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# **Capital Markets Day**

#### 11 October 2023

**3i Infrastructure plc** 





# Introduction

#### **Bernardo Sottomayor**

Managing Partner & Co-Head of European Infrastructure

# Today's agenda



2:00	Agenda and introduction	Bernardo Sottomayor Managing Partner & Co-Head of European Infrastructure, 3i
2:05	<b>Review of investment in Attero</b>	<b>Aaron Church</b> Partner, 3i
0.45	Future Biogas	<b>Tim Short</b> Partner, 3i
2:15		<b>Philipp Lukas</b> CEO, Future Biogas
3:00	Coffee break	
3:15	Global Cloud Xchange ("GCX")	<b>Scott Moseley</b> Managing Partner & Co-Head of European Infrastructure, 3i
3.13		<b>Carl Grivner</b> CEO, GCX
4:00	Close	

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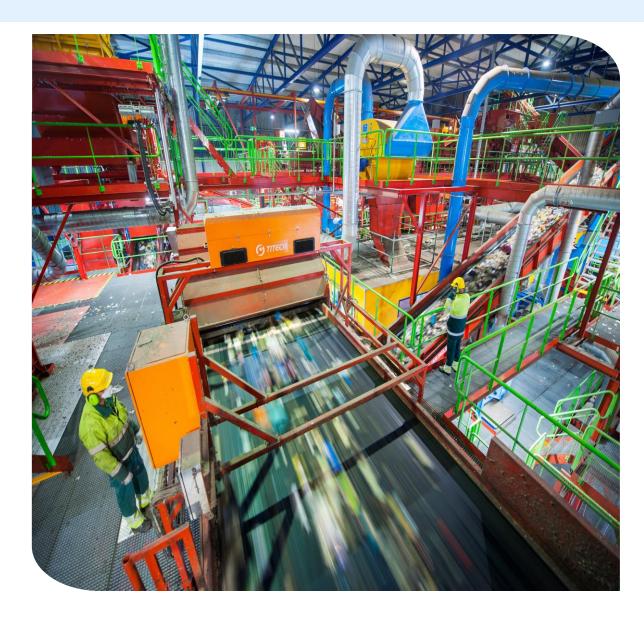


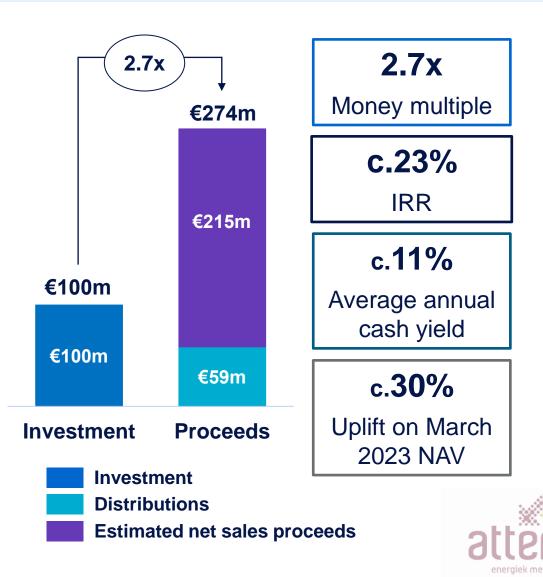
# **Review of investment in Attero**

#### Aaron Church Partner, Infrastructure

### Another exceptional exit

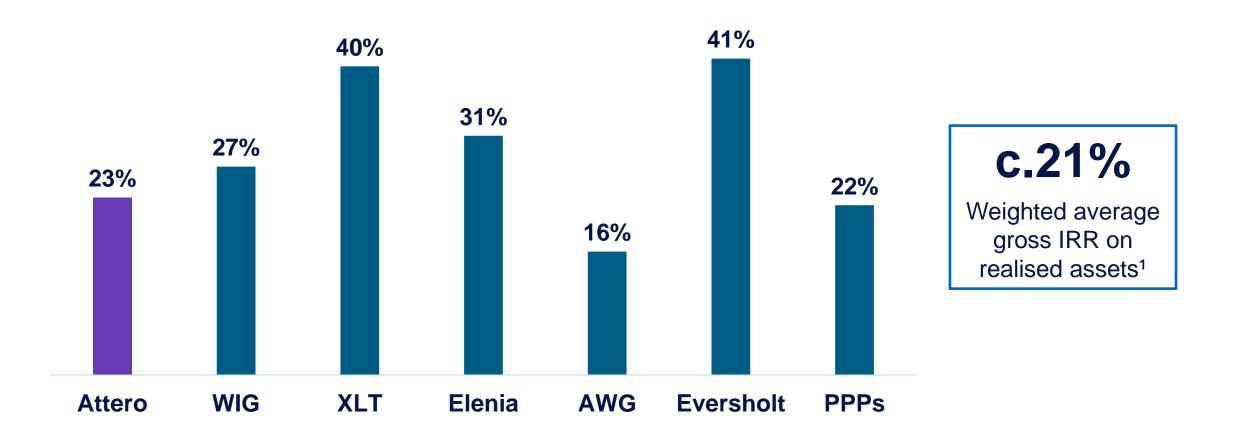






# Consistent track record of successful exits

#### **Gross IRR: Realised assets<sup>1</sup>**



1. Excludes India Infrastructure Fund, Junior debt portfolio, T2C and Novera.

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# Buying well



• Completed a review of the waste sector

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- Identified Attero as one of our preferred targets in the sector
  - Leading Dutch player
  - Diversified business lines
  - Supportive megatrends
- Acquired the business through bilateral process with the previous owner



### Active asset management

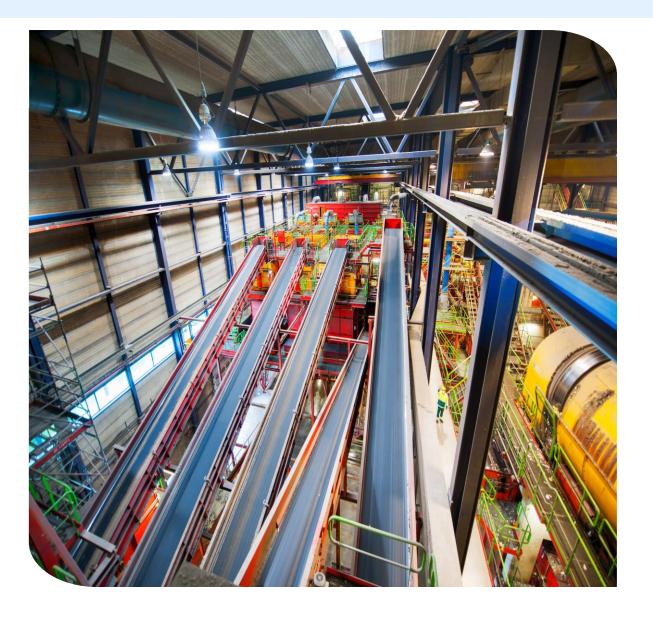




- Partnered with management to diversify and grow the business, and position for future
- Selected achievements include:
  - Diversified sources of waste imports
  - Refinanced with long-term, portable debt before interest rate cycle turned
  - Growth: materially increased electricity production, plastics recycling, biogas expansions, solar farms, CCS project
- Doubled EBITDA since acquisition to c.€160m in 2023



### Why sell now?



- Delivered initial value creation plan
- Major strategic review completed in 2022
  - Focussed on growing carbon neutral energy production, and recycling

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- Identified significant growth potential across all (and new) business lines
- Over €1 billion of capex by 2030
- Exciting growth plan to sell to bidders who may have a lower cost of capital than 3iN



# Selling well



• Extensive preparation and pre-marketing

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• Structured auction sales process

• Portable debt helpful in current market

• Believe winning bidder will be a strong partner for the business





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3i Infrastructure is proud to have supported Attero





# **Future Biogas**

### **Tim Short** Partner, Infrastructure

# **Introducing Future Biogas**







- A leading developer and operator of anaerobic digestion ("AD") plants across the UK
- Biomethane from AD is the most economical solution for hard to decarbonise industrial sectors – essential in supporting energy transition
- Highly experienced management team with a strong track record in the sector
- Exciting pipeline and potential to accelerate growth of business through follow-on investment in new AD plants at attractive returns

# Gruturebiogas

# Decarbonising industry and farming without subsidy

**3i Infrastructure Plc, Capital Markets Day** October 2023

# **UK Leader in Anaerobic Digestion** Development and Operations





# Green Gas Market

Volatility in the gas market, policy costs and carbon taxes and green gas price increases are key commercial drivers for long-term unsubsidised green gas agreements



# Decarbonising Farming Farming is central to everything we do



#### Benefit to farmer:

- Long-term offtake
- Transparent, stable pricing
- Lower income volatility
- Farm diversification
- Healthy soils for future farming
- Rewarded under the SFI

#### Benefit to AD Plant:

- Feedstock security
- Predictable pricing
- High biogas yields
- Low-carbon biomass
- Optimise BECCS delivery

#### **Benefit to Environment:**

- Restore soil health
- Enhance biodiversity
- Improve water retention in soils
- Minimal artificial inputs
- Reduce GHG emissions

#### **Benefit to UK:**

- Deliver Net Zero by 2050
- Enhance food security
- Enhance energy security
- Create jobs in rural economies
- Facilitate delivery of agri-enviro policies

# **Building Resilience** with Crop Rotations

Long and diverse crop rotations offer numerous environmental and agronomic benefits:



Improve soil fertility



Increase soil carbon



Protect topsoil

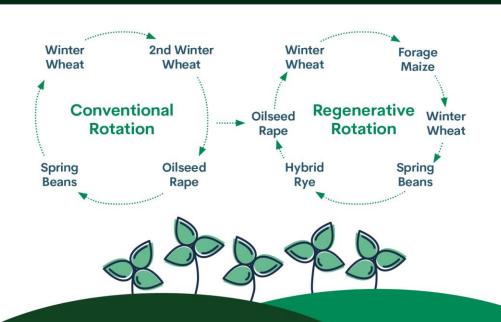


Maximise

crop yields

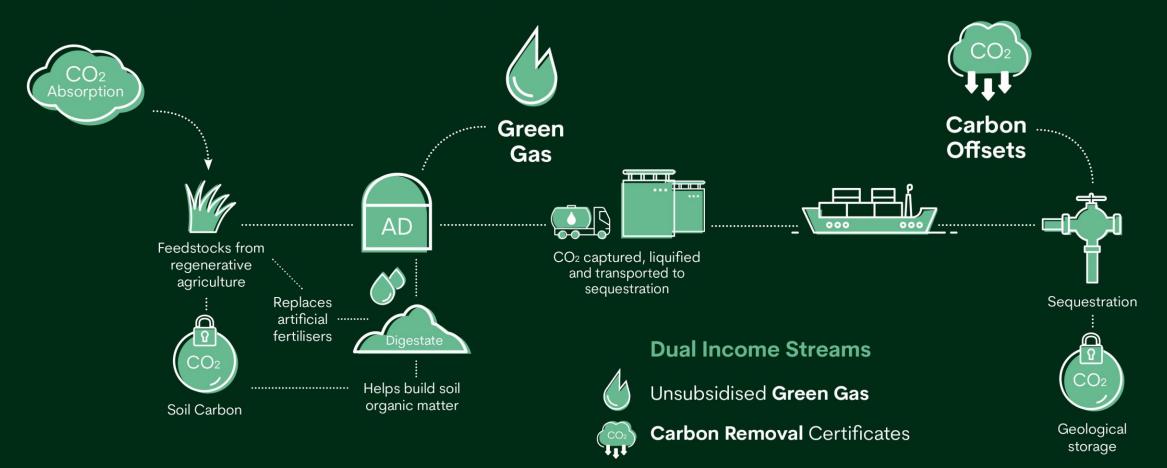
Controls pests and disease

Diversify agricultural income



# Project Carbon Harvest

Future Biogas is developing the UK's first subsidy-free renewable gas from sustainable and regenerative agriculture, combining the power of AD and BECCS



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#### A blueprint for decarbonising industry

- 100% Emission Reduction by 2025
- 15-year partnership:
  - Up to 125GW unsubsidised gas
  - Sleeved through the gas network
  - Plant already in construction
  - Supporting transition of around 12,000ha to sustainable farming
  - Building up to 5,000t of soil carbon every year

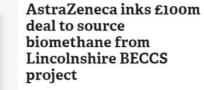


#### Announcement from @AstraZeneca today 👽

Their partnership with @FutureBiogas means less carbon emitted & less gas imported to heat our homes, helping the UK towards home grown sustainable energy. Life sciences & green industries – just two of the growth sectors the UK excels in.



This groundbreaking partnership between @AstraZeneca and @FutureBiogas shows how UK plc is championing sustainability and leading the way on industrial decarbonisation **#** 



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Bloomberg **US Editi**  Live Now Markets Economics Industries Tech ΔΙ Politice Purquito Opinion Green Green AstraZeneca to Invest in Landmark **Clean Biomethane Plant in UK** Investment to also focus on energy efficiency across UK sites Biomethane to provide clean heat for key Astra facilities By Ellie Harmsworth Listen 2:04 September 14, 2023 at 12:01 AM GMT+1 Over fff Gift this article FTSE AstraZeneca Plc is setting up Britain's first subsidy-free biomethane In this Article com gas system that will provide the pharmaceutical giant with an ASTRAZENECA PLC Wor industrial-scale supply of clean heat and help slash its carbon 10.940.00 GBp A +1.17% footprint. to en chan The drugmaker is spending £100 million (\$125 million) in a 15-year partnership with Future Biogas for a facility that will provide four Workda





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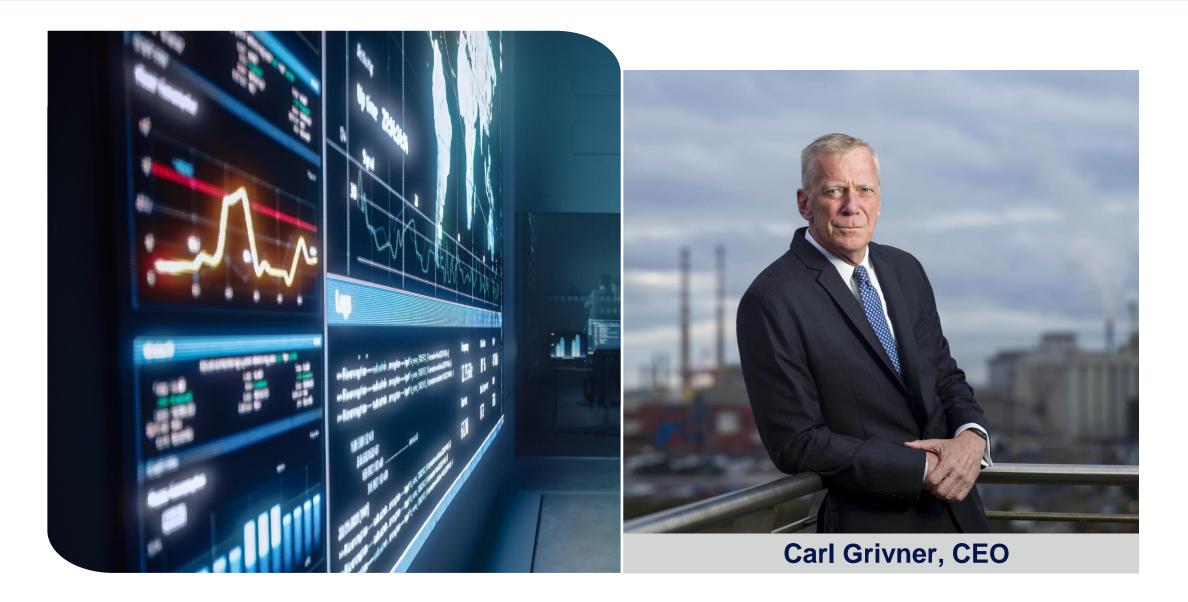


# Global Cloud Xchange ("GCX")

#### **Scott Moseley**

Managing Partner & Co-Head of European Infrastructure

# Introducing Global Cloud Xchange ("GCX")







# SUBSEA CONNECTIVITY & MANAGED SERVICES



Carl Grivner - Who am I ?

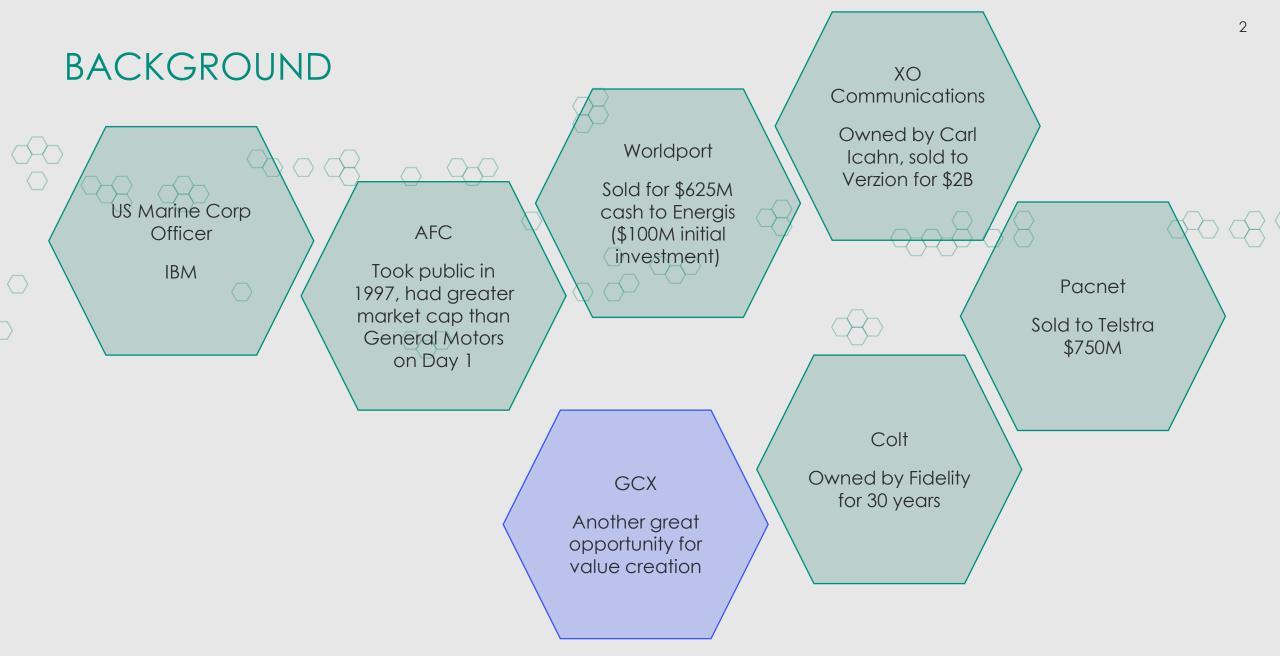
Who / What is GCX ?

Why is Subsea important?

What's next for GCX?

Summary

\$ GCX





# WHO WE ARE

#### GCX is a GLOBAL SUBSEA NETWORK & SECURE GLOBAL MANAGED SERVICE PROVIDER

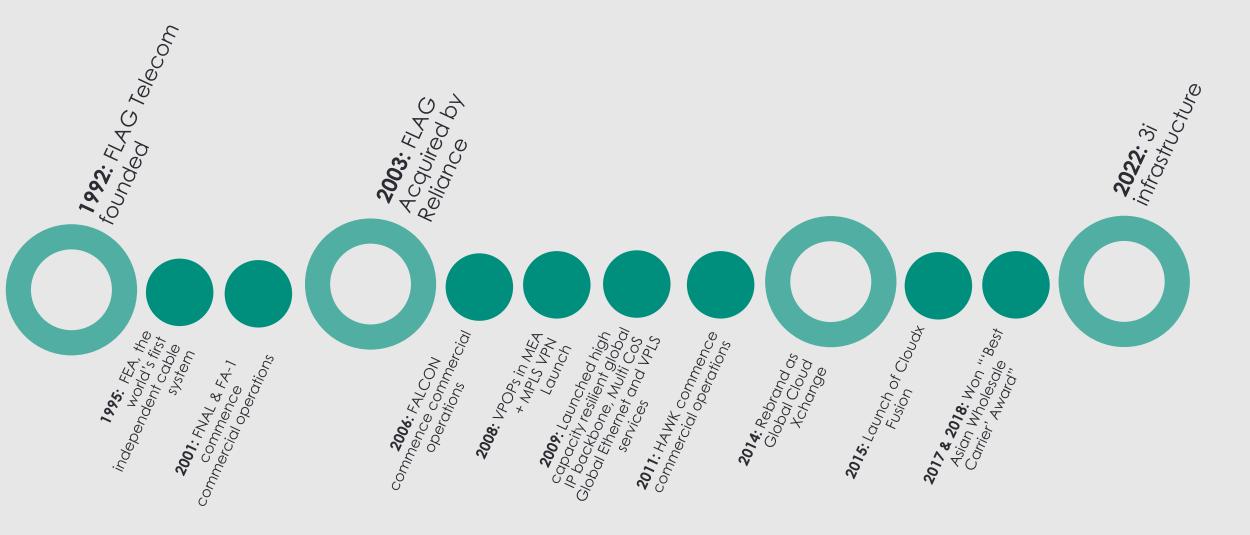
Our goal is to make our customers world of data more scalable, resilient and secure

Our global presence is underpinned by our network – the world's largest private submarine network

Our rapidly expanding portfolio covers a broad range of managed services all designed around improving customer security, ease of data access and control

# OUR HISTORY: FLAG (SUBSEA)

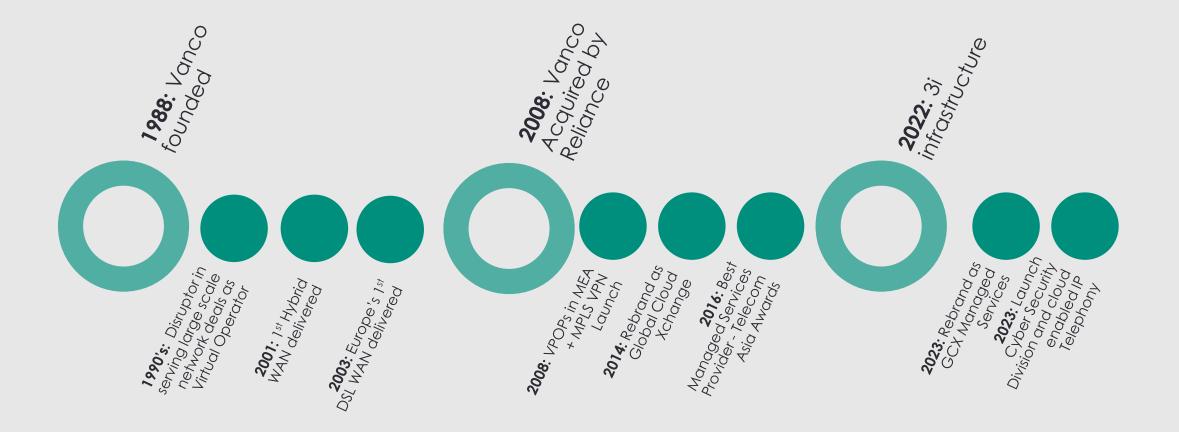
Over 31 years of heritage



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# OUR HISTORY: MANAGED SERVICES

Over 35 years of experience delivering cutting edge solutions



# 3i ADVANTAGES

- Global recognition
- Customers loved the announcement
- Synergies within portfolio
- Tampnet
- Possible new customer opportunities
- Capital raising
- Recently added new funding for new investments
- Environmental, Social and Governance (ESG)
- ESG strategy program in progress
- Our customers demand it and 3i is fully engaged
- All employees are aware and involved



#### **12 PRIORITIZED ESG KPIs**

	Climate change mitigation (energy efficiency & renewable energy)	Diversity, equity & inclusion
	Climate change risk (physical & transition)	Equal pay, fair wages & social benefits
	Waste & hazardous waste materials	Resilient & reliable infrastructure
	Employee health & safety	Cybersecurity
	Responsible supply chain management	Data protection
	Human rights	Bribery, fraud & corruption

WHO WE ARE: MANAGED SERVICES

### Customer First

>35 Years managing private networks > 500 customers

+60% customers with 15+ years of relationships

#### >100,000

Internet circuits (xDSL etc.) delivered

### **Technical Expertise**

>50 Network technologies currently under management **250** NNIs with 3<sup>rd</sup> party providers **150** Connectivity from ISPs & carriers in a single solution

### **Delivery Record**

**15,000** Customer sites under management

>60,000 Tickets resolved annually **164** Countries with active customer Hybrid WAN sites



### Supply Chain

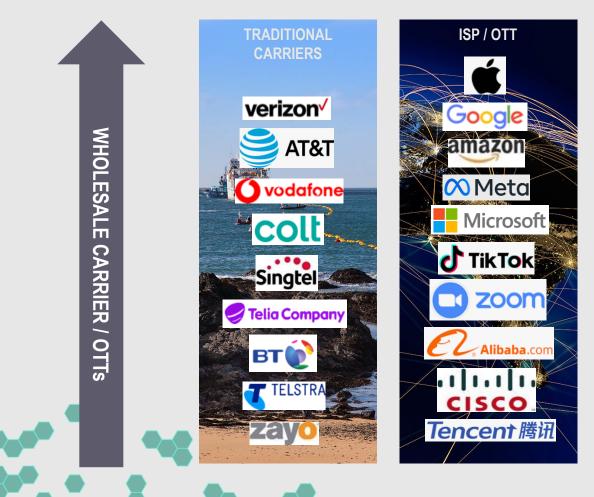
>125 Countries with certified connectivity options >450

Active purchasing relationships with ISPs and carriers worldwide

>2,000 Different carrier/ISP connectivity products under management

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# CUSTOMER VERTICAL SNAPSHOT







FINANCE AND ENTERPRISE

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# WHO WE ARE: GLOBAL SUBSEA NETWORK

Our global presence is underpinned by our network - the world's largest private network footprint.

66,000KM

Submarine Cables

46 Landing Stations In 27 Countries

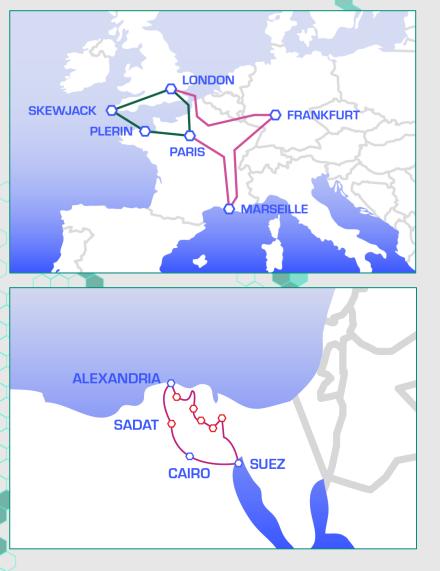
164 Countries

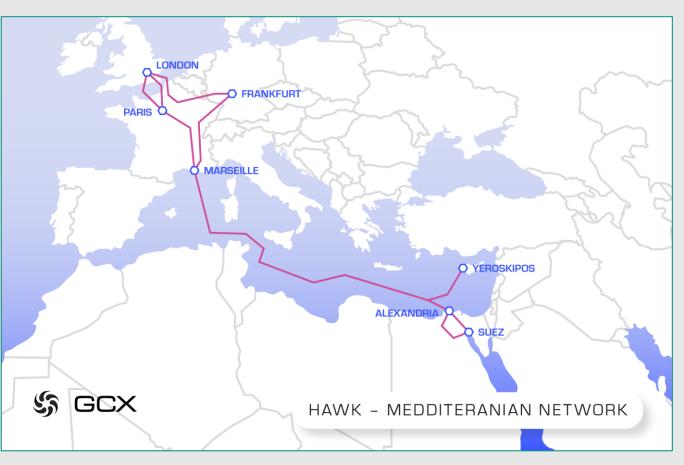
>198,000 Gbps design capacity Terminating Services 100Gbps capable routes globally





# HAWK – MEDITERRANEAN NETWORK





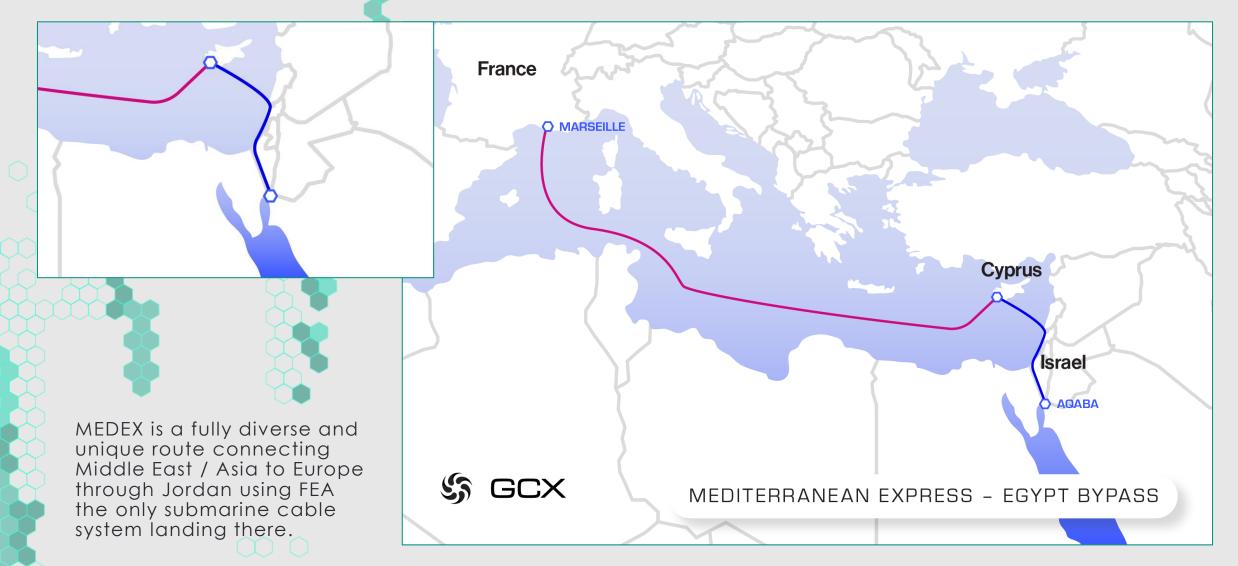
Hawk is an express cable route between Europe and the Middle East with unique diversity across Egypt.

FALCON – MIDDLE EAST NETWORK



Falcon is the only self-healing, optical system in the Middle East landing in more points in the region that any other.

# **MEDITERRANEAN EXPRESS** – EGYPT BYPASS



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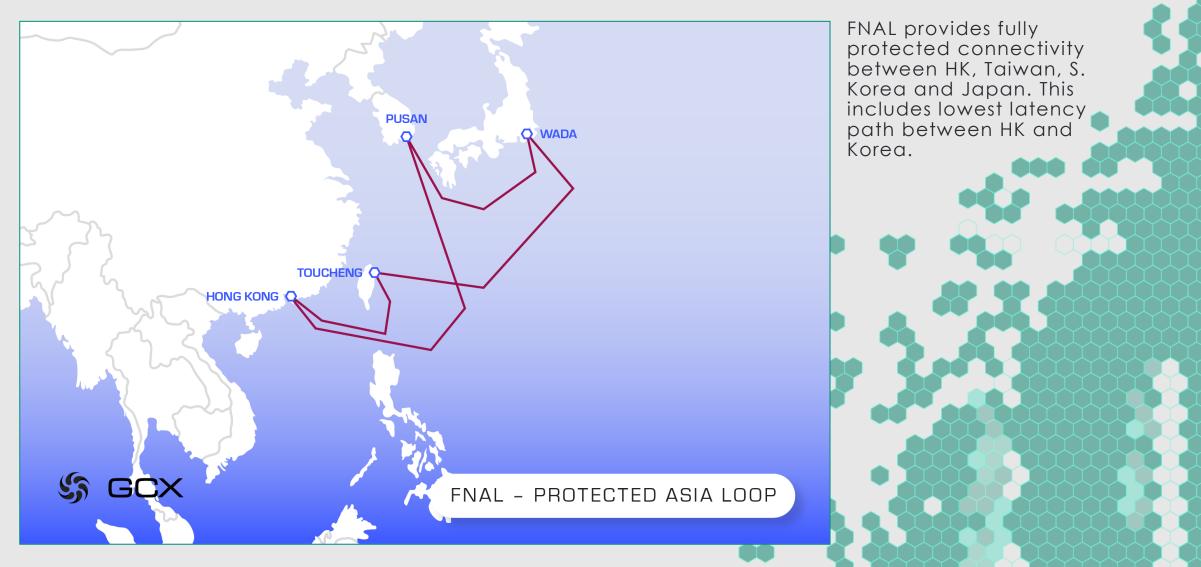
## **GET** – GULF TO EUROPE TRANSIT

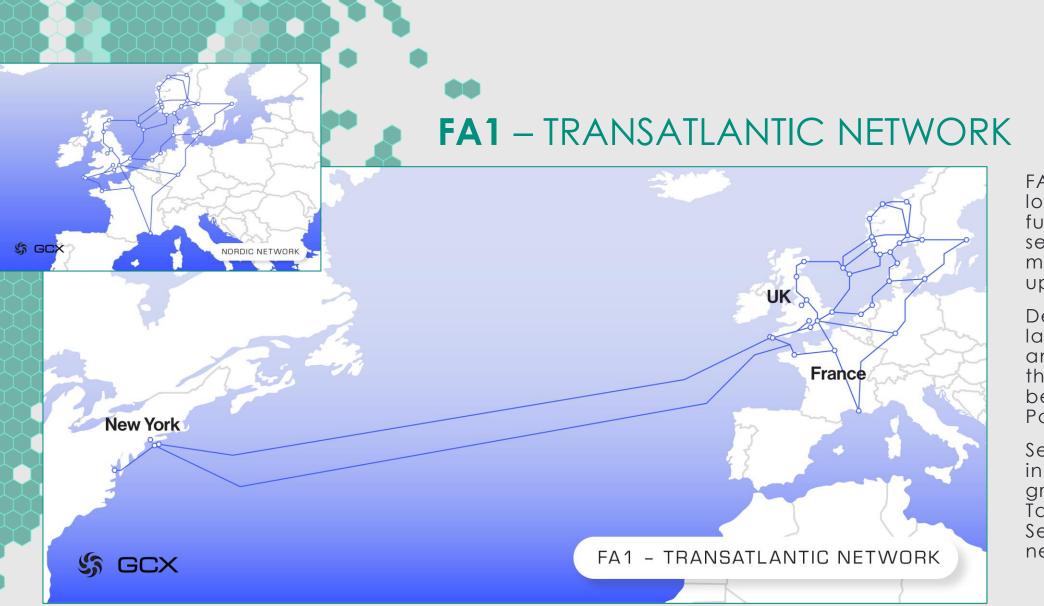


GET provides dual path across Iraq and provides dual path across Turkey and EU.

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### **FNAL** – PROTECTED ASIA LOOP

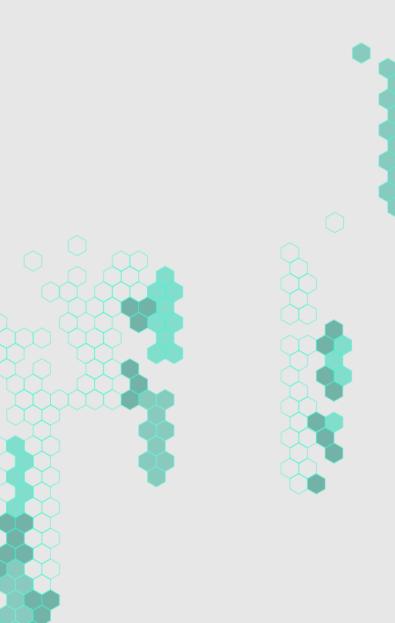




FA1 is a dual fiber loop providing fully-protected services to ensure maximum network uptime.

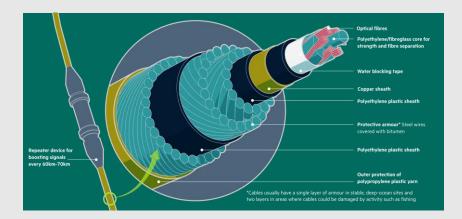
Dedicated landings in NY, UK and France with the lowest latency between NY and Paris.

Seamlessly integrated with group company Tampnet North Sea and Nordic network.



# WHY IS SUBSEA IMPORTANT?

- Carries 99% of all intercontinental data
- A data centre without connectivity is a warehouse
- It is and will be the highest and fastest bandwidth for next 25 years



# THE DRIVERS FOR FUTURE GROWTH

### **CLOUD APPLICATIONS GROWTH**

- More data centres
- Crazy Growth in the Middle East and Asia
- Data centres need power, cooling and CONNECTIVITY

### **ARTIFICIAL INTELLIGENCE (AI)**

- Different chips
- Decentralised data centres (edge)
- Infrastructure needs are 10x Cloud

### **RIGHT GEOGRAPHY**

- High population with minimal infrastructure
- GCX has strong relationships throughout

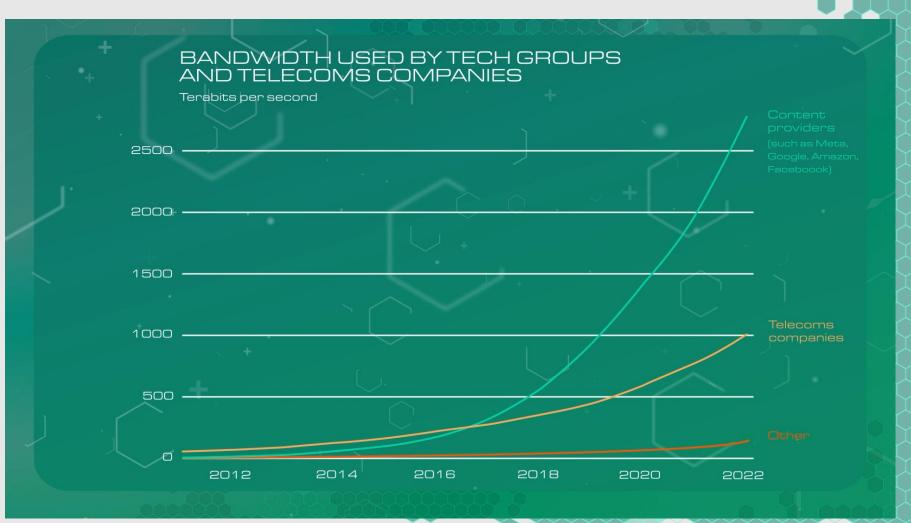


# TECH GIANTS ARE FUELING THE GROWTH OF THE SUBSEA CABLE SECTOR

Tech giants like Google, Meta, and Microsoft have already INVESTED \$2 BILLION IN CABLES FROM 2016 TO 2022, contributing to 15% of the global total.

Over the next three years, they **PLAN TO INJECT AN ADDITIONAL \$3.9 BILLION**, accounting for a significant 35% of the total investment.

Tech companies will shape the future of subsea connectivity.





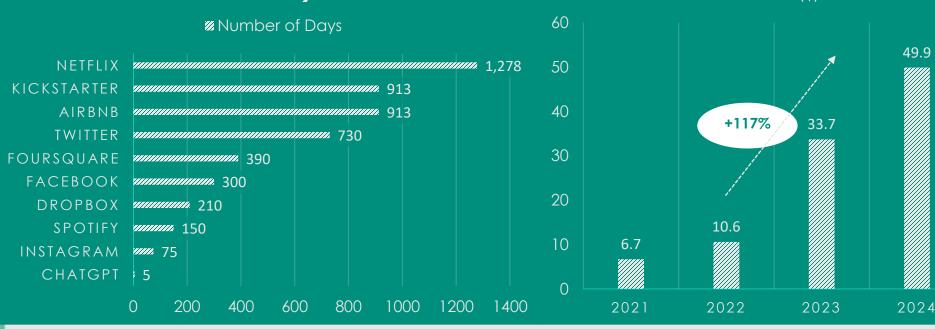
## GENERATIVE AI IMPLICATIONS FOR DIGITAL INFRASTRUCTURE

The recent key moments include the (1) rapid adoption of ChatGPT, (2) the impact of generative AI on companies like NVIDIA, and (3) the emergence of its first mainstream use cases.

52.2

2025

# TIME TO 1 MILLION USERS (IN DAYS)



#### **NVIDIA – DC REVENUES**

Ø Dollars (\$) in billions

 Mid-March '23 Microsoft announced Microsoft 365 Copilot
 Copilot is expected to leverage large

**MICROSOFT CO-PILOT** 

- language models to automate content generation across the Windows 365 and Graph product suites
- For example, product demonstrations show Copilot analysing Excel spreadsheets and for key trends and summary charts



# GENERATIVE AI IMPLICATIONS FOR DIGITAL INFRASTRUCTURE

Key infrastructure trends driven by generative AI include increased data centre demand globally, growth of well-suited edge locations and increased bandwidth demand.



Increased data centre demand to train and run generative AI applications



Growth of edge locations that are well-suited for training and running of generative Al solutions



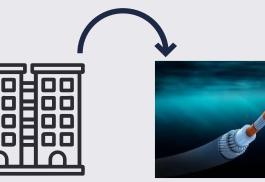
Increased demand for bandwidth driven by adoption of centralised LLMs in the short-term and widespread adoption



# INTERNATIONAL CONNECTIVITY – 22 CORRELATION TO DATA CENTRE DEMAND

#### DC's & international connectivity

Diversity & capacity requirements driving connectivity expansion



Presence of connectivity enabling Cloud DC to enter market

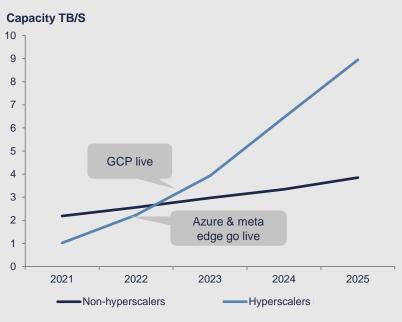


Cost effective, reliable and diverse international connectivity is in many cases a pre-requisite enabling large scale growth in DC requirements

Cloud providers look for up to 5 fully diverse International routes and drive capacity requirements at multiple times previous country needs

#### Hyperscaler requirement driving international growth

Case Study: International capacity demand profile





- The launch of cloud has already driven significant growth
- International Internet Traffic Growth of 21-33% CAGR 2018-24
- Al is expected to accelerate this further
- Regional demand for hyperscale increasing 10x by 2030E<sup>1</sup>



### LARGE CAP TELECOM – RECOGNITION OF SUBSEA AS KEY





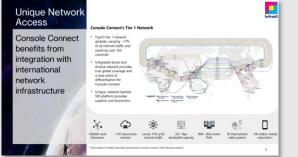






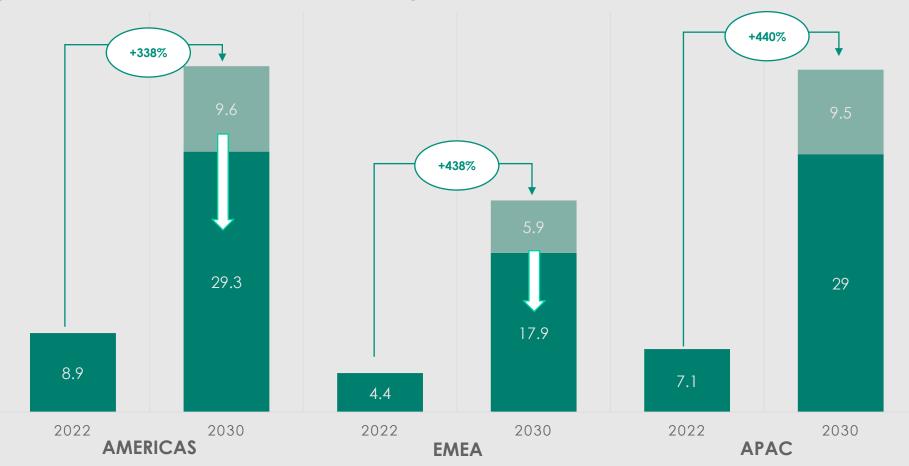








## HYPERSCALE DATA CENTRE DEMAND (IN GW, 2022 AND 2030)



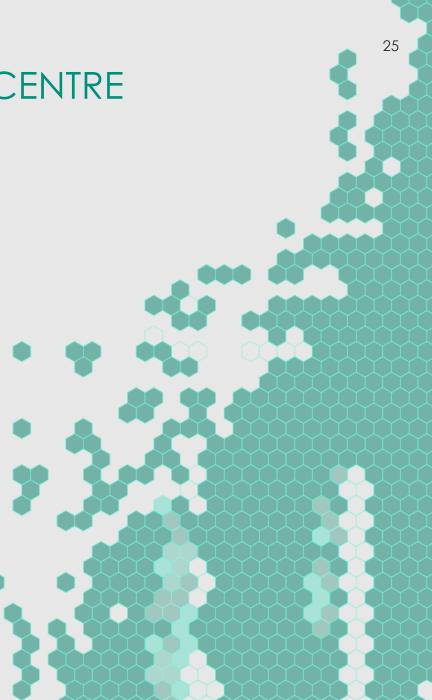
Across the globe, demand for data centre capacity is expected to grow substantially, with around 30% of growth driven by AI workloads.

# WHAT IS AN EDGE / DE-CENTRALISED DATA CENTRE

- Decentralised facility equipped with power and cooling infrastructure
- Provides compute and storage close to the end user

# BENEFITS OF AN EDGE / DE-CENTRALISED DATA CENTRE

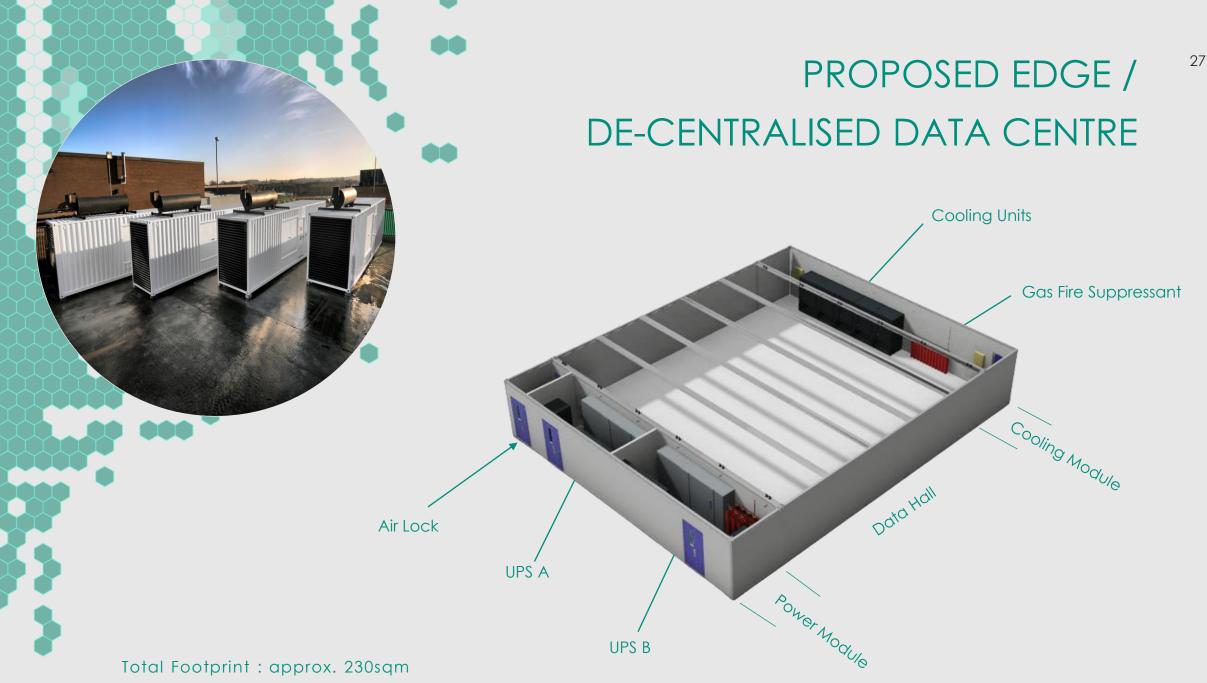
- Low latency
- Greater bandwidth
- Reduced operating costs
- Security
- Data sovereignty



# WHAT IS NEXT FOR GCX?

- Network expansion plan
- Why these markets (ME/India/SEA/Transpac) maintaining high pricing for connectivity and high growth markets etc...
- Edge Datacentres what, where and why? AI will need edge for the latency critical applications... Largest network presence in the Gulf loop...GCX one stop shop for connectivity and DC services across ME.

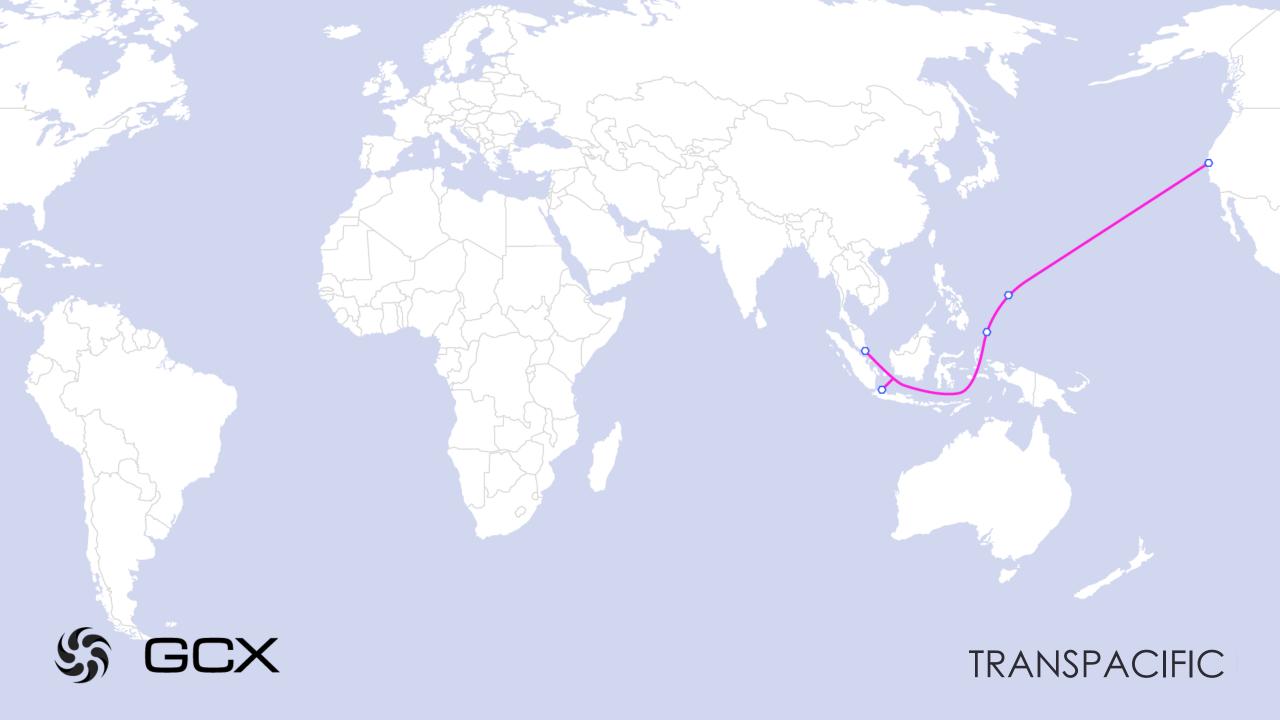


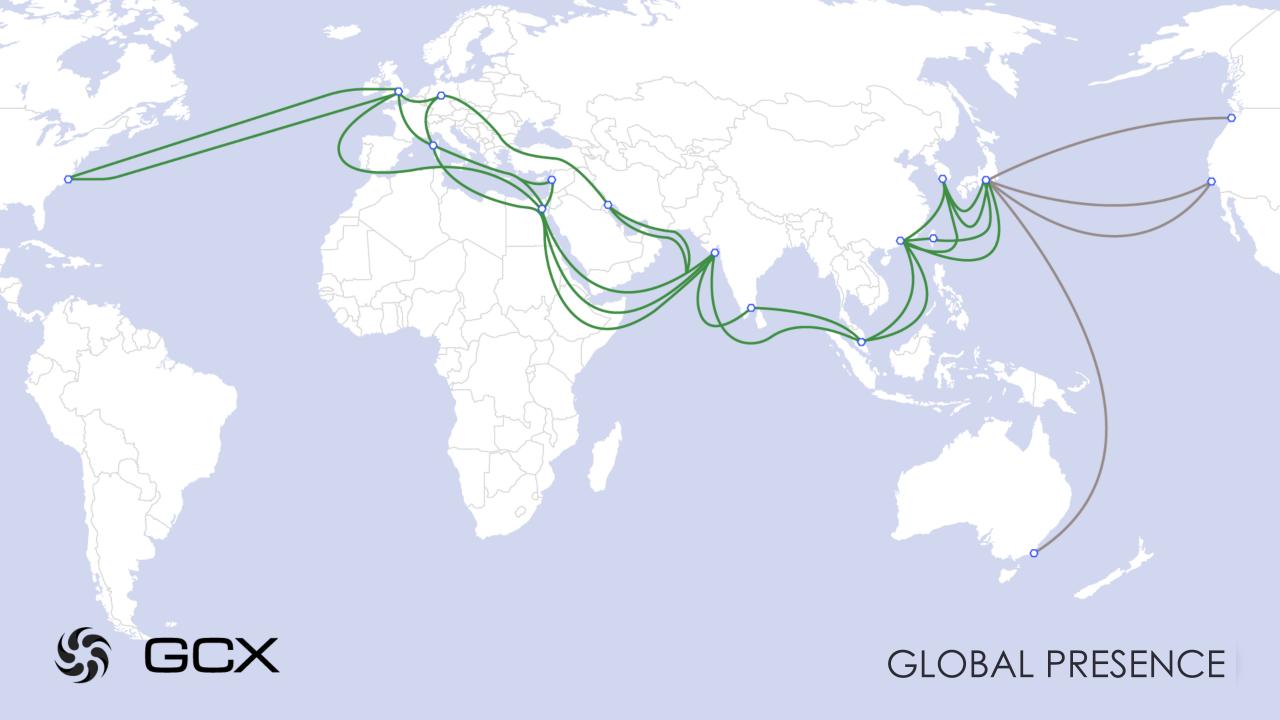


\$ GCX









# SUMMARY

#### A look at the future for GCX

#### **FUTURE INVESTMENTS**

Expand our subsea platform that both extends the economic value of our existing assets as well as investing in the latest cable routes and solutions for our customers:

- Europe to India
- Europe to ME
- India to Singapore
- Transpacific
- Africa to Europe

#### **EDGE DATACENTRE BUSINESS**

GCX set to launch Edge Data centres in opportunistic locations that leverage our existing assets, supporting cloud, AI and data sovereignty opportunities

#### **OPTIMIZE EXISTING ASSETS**

GCX is partnering with various OTTs and Carriers around the world to repurpose GCX owned facilities enabling faster growth in subsea deployments.



www.globalcloudxchange.com enquiry@globalcloudxchange.com

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