aggressive in relevant sectors over the past three years
- Median EBITDA multiples across the comparable set of transactions have increased 4.5x for financial buyers over the past nine years while only increasing 0.3x for strategics



## Select Private Equity TICC Investments since 2020



# TICC landscape scorecard

Key Market Segments		Market Drivers	Level of Consolidation	Market Outlook				
	Buildings & Infrastructure	<ul style="list-style-type: none"> <li>Aging infrastructure</li> <li>Non-residential construction</li> <li>Increased public spending</li> </ul>						
	Consumer	<ul style="list-style-type: none"> <li>Consumer demand</li> <li>FDA regulation</li> <li>Technological innovation</li> </ul>						
	Energy	<ul style="list-style-type: none"> <li>Capital expenditures</li> <li>Maintenance and repair spend</li> <li>Outsourcing penetration rates</li> </ul>						
	Food & Agriculture	<ul style="list-style-type: none"> <li>FDA regulation</li> <li>Foodborne health incidents</li> </ul>						
	Environmental	<ul style="list-style-type: none"> <li>EPA regulation</li> <li>Aging waste infrastructure</li> <li>Rising environmental expenditures</li> </ul>						
	Life Sciences	<ul style="list-style-type: none"> <li>FDA regulation</li> <li>Federal/state reform</li> <li>Pharmacology R&amp;D spend</li> </ul>						
	Power & Utilities	<ul style="list-style-type: none"> <li>Maintenance of existing power plants</li> <li>New, efficient power generation facilities</li> </ul>						
	Transportation/ Aerospace	<ul style="list-style-type: none"> <li>Recalls/adverse events</li> <li>Alternative fuel legislation</li> <li>Supplier/OEM partnerships</li> </ul>						

# Considerations for investors in the North American TICC market

## What Should Investors Be Looking For?



Critical-path  
service offering



Turnkey solution  
offerings



Depth of customer  
relationships



M&A  
capabilities



Technology-  
enabled  
services



Technical  
expertise



End market  
diversity



Dedicated training  
and workforce  
development



Proven track record  
of organic and  
inorganic growth



Safety  
performance



Sales pipeline  
development and  
conversion



National  
scale

# Strong momentum in TICC in 2022

Harris Williams closed numerous TICC deals in 2022, selling businesses serving a variety of end markets to both strategic and financial buyers.

## HW-Led TICC transactions in 2022

*a portfolio company of*

**Dorilton.**

has been acquired by

*a portfolio company of*

Company: Versa Integrity Group

End Market: Energy

Description: Provider of a full variety of inspection and maintenance services for all facets of industrial and petrochemical applications

Date Closed: November 2022

*a portfolio company of*

has been acquired by

Company: D&H United Fueling Solutions

End Market: Energy

Description: Provider of testing, inspection, repair, and installation services for fueling stations and electric vehicle charging infrastructure

Date Closed: September 2022

*a portfolio company of*

has been acquired by

Company: Alcumus

End Market: Buildings & Infrastructure, Consumer, Energy, Healthcare & Life Sciences

Description: Provider of technology-enabled business assurance and compliance risk management solutions

Date Closed: August 2022

has been acquired by

*a portfolio company of*

Company: Jordi Labs

End Market: Healthcare & Life Sciences

Description: Provider of regulatory, quality, clinical, and laboratory services, supporting market access throughout the entire product lifecycle for medical devices and diagnostics

Date Closed: July 2022

*a portfolio company of*

*the edgewater funds*

JZ | PARTNERS

has been acquired by

Company: Technical Safety Services

End Market: Healthcare & Life Sciences

Description: Provider of testing, inspection, certification, and calibration services to healthcare and other life sciences end markets

Date Closed: June 2022



# Sector expertise through industry focus

## Harris Williams TICC Sector Focus Area

### Buildings & Infrastructure

- Design Review
- Commercial, Residential and Civil Inspection
- Project and Construction Management
- Construction Materials Testing
- Structure Integrity Analysis

### Consumer

- Product Failure Analysis
- Environmental Impact Testing
- Consumer Products Testing
- Trade Certification and Auditing
- Expert Witness Services

### Energy

- Oil, Fuel, Liquids and Chain of Custody Testing
- Energy Infrastructure Inspection and Testing
- Integrity Management
- Corrosion Monitoring
- Production Analytics and Measurement

### Environmental

- Stormwater Management
- Emissions Monitoring and Testing
- Soil, Water and Air Testing
- Environmental Consulting
- Industrial Hygiene

### Food & Agriculture

- Pesticide, Soil and Seed/Crop Testing
- FDA Audit and Compliance
- Chemical and Nutritional Testing
- Food Production Assessments
- Food Contaminant Testing

### Life Sciences

- Pharmaceuticals Testing
- Medical Device Testing
- Ecological Toxicology
- Residue and Analytical Chemistry
- Soil, Plant and Animal Metabolism

### Power & Utilities

- T&D Inspection and Testing
- Electrical Inspection and Testing
- Renewables Testing and Inspection
- In-Plant Inspection
- Reliability Services

### Transportation & Aerospace

- Supplier and Supply Chain Audits
- Third-Party Assessments
- Performance Management Services
- Aerospace and Automotive Parts Testing
- Manufacturing Inspection

## Select Recent Harris Williams TICC Transactions

**VERS**A  
a portfolio company of

**Dorilton.**

has been acquired by

**ACUREN**

a portfolio company of

**AMERICAN SECURITIES**

**United**  
FUELING SOLUTIONS

a portfolio company of

**KLH CAPITAL**

has been acquired by

**WIND POINT PARTNERS**

**Alcumus**  
Safer, Healthier, Stronger

a portfolio company of

**inflexion**

has been acquired by

**Apax**

**Jordi Labs**  
MATERIAL SOLUTIONS. UNCOMPROMISING INTEGRITY.

has been acquired by

**RQM+**

a portfolio company of

**LINDEN**

**TSS**  
Technical Safety Services

a portfolio company of

the edgewater funds

**JZ PARTNERS**

has been acquired by

**LEVINE LEICHTMAN CAPITAL PARTNERS**

**encore**  
FIRE PROTECTION

has recieved an investment from

**LEVINE LEICHTMAN CAPITAL PARTNERS**

**NASS EPS**  
Electric Power Services

has been acquired by

**ARCLINE**  
INVESTMENT MANAGEMENT

**QUALUS**  
POWER SERVICES

has been acquired by

**NMC**  
NEW MOUNTAIN CAPITAL LLC

**S P A R U S**

has been acquired by

**Ridgmont** EQUITY PARTNERS™

**ATS**  
Applied Technical Services

has been acquired by

**ODYSSEY**  
PARTNERS

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& Government Services



Business  
Services



Consumer



Energy, Power  
&  
Infrastructure



Healthcare &  
Life Sciences



Industrials



Technology



Transportation  
& Logistics

70% Revenue from  
repeat clients

83% Managing directors  
promoted from  
within the firm

30+ Year  
history



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