

# ESG FOR EXCHANGES

PERSPECTIVES FOR STOCK EXCHANGES

MARCH 2022



QUINLAN  
& ASSOCIATES

## AUTHORS



**BENJAMIN QUINLAN**

**CEO & MANAGING PARTNER**

BCom (Hons 1) / LLB (Hons), *Macquarie University*



**YVETTE KWAN**

**COO & PARTNER**

BCom (Merit), *UNSW*  
MBA, *AGSM*



**JUSTIN CHUNG**

**SENIOR ASSOCIATE**

BBA (Hons 1), *HKUST*



**ALISON HU**

**CONSULTANT**

BEcon&Fin (Hons), *HKU*

# TABLE OF CONTENTS

SECTION	TITLE	PAGE
<b>Section 1</b>	Industry Perspectives	<b>4</b>
<b>Section 2</b>	Exchange Perspectives	<b>14</b>
<b>Section 3</b>	The Opportunity for Exchanges	<b>31</b>
<b>Section 4</b>	How We Can Help	<b>35</b>

# SECTION 1

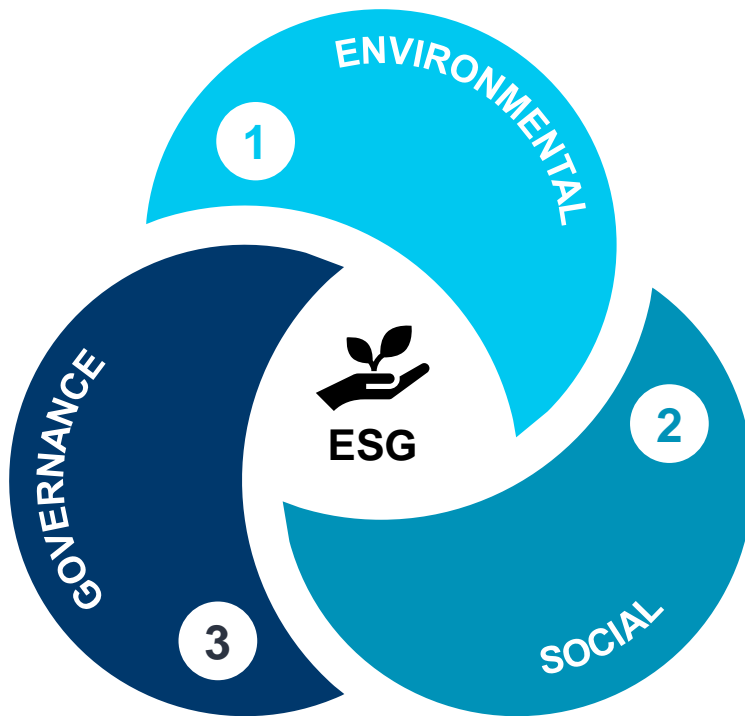
# INDUSTRY PERSPECTIVES

# ESG OVERVIEW

Environmental, social, and governance (“ESG”) is an increasingly prevalent concept that is receiving heightened attention from organisations across the globe

## ESG Overview

Metrics



### Categories

### Examples

#### E NVIRONMENTAL

Utilisation of natural resources and the effect of their operations on the environment and climate

- Emission and damage
- Resource usage
- Future planning

#### S OCIAL

Relationship between the management and the workforce, operating community, and broader political landscape

- Supply chain management
- Human resources
- External efforts

#### G OVERNANCE

The company's practices in rules and responsibilities' distribution among corporate participants and stakeholders

- Company overview
- Risks and mitigation
- Shareholder rights

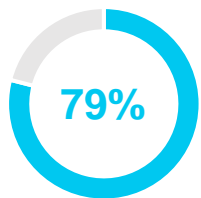
## GROWTH DRIVERS (1/3) – PUBLIC INTEREST

Global public interest in ESG continues to rise among both issuers and investors, with a growing number of companies making ESG integration a core strategic priority

### Growth Drivers

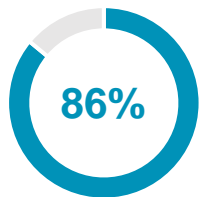
By Key Stakeholders

#### Global Public Interest / Demand (2021)



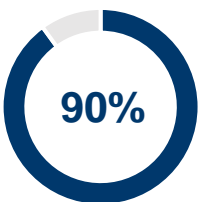
#### INSTITUTIONAL INVESTORS

Increased ESG investment either significantly or moderately in the past 12 months



#### RETAIL INVESTORS

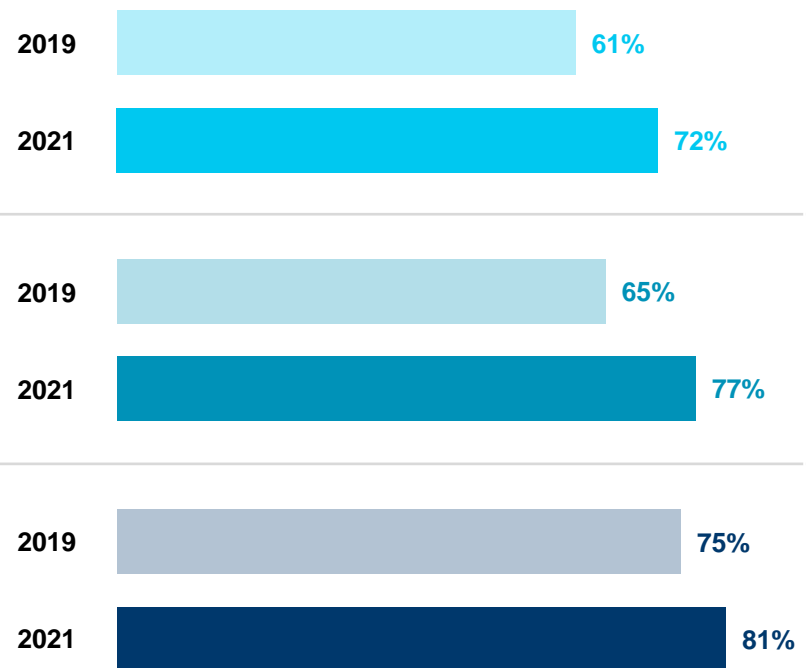
Increased their focus and attention on ESG investments in the past 12 months



#### GLOBAL ISSUERS

Increased their ESG data collection, monitoring and reporting frequency

#### Incorporating ESG in Strategy\* (2021 vs 2019)



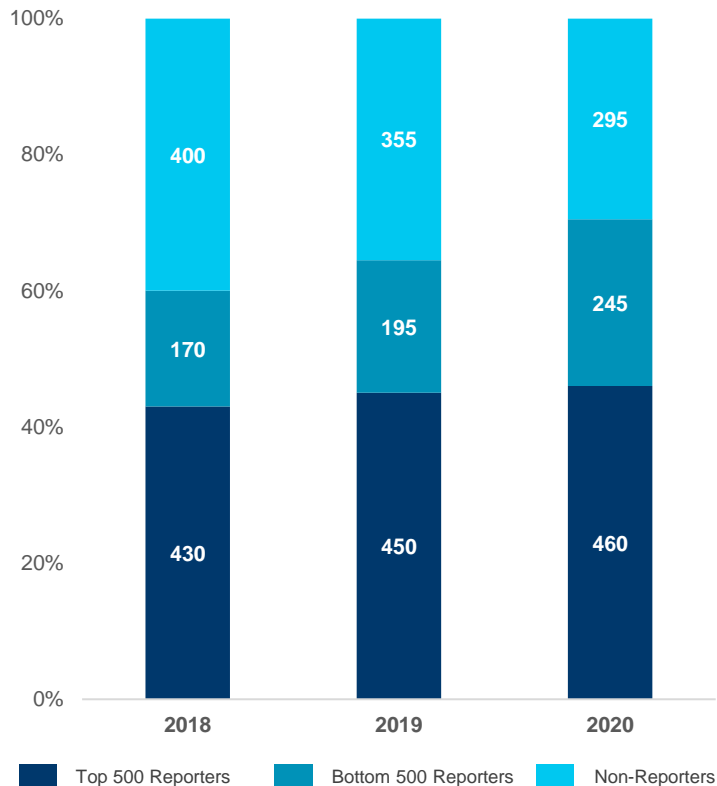
Note: Strategy refers to investment strategies for investors and operational strategies for issuers  
Source: Credit Suisse, Natixis, CFA Institute, Quinlan & Associates analysis

## GROWTH DRIVERS (2/3) – ISSUER DISCLOSURE

There is a clear trend of issuers being more willing to disclose and report ESG data in order to satisfy relevant ESG standards (and, by extension, attract capital / liquidity)

### Disclosure Rate

2018-20, %, Russell 1000 Companies



### Disclosure Standards Adopted by Issuers

2019 vs. 2020, % of reporters

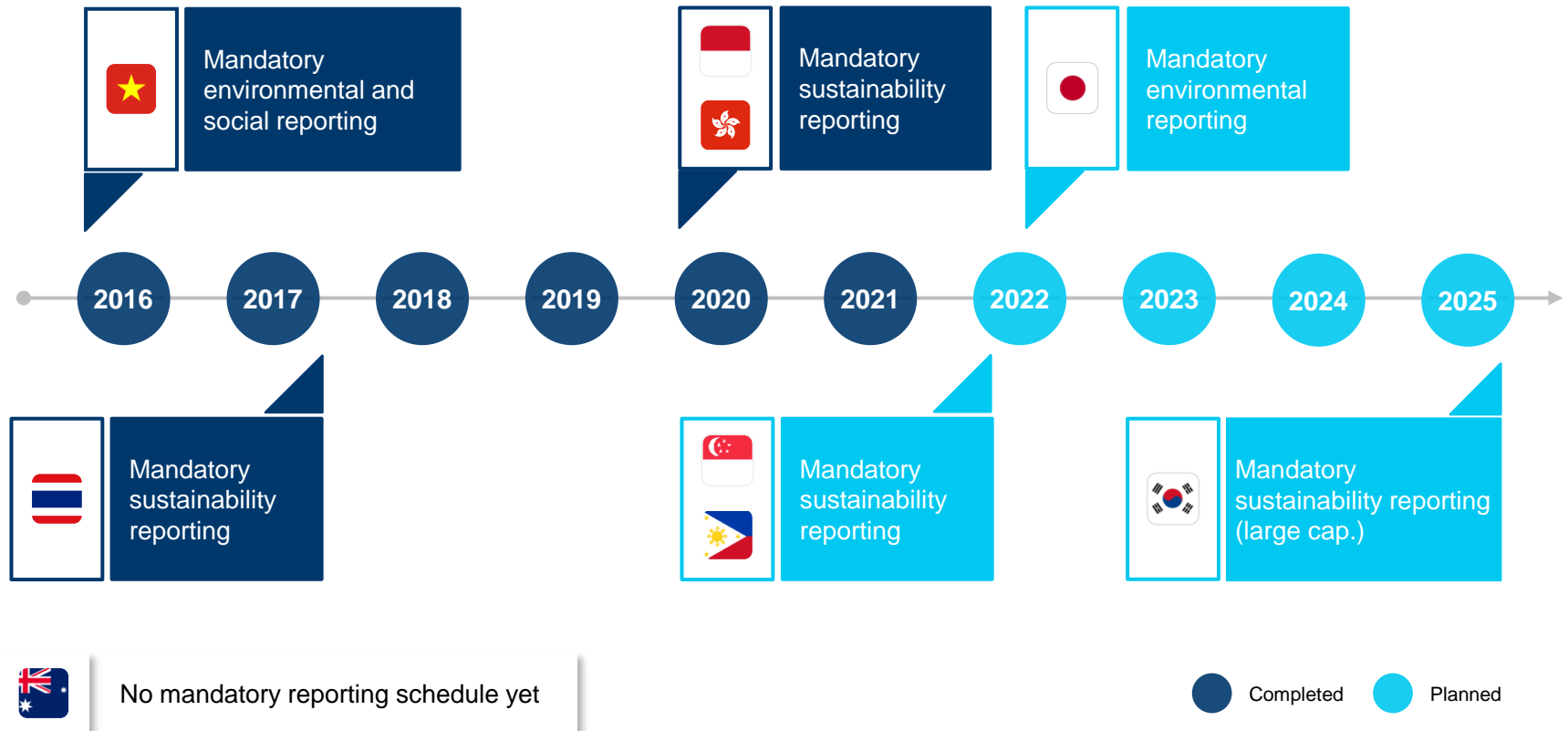
Notable Standards (Global)	S&P 500 (2019)	S&P 500 (2020)	Russell 1000 (2019)	Russell 1000 (2020)
GRI STANDARDS	51%	66%	47%	52%
TCFD   TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES	5%	23%	4%	17%
SASB	14%	58%	12%	39%
CDP	65%	74%	40%	40%
INTEGRATED REPORTING <IR>	-	3%	-	2%
SUSTAINABLE DEVELOPMENT GOALS	36%	82%	32%	42%

## GROWTH DRIVERS (3/3) – POLICY EVOLVEMENT

The majority of APAC regulators have also announced plans to mandate ESG reporting for listed issuers based on different frameworks

### ESG Mandatory Disclosure Regulations

APAC



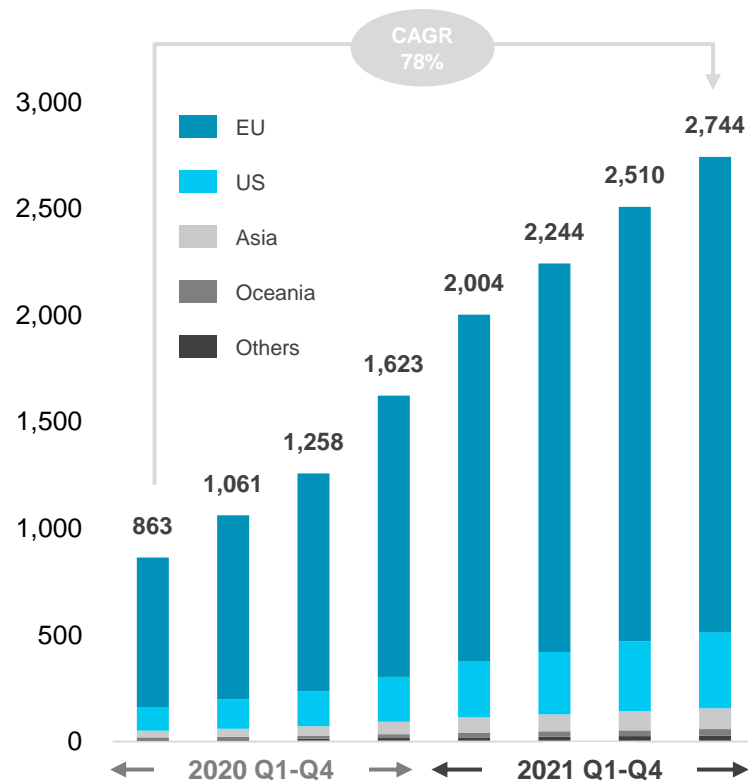


## ESG INVESTMENT TRENDS (1/2) – GLOBAL

Heightened interest in ESG is being reflected by strong growth in sustainable investment and issuance volumes in recent years

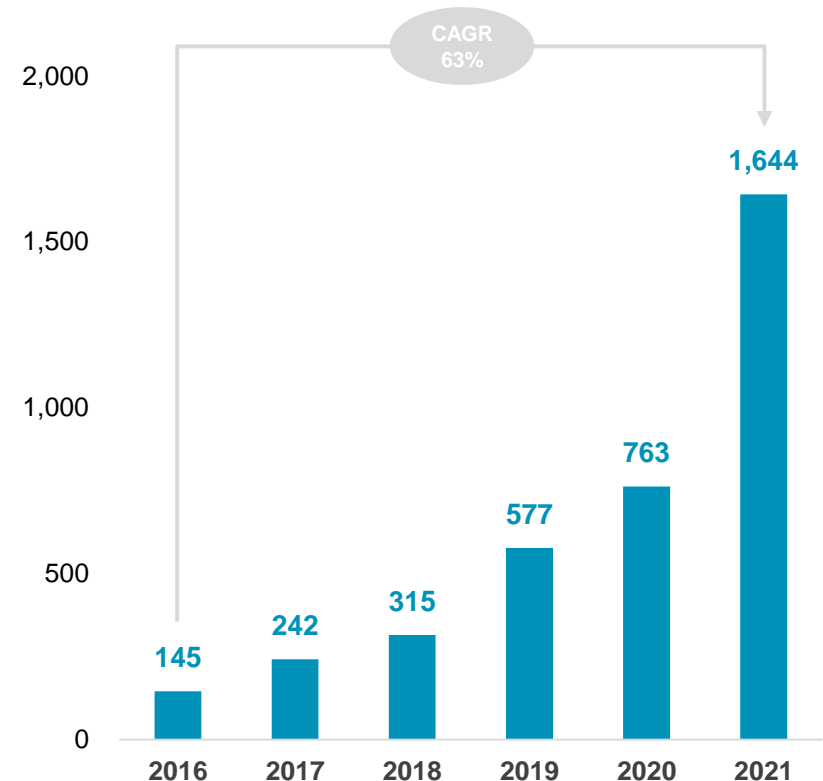
### Growth in Assets of Sustainable Funds

2020 – 21, USD billion



### Growth in Sustainable Debt Issuance

2016 – 21, USD billion



## ESG INVESTMENT TRENDS (2/2) – APAC

Asset owners in APAC are also sharpening their focus towards sustainable assets, creating considerable opportunities to facilitate their ESG investments

### Government Pension Investment Fund

ESG Initiative



Government Pension Investment Fund (GPIF), the world's largest single pension fund, was established by the Japanese government in 2006

**USD 1.6trn**  
AuM

2015	<p><b>Value and Mission</b></p> <ul style="list-style-type: none"> <li>Signed the UN-supported Principles for Responsible Investing (PRI)</li> <li>Published its own ESG investment principles</li> </ul>
2017	<p><b>Initial Action</b></p> <ul style="list-style-type: none"> <li>Allocated USD 27 Bn into 3 ESG indices</li> <li>Revised its evaluation criteria in with significantly higher scores for good ESG-related activities</li> </ul>
2018	<p><b>Next Journey</b></p> <ul style="list-style-type: none"> <li>Required all the EAMs it uses in Japan to consider ESG as a fundamental measure of investment</li> <li>Allocated USD 10 Bn into low-carbon indices</li> </ul>

### AustralianSuper

ESG Initiative



AustralianSuper, established in 2006, is the largest Australian superannuation and pension fund, offering services to over 2.5 million members

**USD 176bn**  
AuM

- 

**INTEGRATION**  
Produce ESG scores and integrate them in investment valuation and strategies for all asset classes, both directly and through external managers
- 

**STEWARDSHIP**  
Early, direct engagement with invested companies on ESG factors, and actively voting for climate change-related shareholder resolutions
- 






**REPORTING**  
Participate in global industry reporting projects to monitor ongoing ESG progress, (e.g. achieved A+ in the 2020 PRI Global Assessment Report)

# CHALLENGES IN ESG MARKETS (1/2) – OVERVIEW

Notwithstanding global interest in ESG, corporates and investors are facing various challenges with respect to ESG compliance, many of which can be solved by exchanges

## Issuers' Perspective






ESG Outlook

	Challenges	Descriptions
CUSTOMER ACQUISITION	 <b>Evolving Expectation</b>	Keeping up with consumers and investors' demand with regards to releasing sustainable reports
	 <b>Unclear Guidance</b>	Poor regulatory framework regarding ESG compliance, especially in immature markets
ESG TRANSFORMATION	 <b>Technology Readiness</b>	The lack of the right technologies and capabilities to facilitate seamless ESG transformation
	 <b>ESG Culture</b>	Inadequate policies and internal culture in place to support the execution and reporting of ESG
REGULATION COMPLIANCE	 <b>Data Monitoring</b>	Data monitoring can be highly costly and labour-intensive without a robust data strategy in place

 Addressable by Exchanges

## Investors' Perspective





ESG Outlook

	Challenges	Descriptions
INVESTMENT RESEARCH	 <b>Provider Selection</b>	Selecting data providers is difficult since metrics, calculations and price proposition vary per provider
	 <b>Target Identification</b>	53% of investors claim that a major challenge is the lack of transparency and recorded data
INVESTMENT DECISION	 <b>Assessment Criteria</b>	Identifying, prioritising and assigning weightings to ESG assessment criteria could be arduous
	 <b>Company Comparison</b>	Data varies across countries, adding complexity in comparing companies' ESG-compliance
	 <b>Portfolio Construction</b>	It remains time-consuming to build a sustainable portfolio tailored to specific ESG requirements

 Addressable by Exchanges

## CHALLENGES IN ESG MARKETS (2/2) – DATA STANDARDISATION

Although ESG data and ratings are mostly handled and distributed by data redistributors, they all adopt different data collection and analysis standards / methodologies

	<b>MSCI</b> 	<b>REFINITIV</b> 	<b>S&amp;P Global</b>	<b>Bloomberg</b>	<b>SUSTAINALYTICS</b> 	<b>CDP</b> 
<b>Provider Type</b>	General Dataset	General Dataset	General Dataset	General Dataset	ESG Specialist	ESG Specialist
<b>Coverage</b> (# of corporates)	14,000	9,000	9,200	11,500	4,180	9,600
<b>Main Data Source</b>	<ul style="list-style-type: none"> <li>Alternative: 3,400+ media sources</li> <li>Company disclosure</li> </ul>	<ul style="list-style-type: none"> <li>Corporate filings</li> <li>Company websites</li> <li>News sources</li> </ul>	<ul style="list-style-type: none"> <li>Corporate filings</li> <li>Company websites</li> <li>Media analysis</li> </ul>	<ul style="list-style-type: none"> <li>Corporate filings</li> <li>Company websites</li> <li>News sources</li> </ul>	<ul style="list-style-type: none"> <li>Alternative: 60,000 media sources</li> <li>News sources</li> </ul>	<ul style="list-style-type: none"> <li>Questionnaires that request data from corporates</li> </ul>
<b>Indicators</b>	> 270	> 500	> 100	> 600	> 300	-
<b>ESG Data Coverage</b>						
<b>Environment</b>						
Damage	✓	✓	✓	✓	✓	✓
Resource Usage	✓	✓	✓	✓	✓	✓
Future Planning	✓	✓	-	-	-	✓
<b>Society</b>						
Supply Chain	✓	-	✓	-	✓	-
Human Resources	✓	-	-	✓	✓	-
External Efforts	-	-	✓	✓	-	-
<b>Governance</b>						
Company	✓	-	✓	-	-	-
Risks	✓	-	✓	-	-	-
Executive Rights	✓	✓	-	✓	-	-

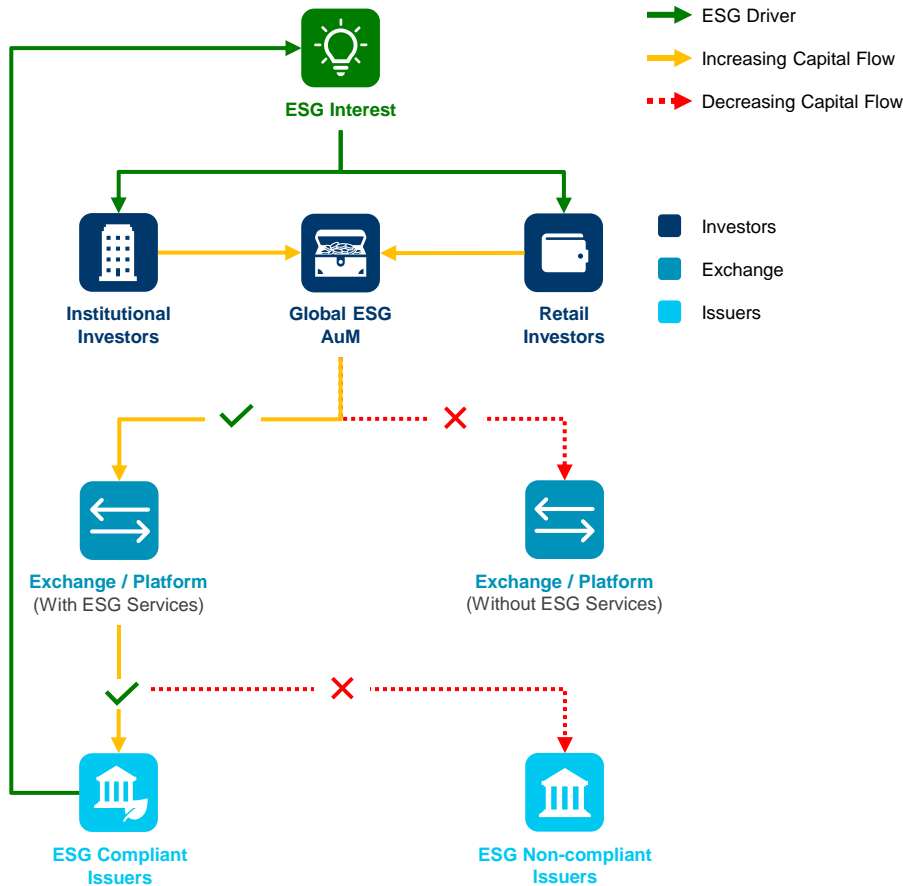
✓ Comprehensive Coverage    - Relatively Low Coverage

# COMPLY OR DIE

With investors increasingly scrutinising the ESG data / standards of exchanges, investment platforms, and corporates, non-compliant players are likely to be left behind

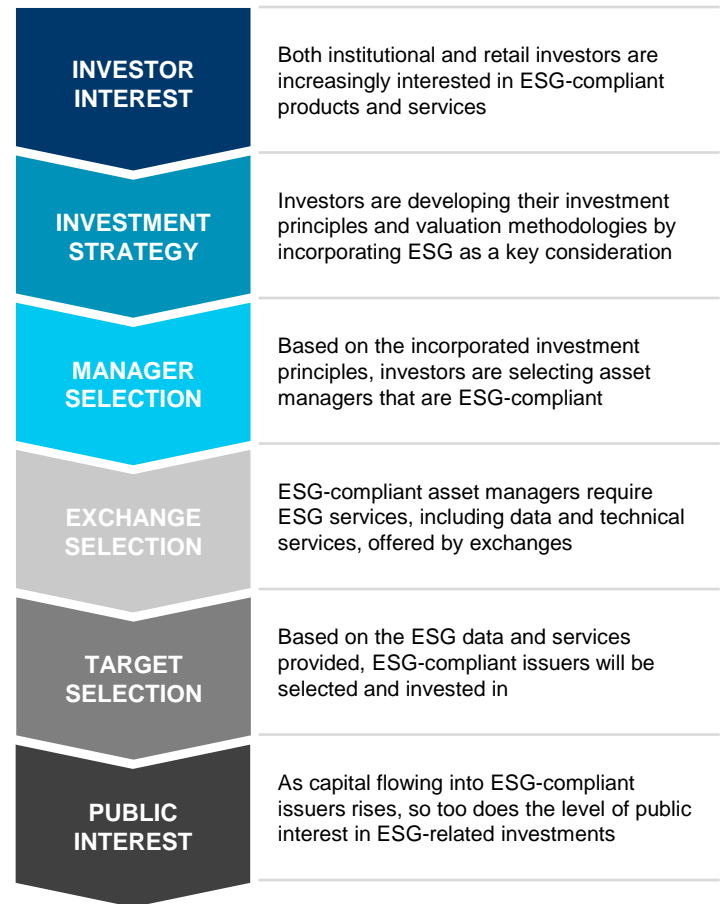
## ESG Investment Cycle

Illustrative



## ESG Investment Cycle

Value Chain



## SECTION 2

## ESG EXCHANGE PERSPECTIVES

# EXCHANGES (1/2) – KEY STAKEHOLDERS

Securities exchanges play a critical role as a: (1) regulatory enforcement body; (2) ESG market trading platform; and (3) ESG data collector for both issuers and investors

## Key Stakeholders

ESG Investment Activities



### Intergovernmental Organisations (“IGOs”)

IGOs set ESG goals and launch global-level guidelines for key market participants



### Regional / Local Authorities

Regional authorities establish and execute regulations according to global standards



### Securities Exchanges

Securities exchanges set and enforce ESG standards in collaboration with regulators



### Investors (e.g. Institutional / Retail)

Investors make decisions and inject capital into ESG-compliant industries / companies



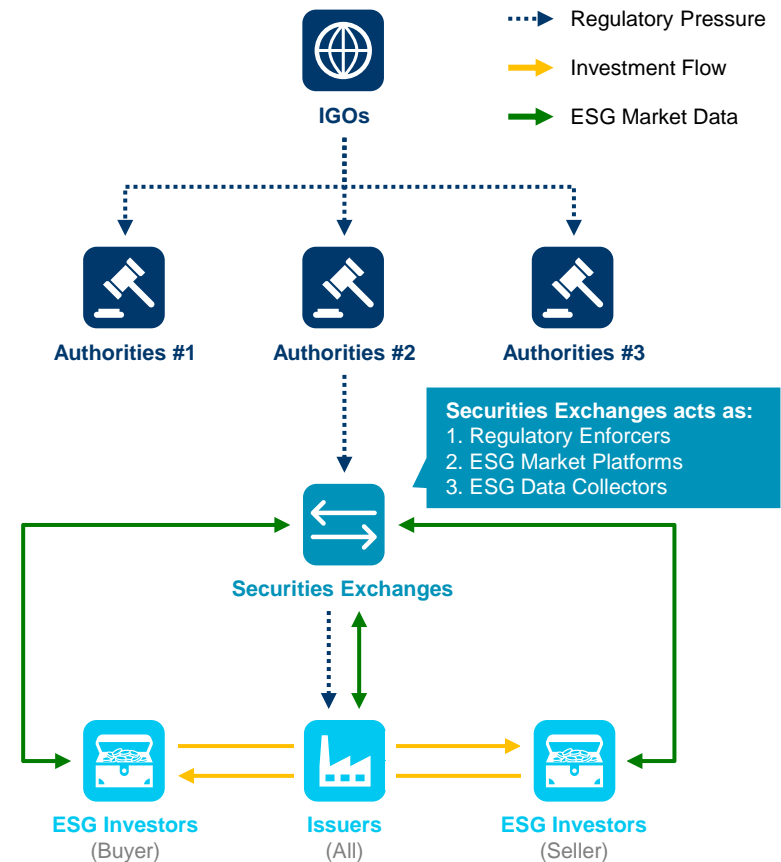
### Issuers (e.g., Industries / Corporates)

Industries and firms integrate ESG in their decision-making processes to be compliant

■ Regulatory Bodies ■ Market Facilitator ■ Market Participants

## Industry Dynamics

Illustrative

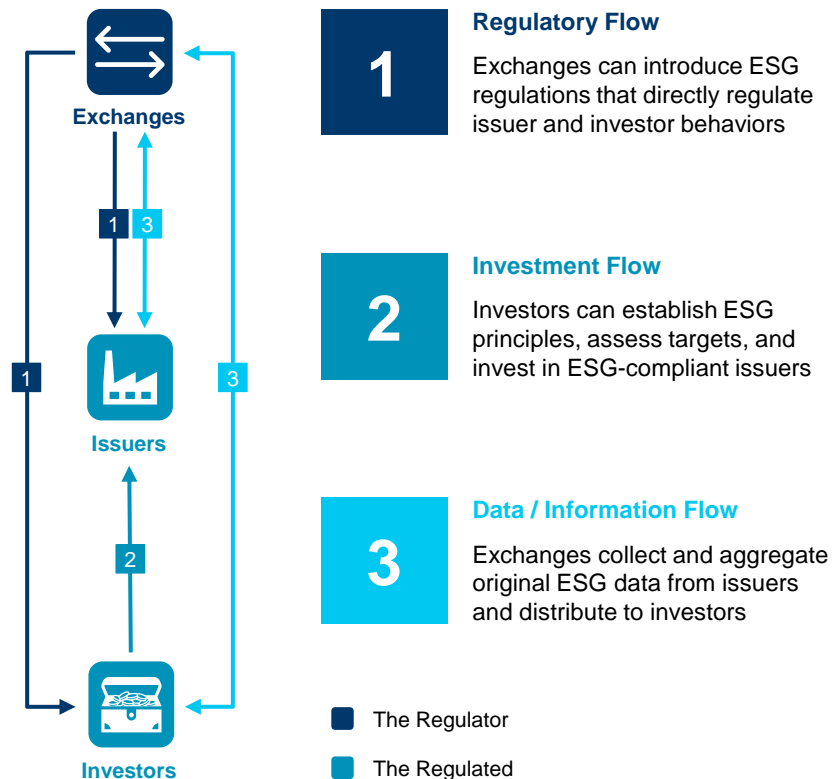


## EXCHANGES (2/2) – CONNECTING THE DOTS

As a centralised portal connecting regulators, issuers, and investors, we believe securities exchanges can play a major role in addressing many of these challenges

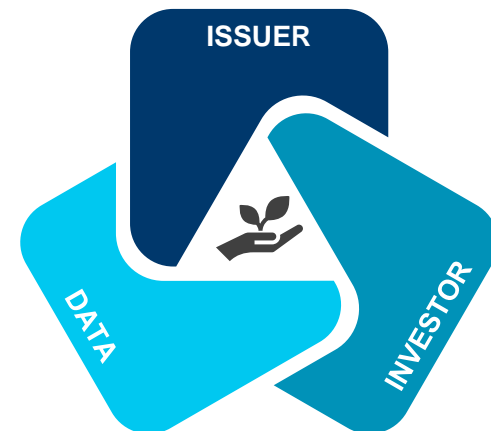
### Exchanges Value Chain

Exchanges



### ESG Services

Exchanges



<b>ISSUER SERVICES</b>	While exchanges regulate issuers with respect to their ESG disclosure and reporting, they also provide services to facilitate the capital raising
<b>INVESTOR SERVICES</b>	Exchanges provide ESG products and services to investors to assist them in assessing, selecting, and investing in issuers with high ESG standards
<b>DATA SERVICES</b>	Exchanges can collect, aggregate, process and analyse ESG data as they naturally connect to corporates, who are the primary “data originators”

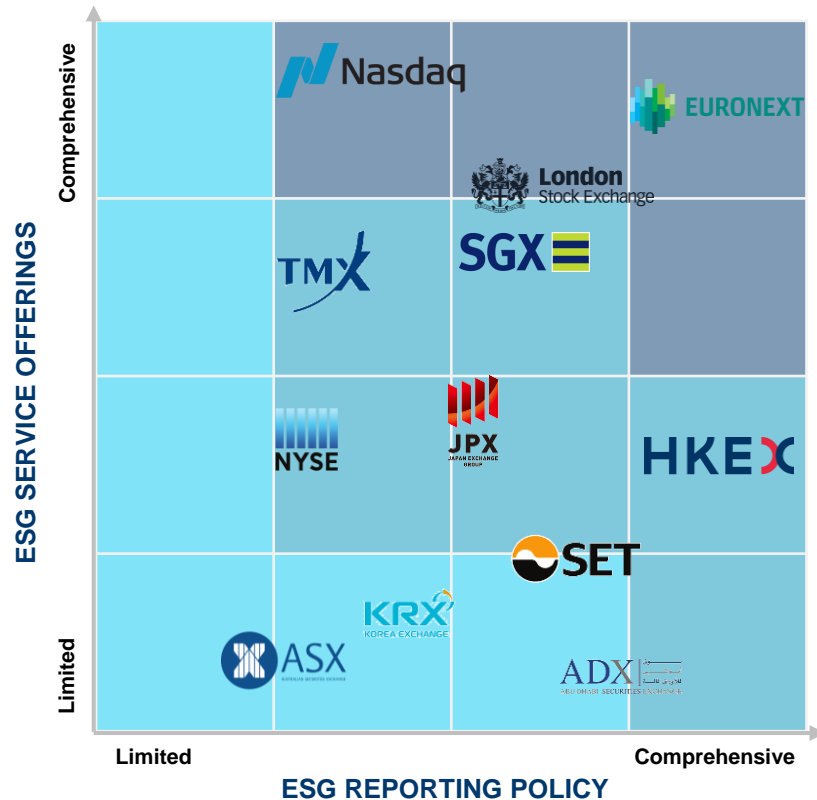


# ESG PRACTICE LANDSCAPE

Exchanges across the globe are at different stages of maturity with respect to their ESG product and service offerings, as well as reporting policies

## ESG Maturity

Illustrative Sample



## ESG Disclosure Rate

2020, %

	Exchanges (By Disclosure %)	Companies (# Count)	Market Cap (USD Bn)	Disclosure (% , 2020)
EMEA	EURONEXT	2,000	6,400	91-100%
	London Stock Exchange	2,010	3,800	81-90%
	ADX (Abu Dhabi Securities Exchange)	86	490	Below 70%
NORTH AMERICA	Nasdaq	3,550	19,400	71-80%
	NYSE	2,430	27,700	71-80%
	TMX	1,640	2,600	71-80%
APAC	HKEX	2,200	6,000	91-100%
	JPX	3,825	6,100	81-90%
	SGX	780	660	81-90%
	KRX	2,270	2,270	71-80%
	SET	750	680	81-90%
	ASX	2,310	1,880	91-100%

\*Top 100 companies only, no exchange-level full disclosures

Source: Exchanges disclosures, Government disclosures, KPMG, Bloomberg, Quinlan & Associates analysis

## ISSUER SERVICES (1/4) – OVERVIEW

Exchanges can capture potential revenues by offering ESG services to issuers, ranging from non-technical to technical tools, as well as through optimising ESG regulations

### ESG Issuer Products & Services

Description

Issuer Products & Services	Description
<b>ESG Regulations</b>	
<b>ESG Reporting / Disclosure</b>	
Mandatory Reporting	<ul style="list-style-type: none"> <li>All listed issuers should publish standardised ESG reports regularly to the public</li> </ul>
Comply or Explain	<ul style="list-style-type: none"> <li>Issuers should disclose specified ESG data to exchanges or explain if they do not</li> </ul>
Voluntary Reporting	<ul style="list-style-type: none"> <li>Issuers are recommended to disclose ESG data on a voluntary basis</li> </ul>
<b>ESG Issuer Services</b>	
<b>Non-Technical</b>	
ESG Education / Training	<ul style="list-style-type: none"> <li>Education sessions or events held for potential / current issuers regarding ESG regulations</li> </ul>
ESG Marketing Tool	<ul style="list-style-type: none"> <li>Tools to generate ESG marketing content for issuers to attract global investors</li> </ul>
ESG Advisory Services	<ul style="list-style-type: none"> <li>Professional ESG advisory team available to assist issuers with ESG integration</li> </ul>
<b>Technical</b>	
Real-time Data Portal – Issuer	<ul style="list-style-type: none"> <li>Portal for issuers to directly input, integrate, and report ESG data points</li> </ul>
ESG Compliance Monitoring Tool	<ul style="list-style-type: none"> <li>Tool to help issuers monitor their ESG data and performance internally</li> </ul>
Customised Reports Creation Tool	<ul style="list-style-type: none"> <li>Tool to create customised reports according to various frameworks and standards</li> </ul>

## ISSUER SERVICES (2/4) – GLOBAL EXCHANGES

Most global leaders currently provide issuers with a full suite of non-technical and technical ESG services to facilitate their monitoring, reporting, and marketing efforts

### ESG Issuer Products & Services

Global Exchanges Coverage, Illustrative

#### Issuer Products & Services



#### ESG Regulations

##### ESG Reporting / Disclosure

Mandatory Reporting

✘

Comply or Explain

✘

Voluntary Reporting

✔

#### ESG Issuer Services

##### Non-Technical

ESG Education / Training

✔

ESG Marketing Tool

✔

ESG Advisory Services

✔

##### Technical

Real-time Data Portal – Issuer

✔

ESG Compliance Monitoring Tool

✔

Customised Reports Creation Tool

✔

REDACTED

✔ Available   - In Progress   ✘ Not Available

## ISSUER SERVICES (3/4) – APAC EXCHANGES

Major gaps for exchanges in developing APAC include minimal provision of technical and non-technical ESG services, though some traction has been made in developed APAC

### ESG Issuer Products & Services

APAC Exchanges Coverage, Illustrative

#### Issuer Products & Services



#### ESG Regulations

##### ESG Reporting / Disclosure

Mandatory Reporting

✘

✘

Comply or Explain

✔

✔

Voluntary Reporting

✘

✘

#### ESG Issuer Services

##### Non-Technical

ESG Education / Training

✔

✔

ESG Marketing Tool

-

✔

ESG Advisory Services

✔

✘

##### Technical

Real-time Data Portal – Issuer

-

-

ESG Compliance Monitoring Tool

-

✘

Customised Reports Creation Tool

-

✘

REDACTED



Available



In Progress



Not Available

## ISSUER SERVICES (4/4) – CASE STUDY

Nasdaq provides a full suite of comprehensive ESG advisory services to issuers, to help them optimise their ESG practices and better connect to ESG-focused investors

### Nasdaq ESG Advisory



Nasdaq, who began to operate as a national securities exchange at New York in 2006, is now the second largest exchange globally, with over 4,000 issuers listed and a market cap of over USD 19 trillion

### ESG Advisory Core Process

- 1 MATCH**  
The ESG Advisory Programme pairs companies with consultative ESG expertise globally
- 2 DESIGN**  
Offers flexibility in program design for companies at different points on their ESG adoption curve
- 3 GUIDE**  
Assists companies to analyse, assess and action best ESG practices and capture growing ESG-dedicated capital

### ESG Advisory Coverage of Support



## INVESTOR SERVICES (1/4) – OVERVIEW

From an investor services perspective, exchanges are able to provide several ESG products and platforms for trading, as well as data portals and technical tools

### ESG Investor Products & Services

Description

Investor Products & Services	Description
<b>ESG Trading Services</b>	
<b>Platforms</b>	
Sustainable Bond Platform	• A separate platform or network specifically for sustainable bond listing and trading
Sustainable Stock Platform	• A separate platform or network specifically for sustainable stock listing and trading
<b>Products</b>	
ESG Index ETF	• ETF products based on ESG indices, either proprietary or by partnership
ESG Index Derivatives	• Derivative products based on ESG indices, either proprietary or by partnership
<b>ESG Investor Services</b>	
<b>Technical</b>	
Real-time Data Portal – Investor	• Portal for investors to download first-hand ESG data points immediately after issuers report
Target Selection Tool	• Tool for investors to select investments targets based on customised ESG metrics
Portfolio ESG Risk Management Tool	• Tool to monitor potential ESG risks in the constructed portfolios

## INVESTOR SERVICES (2/4) – GLOBAL EXCHANGES

Leading global exchanges provide investors with a well-structured sustainable bond network, various index-tracking products, and an ESG data portal

### ESG Investor Products & Services

Global Exchanges Coverage, Illustrative

#### Investor Products & Services



#### ESG Trading Services

##### Platforms

Sustainable Bond Platform



Sustainable Stock Platform



##### Products

ESG Index ETF



ESG Index Derivatives



#### ESG Investor Services

##### Technical

Real-time Data Portal – Investor



Target Selection Tool



Portfolio ESG Risk Mgmt. Tool



REDACTED

Available
 In Progress
 Not Available

## INVESTOR SERVICES (3/4) – APAC EXCHANGES

On the investor side, only some APAC developed exchanges currently provide ETF products based on ESG indices, with key gaps in all other products and services

### ESG Investor Products & Services

APAC Exchanges Coverage, Illustrative

#### Investor Products & Services



#### ESG Trading Services

##### Platforms

Sustainable Bond Platform

✓	✓
---	---

Sustainable Stock Platform

✗	✗
---	---

##### Products

ESG Index ETF

✓	✓
---	---

ESG Index Derivatives

✓	✗
---	---

#### ESG Investor Services

##### Technical

Real-time Data Portal – Investor

-	-
---	---

Target Selection Tool

✗	✗
---	---

Portfolio ESG Risk Mgmt. Tool

-	✗
---	---

REDACTED

✓ Available
- In Progress
✗ Not Available



## INVESTOR SERVICES (4/4) – CASE STUDY

SGX established a sustainable bond hub to provide investors with improved access to green, social, and sustainable bonds by partnering with Nasdaq Bond Network

### SGX

ESG Bond Hub



SGX, established in 1999, is currently one of the most international multi-asset exchanges in Asia Pacific that provides services to over 780 listed issuers and has a market cap of over USD 660 billion.

### ESG Bond Hub

Overview

#### COVERAGE

- Green, Social, Sustainable, and Sustainability-Linked Bonds

#### DESCRIPTION

- The listing venue for more than half of the listed international ESG bonds in Asia Pacific

#### SERVICES

- Access to MAS's Sustainable Bond Grant scheme to help offset some issuance expenses

#### ACCESSIBILITY

- The exclusive partner in Asia for the Nasdaq Sustainable Bond Network (NSBN)

### Partnership with NSBN

Benefits

#### INVESTORS

Access global bond networks, aggregate data of ESG impact on a pro-rated basis, and simulate changes to portfolios' sustainability based on holdings



#### ISSUERS

Contribute issuer datasets to NSBN and showcase issuer ESG profiles to a wider audience globally

#### DATA

Integrate ESG data from Asia with a network of over 4,500 bonds, mainly originating from US and EU

## ISSUER & INVESTOR SERVICES – CASE STUDY

Nasdaq developed a comprehensive real-time ESG data portal for issuers and investors to upload, download, and process data, as well as connect with others via the network

### ESG Data Portal

Nasdaq



Issuers



Investors

## DATA SERVICES (1/4) – OVERVIEW

We identified a variety of different data products ranging from indices, scorings to data tools by leveraging traditional or alternative data that exchanges may offer

### ESG Data Products & Services

Description

Data Products & Services	Description
<b>Data Origination</b>	
<b>Traditional Data</b>	<ul style="list-style-type: none"> <li>Data collected from traditional sources (e.g. annual reports, filings, etc.)</li> </ul>
<b>Alternative Data</b>	<ul style="list-style-type: none"> <li>Data collected from alternative sources (e.g. utility bills, social media, etc.)</li> </ul>
<b>Data Offerings</b>	
<b>Raw Data</b>	<ul style="list-style-type: none"> <li>Raw data without normalisation or analysis offered as a product to investors</li> </ul>
<b>Processed Data</b>	
ESG Index	<ul style="list-style-type: none"> <li>ESG indices that could be leveraged as an investable vehicle</li> </ul>
ESG Scoring	<ul style="list-style-type: none"> <li>ESG scoring and analysis for selected / all issuers</li> </ul>
<i>Proprietary</i>	<ul style="list-style-type: none"> <li>...by leveraging in-house standards and / or technologies</li> </ul>
<i>Partnership</i>	<ul style="list-style-type: none"> <li>...by cooperating with a traditional or alternative scoring / ratings agencies</li> </ul>
ESG Scoring League Table	<ul style="list-style-type: none"> <li>Public league table to rank and showcase all listed issuers</li> </ul>
Customised Scoring Tool	<ul style="list-style-type: none"> <li>Investor enablement tool to score issuers with their customised ESG standards / metrics</li> </ul>

## DATA SERVICES (2/4) – GLOBAL EXCHANGES

Most global exchanges provide issuers and investors with comprehensive data products ranging from raw data to ESG indices and scores

### ESG Data Products & Services

Global Exchanges Coverage, Illustrative

Data Products & Services	Nasdaq	EURONEXT	London Stock Exchange	NYSE	TMX	ADX ABU DHABI SECURITIES EXCHANGE
<b>Data Origination</b>						
Traditional Data	✓					
Alternative Data	✓					
<b>Data Offerings</b>						
Raw Data	✓					
<b>Processed Data</b>						
ESG Index	✓					
ESG Scoring	✓					
<i>Proprietary</i>	✗					
<i>Partnership</i>	✓					
ESG Scoring League Table	✓					
Customised Scoring Tool	✗					

REDACTED

✓ Available   
 - In Progress   
 ✗ Not Available

## DATA SERVICES (3/4) – APAC EXCHANGES

Only a handful of APAC exchanges currently provide ESG indices and scores based on traditional data, though most lack a wide variety of data products

### ESG Data Products & Services

APAC Exchanges Coverage, Illustrative

Data Products & Services	SGX	JPX	HKEX	KRX	SET	ASX	IDX	PSE	HOSE	BURSA MALAYSIA	NZX	NSE
<b>Data Origination</b>												
Traditional Data	✓	✓										
Alternative Data	-	✗										
<b>Data Offerings</b>												
Raw Data	-	✗										
<b>Processed Data</b>												
ESG Index	✓	✓										
ESG Scoring	✓	✓										
Proprietary	✗	✗										
Partnership	✓	✓										
ESG Scoring League Table	✗	✗										
Customised Scoring Tool	✗	✗										

**REDACTED**

✓ Available
 - In Progress
 ✗ Not Available

## DATA SERVICES (4/4) – CASE STUDY

To address ESG data quality and integrity issues, Deutsche Börse has built its own proprietary ESG data offering capabilities

### Challenges to ESG Investment

2019-2021, N = 356



#### 38% of Investors

...responded that ESG data is generally of low quality and thus unreliable



#### 37% of Investors

... responded that they are concerned with the inconsistency of the ESG data points that they are receiving



#### 28% of Investors

... responded that they see conflicting ESG scoring being provided by different rating agencies

Data providers capable of distributing consistent and highly reliable ESG data will likely be winners in this market

### Deutsche Börse

2021



A screenshot of the Deutsche Börse Group website. The page displays a press release titled 'Deutsche Börse successfully completes acquisition of ISS, strengthening the focus on sustainable investing'. The release date is 26 Feb 2021. The main text of the press release states: 'Completion of 81% majority stake acquisition of Institutional Shareholder Services (ISS) - Deutsche Börse becomes a leading global market infrastructure player on the critical development towards more sustainable investing'. The website header includes navigation links such as 'Our company', 'Products/services', 'Insights', 'Investor relations', 'Media', 'Career', 'Sustainability', and 'Regulation'. There are also search bars and a 'Deutsche Version' link.

Deutsche Börse acquired ISS to address ESG data sourcing quality & sovereignty concerns in Europe

## SECTION 3

## THE OPPORTUNITY FOR EXCHANGES

## OPERATING MODELS

Exchanges can explore a number of operating models when building their ESG capabilities, which should be evaluated for each specific product or service

### Operating Models

Three Options



#### PARTNER

##### Third-Party Service Provider

Identify and establish partnerships with relevant ESG data / technology providers in the market



#### BUILD

##### Proprietary Solution

Build proprietary technology to support ESG services in order to directly capture the opportunity



#### BUY

##### Company with Proprietary Solution

Invest to acquire a ESG service provider with established operations and data technologies

#### DESCRIPTION

#### CRITERIA

#### WEIGHT

CRITERIA	WEIGHT	PARTNER	BUILD	BUY
Quality Control	■ ■ ■ ■ ■	✘	✓	✓
Function Control	■ ■ ■ ■ ■	✘	✓	✓
Speed to Market	■ ■ ■ ■ □	✓	✘	-
Resources Availability	■ ■ ■ □ □	✓	✘	✓
Investment Requirement	■ ■ □ □ □	✓	✘	✘

✓ Favourable
 - Dependent / Neutral / N.A.
 ✘ Unfavourable

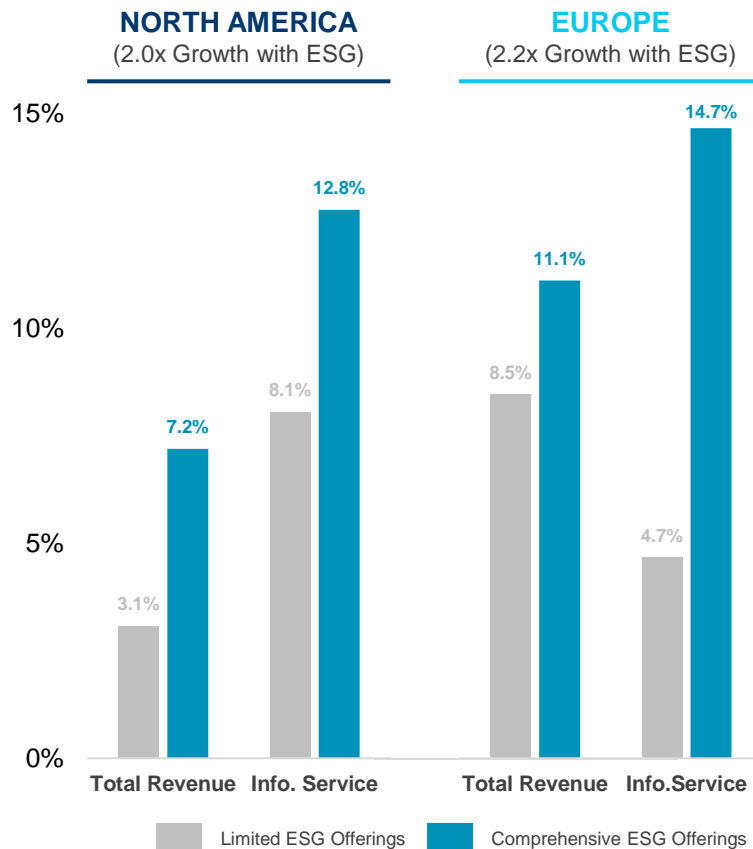


## GROWTH POTENTIAL

Our research shows that the top-line revenue growth of exchanges that are actively incorporating ESG offerings has grown ~2x faster than their peers over the past two years

### Revenue Growth Difference

ESG Incorporation, 2018-20 CAGR



### Case Study

Nasdaq, USD million

Nasdaq	2018	2019	2020	CAGR
<b>Market Services</b>	1,055	922	1,108	2.5%
<b>Corporate Platform</b>	487	496	530	4.3%
<i>Listing Services</i>	290	296	316	4.4%
<i>IR &amp; ESG Services*</i>	197	200	214	4.2%
<b>Investment Intel.</b>	714	779	908	12.8%
<i>Market Data</i>	390	398	409	2.4%
<i>Index</i>	206	223	324	25.4%
<i>Analytics</i>	118	158	175	21.8%
<b>Market Tech.</b>	270	338	357	15.0%
<b>Total Revenue</b>	<b>2,526</b>	<b>2,535</b>	<b>2,903</b>	<b>7.2%</b>

Growth Highlight

\*Nasdaq offers ESG consulting services for issuers and ESG Data Portal (ESG-related data and analytics of 600+ companies for both institutional and retail investor usage)

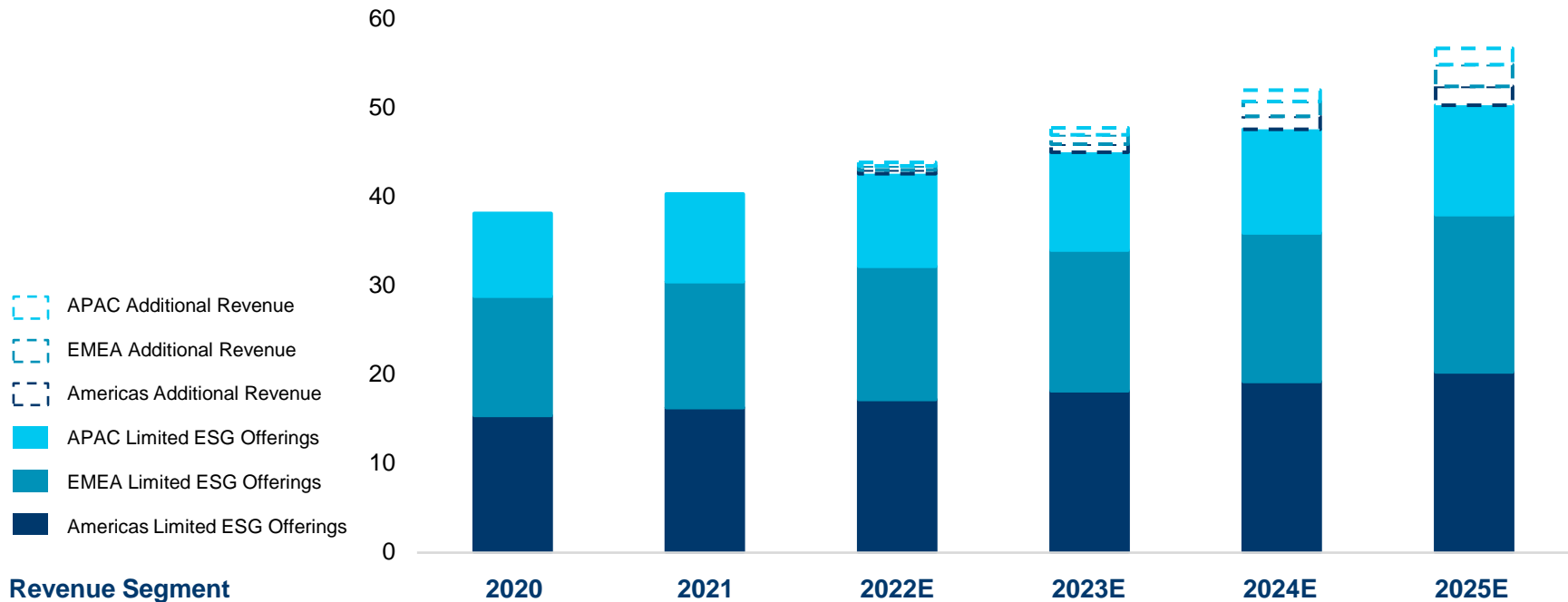
Source: Annual reports, Nasdaq, Quinlan & Associates analysis

## ESG REVENUE POTENTIAL

We estimate that an additional ~USD 6.4 billion p.a. in revenues could be generated by securities exchanges worldwide by 2025 via ESG product and service offerings

### ESG Revenue Potential

Global Exchanges, 2020-2025E, USD billion



Limited ESG Offerings

38.0

40.2

CAGR:5.7%

50.2

Comprehensive ESG Offerings

38.0

40.2

CAGR:8.9%

56.6

**Incremental ESG Revenue**

-

-

**1.3**

**2.8**

**4.5**

**6.4**

## SECTION 3

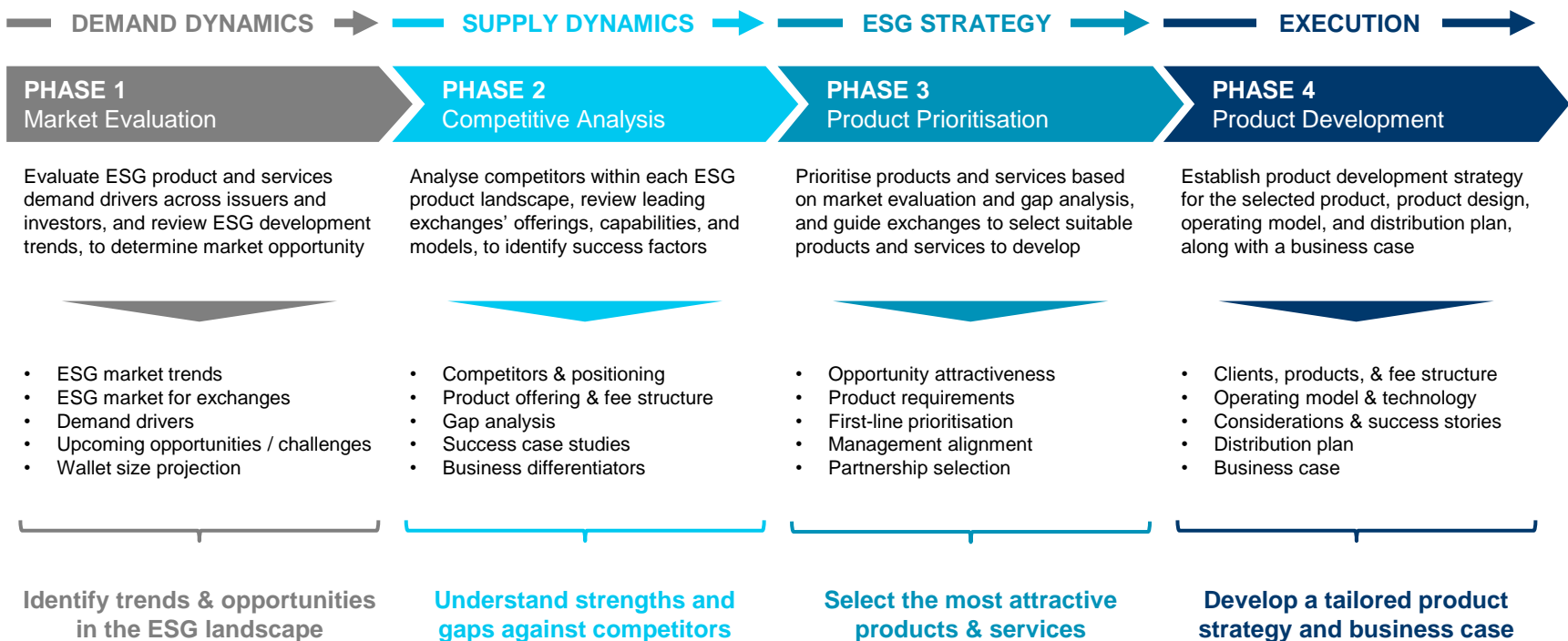
## HOW WE CAN HELP

# SUGGESTED PROJECT APPROACH

We propose a four-phase structure for exchanges, covering (1) Market Evaluation, (2) Competitive Analysis, (3) Product Prioritisation, and (4) Product Development

## Proposed Approach

Four Phases



## DISCLAIMER

Copyright © 2022 Quinlan & Associates.

All rights reserved. This report may not be distributed, in whole or in part, without the express written consent of Quinlan & Associates. Quinlan & Associates accepts no liability whatsoever for the actions of third parties in this respect.

The information and opinions in this report were prepared by Quinlan & Associates. This report is not financial or investment advice and should not be relied upon for such advice or as a substitute for professional accounting, tax, legal or financial advice. Quinlan & Associates has made every effort to use reliable, up-to-date and comprehensive information and analysis in this report, but all information is provided without warranty of any kind, express or implied.

Quinlan & Associates disclaims any responsibility to update the information or conclusions in this report. Quinlan & Associates accepts no liability for any loss arising from any action taken or refrained from as a result of information contained in this report or any reports or sources of information referred to herein, or for any consequential, special or similar damages even if advised of the possibility of such damages. This report is not an offer to buy or sell securities or a solicitation of an offer to buy or sell securities.

QUINLAN  
&ASSOCIATES

---

STRATEGY WITH A DIFFERENCE