



CMDf
Thailand Capital Market
Development Fund

McKinsey
& Company

Improving Thailand's Capital Market Competitiveness & Efficiency

FETCO and CMDf Seminar

January 2023



Summary of Thai Capital Markets' starting position across 5 lens

5 Lenses



Len 1: State of the Market

- Satisfactory **capital markets depth** in equity and bond
- Competitive and efficient **cash equity**
- Growing **derivatives** market

What could be better

- Potential to deepen products **beyond cash equities**
- **Unclear niche** to differentiate from peers
- Potential to add more '**new economy**' assets



Len 2: Performance of exchange

- **Leading regional stock exchange**
- **Steady revenue growth** of the stock exchange

- Potential to develop **secondary bond market**



Len 3: Attractive pre-IPO financing ecosystem

- Strong **IPO hub** amongst regional peers
- Focused initiative to support growth of **startup/SME**

- Relatively smaller **PE/VC investment** and domestic **PE/VC funds**
- Fragmented efforts from government and private sector to support **startups during pre-seed and scale up phase**



Len 4: Diversity in the investor base

- **High financial awareness**
- Increasing participation of **domestic retail investors**
- Growing **cash equities** trading volumes

- Significant share of **ST foreign investors**
- Potential to improve **investment-related knowledge**
- Relatively low **pension saving assets**



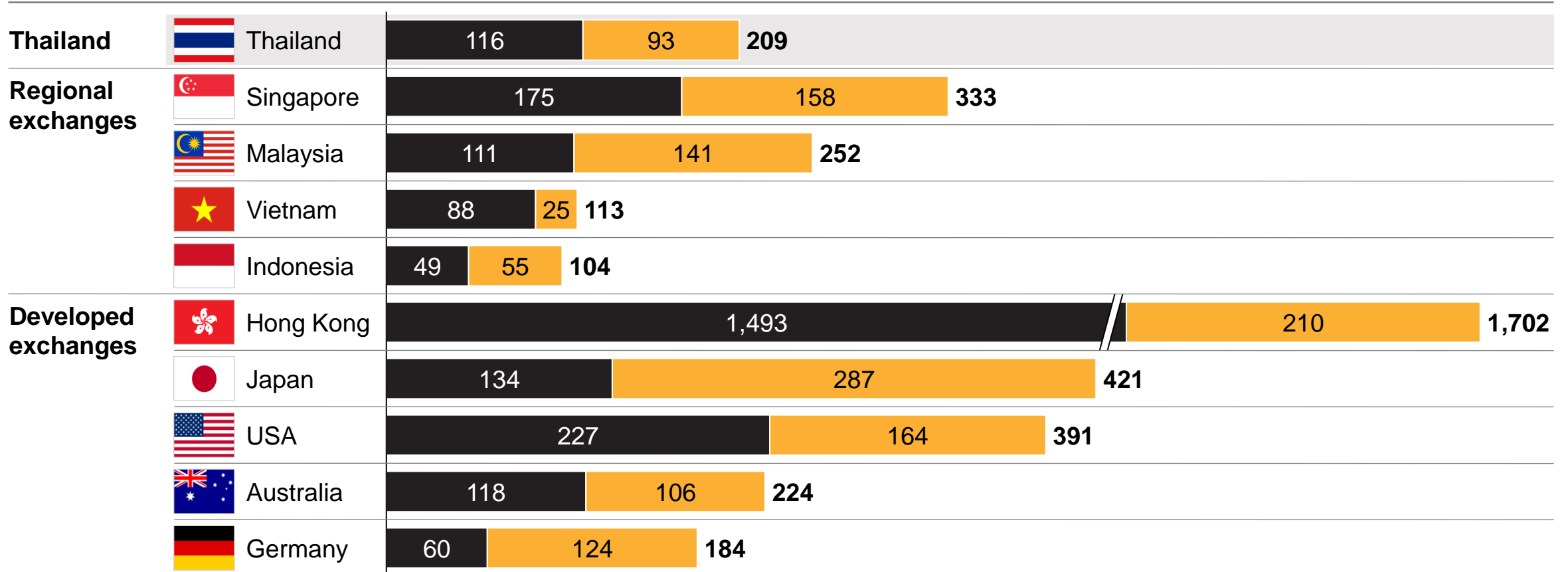
Len 5: Tax & regulations

- Early-stages of development of **ESG investments/issuance frameworks**
- Early-stages of development of regulations on **digital assets**
- Considerations on re-introducing 0.1% **FTT on equities sales**

Exhibit 1: Thailand has satisfactory capital markets depth comparable to regional peers

■ Equity (Listed market cap as a % of GDP)¹ ■ Bonds (Outstanding as a % of GDP)²

Capital markets penetration, 2021 % of GDP



1. SET (Thailand), SGX (Singapore), Bursa Malaysia (Malaysia), Ho Chi Minh SE and Hanoi SE (Vietnam), IDX (Indonesia), HKEx (HK), JPX (Japan), NYSE and Nasdaq (USA), ASX (Australia), Deutsche Börse (Germany)

2. Including both corporate and government bonds

Exhibit 13: Thailand cost efficiency across capital market products compared to peers

		Cost efficiency				
		High	Medium	Low	N/A	
Equity	Cost of equity fundraising on SET ¹	High	Medium	High	High	High
	Cost of equity fundraising on MAI ²	Medium	Medium	High	N/A	Low
	Cost of equity trading ³	Low	High	Medium	Low	Medium
Bonds	Bonds bid-ask spread	Medium	High	Low	High	Medium
	Cost of bonds ⁴	Medium	High	Medium	Low	High
REIT	Cost of listing on SET ⁵	Medium	High	N/A	N/A	Low
	Average expense ratio	High	Low	Medium	N/A	Low
Mutual Funds	Average expense ratio	Low	High	Medium	Low	High

1. Estimated based on issue size of USD 100 Mn and market cap of USD 500 Mn
2. Estimated based on market cap of USD 200 Mn and issue size of USD 20 Mn
3. Includes regulatory levy, transaction tax, local tax, stamp duty and other taxes as applicable, excludes brokerage charges
4. Lowest investment-grade corporate bonds average YTM with maturity during 2027-2028 (~5 years financing)
5. Estimated based on REIT size of USD 100 Mn

Source: Dealogic, Bloomberg, Capital IQ, ADB, Morningstar, exchange fee schedules, expert interviews, press search

Thailand capital markets are competitive on costs efficiency compared to emerging ASEAN peers such as Malaysia, Indonesia but have room to improve when compared with developed markets such as Singapore

Thailand is most efficient in equity fundraising on SET (230-280 bps of issue size) and **REITS management expenses** (across majority asset classes except for industrial REITs)

Scope to **improve market efficiency in equity trading** (30 bps which is highest amongst ASEAN except Indonesia) and **mutual funds** (driven by expense ratio for fixed income and mixed allocation funds)

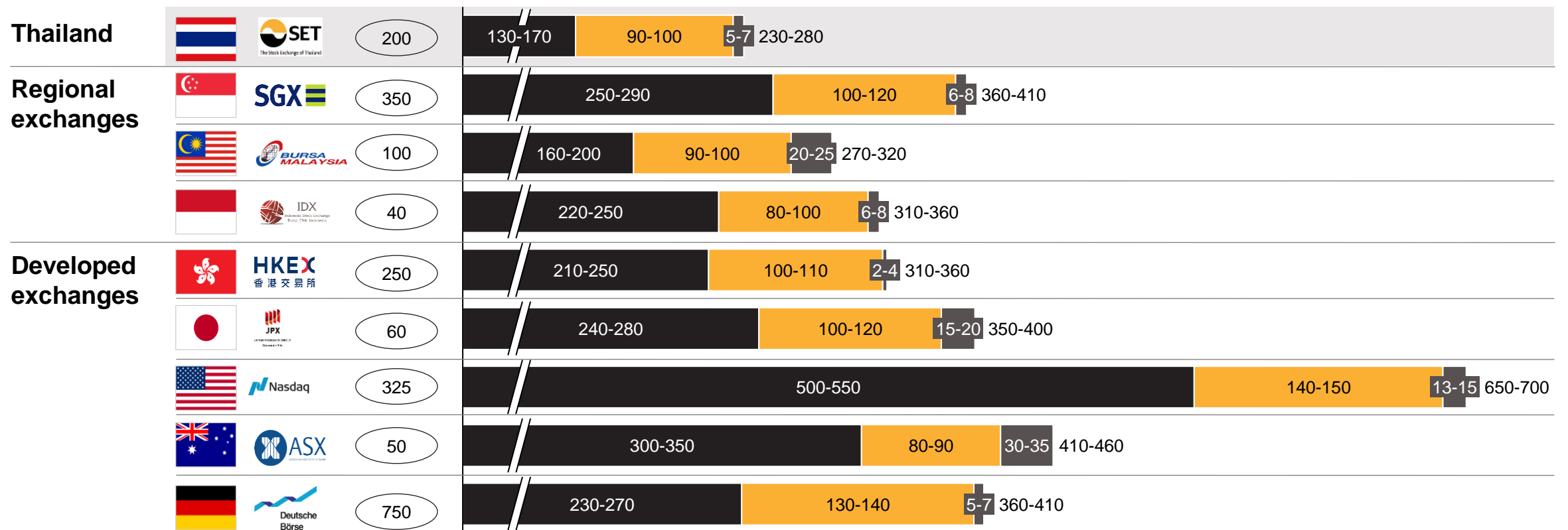
Exhibit 14: Cost of listing an equity on SET compared to other main exchanges in regional and global peers

NOT EXHAUSTIVE

■ Underwriting fees ■ Legal, accounting and roadshows ■ Listing and regulatory fees

XX Average issue size, 2019-21, USD mn

Total cost of equity fundraising on the main exchange as % of issuance value, as in Aug 2022, bps



Note: Weaker currency impact lower underwriting fees in Thailand and Malaysia (35.59 THB/USD and 4.46 MYR/USD respectively as of Aug 9, 2022)

Note: Costs estimated based on market capitalization of US\$ 500 Mn and issue value of US\$100 Mn for IPO listing







Source: Dealogic, exchange fee schedules, expert interviews, press search

Exhibit 6: Thailand's assessment of bonds market liquidity compared to regional peers

Assessment of local currency bond market liquidity, rating on a scale of 1-4, 2021

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Worst Quartile  Best Quartile

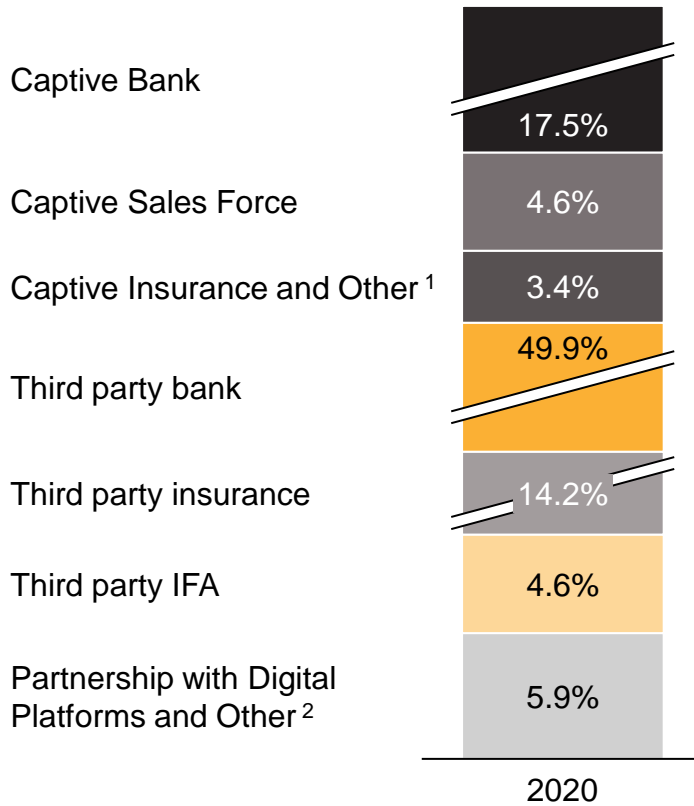
Key parameters						
FX regulations	3.00	3.50	3.00	2.60	3.40	4.00
Greater diversity of investor profile	1 3.30	3.00	3.00	2.20	3.40	3.00
Hedging mechanisms	3.00	3.50	2.80	2.20	2.40	3.00
Market access	3.30	3.50	2.60	2.60	3.40	4.00
Settlement & Custody	2 3.00	4.00	3.40	3.20	3.40	4.00
Tax treatment	3.70	4.00	3.60	2.80	3.00	4.00
Transaction funding	3.70	3.50	3.00	3.40	3.60	3.00
Transparency	3 3.30	4.00	3.80	3.20	3.40	4.00

Note: The survey is conducted with bond market participants such as traders, bond pricing agencies, and regulators. Market participants were asked about their perceptions on several structural factors that are known to affect bond market liquidity and provide a rating from 1-4. A rating of 4 indicates that the respective bond market is considered significantly advanced or developed

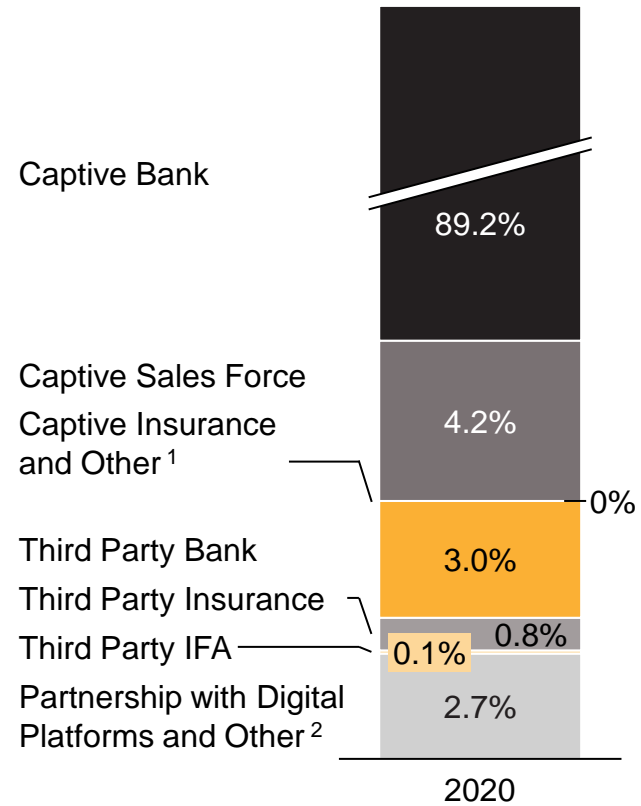
Exhibit 9: ~70% of mutual fund fee in Thailand is estimated to be earned by Captive Banks which dominate the distribution channel mix

RETAIL + WHOLESALE

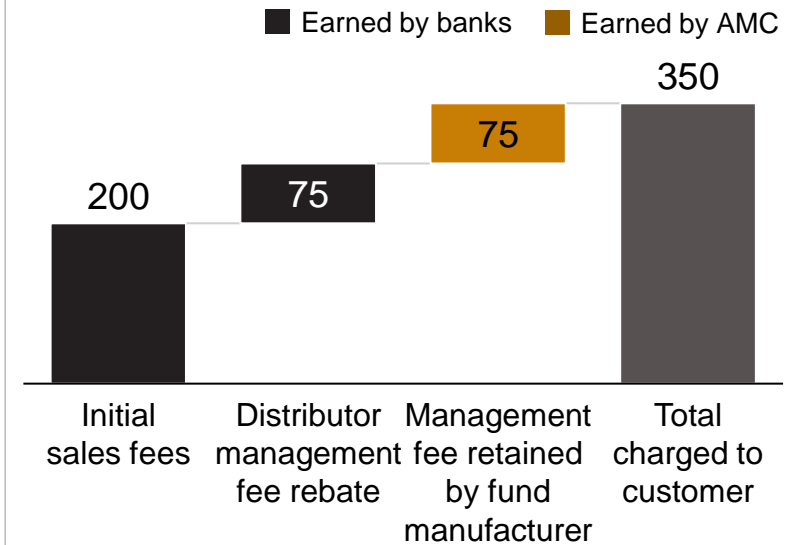
APAC average channel mix – Retail



Thailand Average



AMC mutual fund fee structure, bps of AUM



- 275bps is earned by **distributors (banks)**, while 75bps is earned by the **AMC**
- Majority of revenues (~70%) **tend towards captive banks** in Thailand, given they comprise the lion's share of fund distribution

1. Securities, direct digital and other

2. Robo-advisors, securities companies and Other

Note: Results based on the sample set of Asia Asset management Survey

Source: 2021 McKinsey Asia asset management survey

Exhibit 11: Mutual fund's cost of fundraising and expense ratio in Thailand compared to peers

Asset Management companies' operating cost by function, 2021, %

ESTIMATES

Worst Quartile     Best Quartile



Total costs as % of AuM, bps

18.5


14.5

26.4

13.0

	Thailand	Singapore	Indonesia	Japan
Sales and Marketing	23%	40%	32%	16%
Investment Management	25%	29%	29%	21%
Management and admin	20%	16%	21%	19%
Operations	14%	10%	5%	10%
Technology	7%	3%	4%	19%
Others	11%	2%	8%	15%

Exhibit 35: Summary of key building blocks for Thailand's capital markets to achieve its aspirations

 Driving competitiveness

 Driving efficiency


Aspiration

“Become a global capital markets leader of efficiency and inclusiveness to drive Thailand's prosperity”

Society



Fund a sustainable future

- 1** Foster “sustainability” financing to help Thailand meet its NCZ goals 
- 2** Provide opportunities for pension funds to create the capital required to support an aging population

Businesses




Fuel economic growth and innovation

- 3** Nurture SMEs/start-ups with capital and capability support 
- 4** Expand digital assets and regulated exchanges at the right time considering market development  

Individual Investors





Expand access & knowledge for wealth creation

- 5** Improve financial literacy for Thais with financial education program
- 6** Simplify retail investors' journey 

Institutional Investors



Foster long-term capital deployment

- 7** Broaden long-term domestic institutional investors 
- 8** Attract long-term foreign institutional investors by increasing Thailand's visibility and accessibility internationally 

9 Create centralized database to unlock data analytics 


10 Attract and nurture talent 

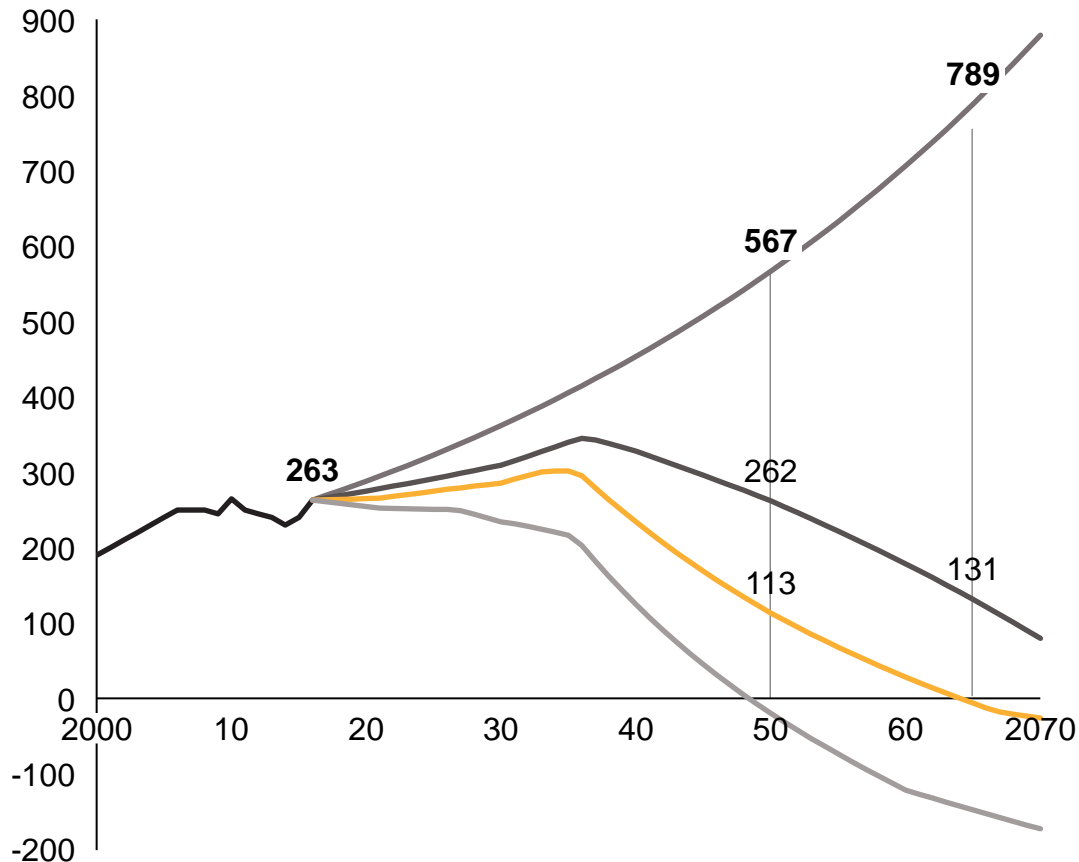
Exhibit 30: Thailand face a challenge to reach NCZ by 2065

Expected NET emissions, Mtpa CO₂eq in various scenarios

HIGHLY PRELIMINARY

— Historical — BAU (NCN: NA) — Current (NCN: 2090) — Green step-up (NCN: 2065) — Stretch (NCN: 2050)

Thailand's NET emissions scenario projections



BAU scenario (NCN: NA)

Trends continue at its current rate with technology adoption remain at the same level to what it is in 2020. **Yearly CO₂ net emissions reaching ~550 GgCO₂e by 2050.** Emissions under BAU can potentially be lower with **increased technological adoption due to improved economics**

Current scenario (NCN: 2090)

Using existing plans and significant efforts to decarbonize by 2050 such as 43% CCS for Gas and Coal power production, renewable penetration of 33%, 34% of biofuels usage, CCS usage in industries, EE measures for residential and commercial (e.g., solar water heating)

Green step-up scenario (NCN: 2065)

Further pushing efforts on energy and transportation to country's maximum potential such as renewables at >50%, 100% BEV and PHEV vehicles by 2050 – 69% by 2035, 30% Energy efficiency improvement by 2037, extensive CCS use

Stretch scenario (NCN: 2050)

Early adoption of next wave of technologies and initiatives (e.g., battery technology, alternative green power sources) will be crucial to help Thailand achieve net zero by 2050

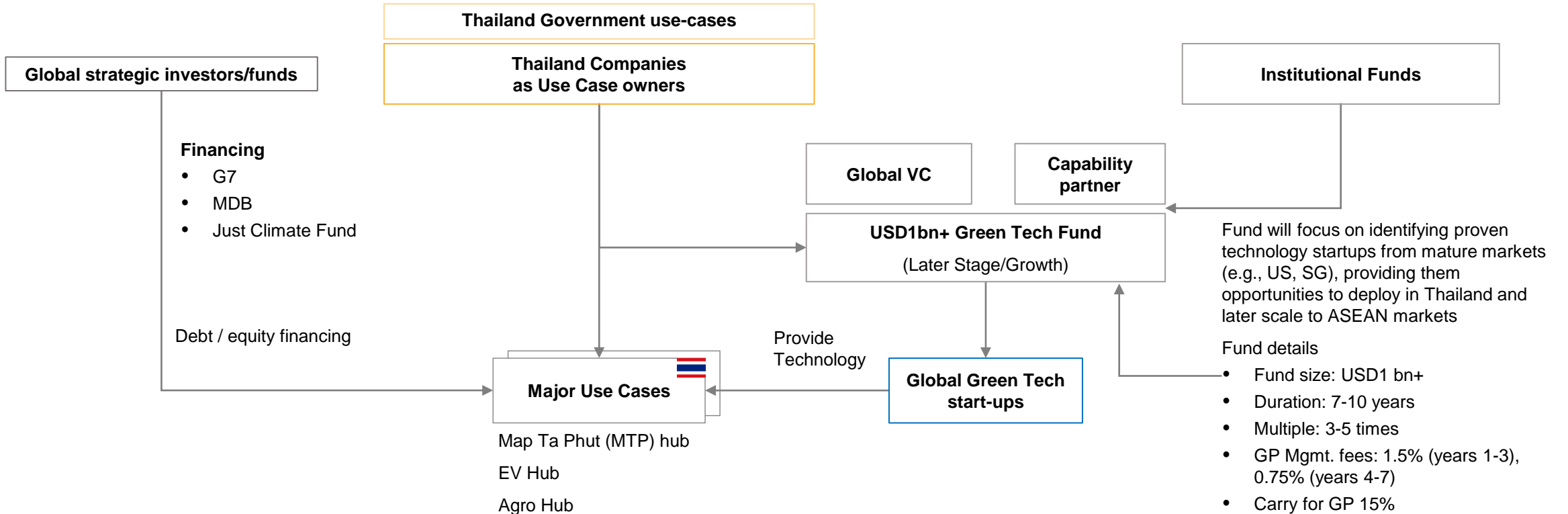
Exhibit 36: There are 3 engines needed to fund the required green investment

Decarbonize “installed base” – existing tech

A) Green Project Financing

Build for the future – new zero carbon tech

B) Green Technology Fund



Accelerate green markets






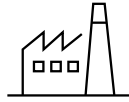



C) Carbon trading mechanism

Exhibit 37: EU Taxonomy Regulation provided unified criteria to qualify as "green", including bonds

EU taxonomy for Sustainable Finance Regulation, July 2020



Technical screening provisions under EU Taxonomy Regulation

Concrete dimensions	Description
Substantial environmental contribution 	Investment to substantially contribute to at least one of the six objectives: <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  Climate change mitigation </div> <div style="text-align: center;">  Climate change adaptation </div> <div style="text-align: center;">  Sustainable use of water and marine resources </div> </div> <div style="display: flex; justify-content: space-around; align-items: flex-start; margin-top: 20px;"> <div style="text-align: center;">  Circular economy </div> <div style="text-align: center;">  Pollution prevention </div> <div style="text-align: center;">  Healthy ecosystem </div> </div>
Do No Significant Harm 	While contributing to one environmental objective, the activity must not significantly harm any of the other five environmental objectives
Minimal safeguards 	Aimed to ensure that all economic activities deemed environmentally sustainable to be carried out complying with minimum safeguards, such as fundamental labour rights

EU Green Bond Standard

- EU Commission's Action Plan calls for the **creation of standards and labels for green financial products**
- Under this voluntary **Green Bond Standard**, regulator would comprise **three critical elements**:

- 1 Alignment with Taxonomy technical screening**
- 2 Mandatory reporting** on allocation of proceeds and impact
- 3 Mandatory verification** by external reviewer (Green Bond Framework and final allocation report)

Exhibit 38: Green tech-fund: BlackRock and Temasek have come together to set up a joint decarbonization fund in Singapore

BlackRock | **TEMASEK**
Decarbonization Partners



Purpose and opportunity

Shared belief that climate transition presents a significant investment opportunity.

In 2021 committed USD 600m to **invest in early-stage growth companies targeting proven technologies that will reduce and potentially eliminate carbon emissions**

That translates into reducing carbon emissions by approx. 1.7 bn tons p.a. to achieve net zero by 2050 thru

Using less (energy efficiency)

Increased clean energy supply (RE, hydrogen)

Removing carbon out of the system (re-forestation, carbon capture, storage)



Investment targets

Drive decarbonization, resource efficiencies, and material and process innovation by making investments in early-stage growth companies which target next-generational **renewable and mobility technologies**, including

Emerging fuel sources

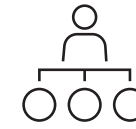
Grid solutions

Battery storage

Electric and autonomous vehicle technologies

Building and manufacturing sectors

As well as companies in **building and manufacturing** sectors.



How they work

Raise third-party capital from investors committed to achieving a net zero world while seeking long-term sustainable financial returns.

Series of late-stage venture capital (VC) and early-growth private equity (PE) investment funds. Goal for 1st fund USD 1bn (incl. from both partners).

Convene scientists, technologists, and thought leaders in sustainability space.

Ensure announced net zero commitments across






Measurement and transparency

Investment management

Investment stewardship

Exhibit 39: Regional markets in Southeast Asia have launched or announced their plans for a voluntary carbon markets

NOT EXHAUSTIVE

Country	Status	Description
	Active 	<ul style="list-style-type: none"> May 2021: SGX, DBS, Standard Chartered and Temasek announce to setup a voluntary global exchange and marketplace for carbon credits (Climate Impact X) 2021: The Green Finance Industry Taskforce (GFIT), convened by MAS has issued a proposed green taxonomy and handbook on implementing environment risk management for financial institutions in Singapore
	Active 	<ul style="list-style-type: none"> 2017: Government Regulation on Environmental Economic Instruments passed which mandates implementation of a compliance trading system by 2024 March 2021: Launch of a voluntary emissions trading trial, participation from 80 coal-fired power plants making up 75% of emissions from power sector Voluntary program is a pilot to familiarize stakeholders with the development of a national ETS, compliance procedures and offset mechanisms
	Announced 	<ul style="list-style-type: none"> Sep 2021: Government agreed to develop a Voluntary Carbon Market as a reference for international carbon credit transactions through cooperation between KASA (Ministry of Environment and Water), Ministry of Finance, and Bursa Malaysia November 2021: Bursa Malaysia launched an international RfP for setting up a voluntary carbon market exchange

Implications for Thailand

- **Increased competition to onboard foreign institutional participants** on Thailand's carbon markets
- + **Possible opportunity to supply high quality carbon credits to regional markets** (e.g., Singapore which lacks geographical area to create carbon credits)



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