

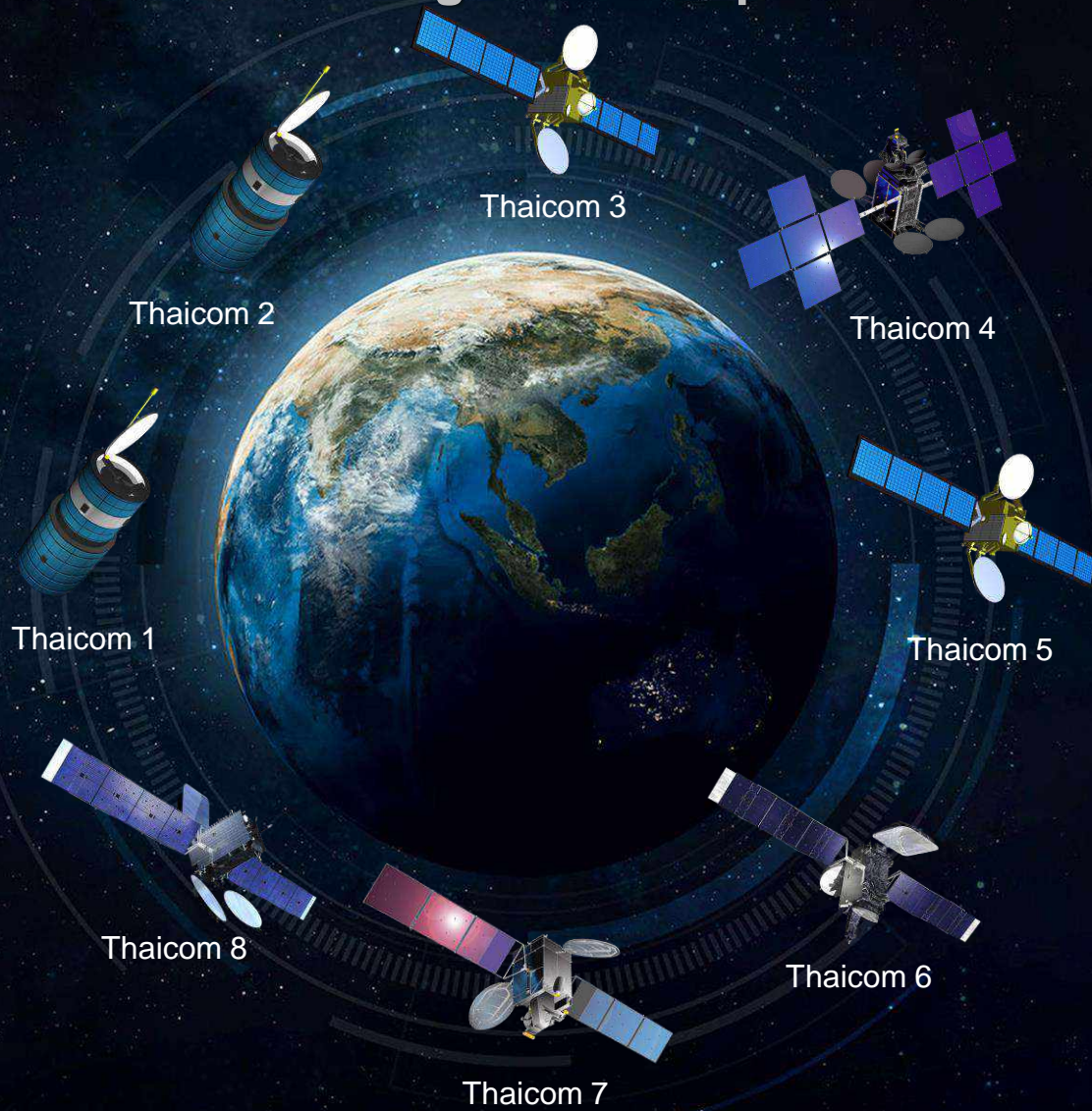
THAICOM PUBLIC COMPANY LIMITED

Sustainability Excellence

01 September 2023

Over the past 30 years...

The Leading Satellite Operator



Our Future...

The Leading Regional Space Tech Company



OUR VISION

To empower people with **Innovative Space Technology** for a better life

Mission



To be the **number one space tech company** in Thailand and one of the top in the region.



To grow our business through **international partnerships**



To build new **digital capabilities** to serve business opportunities of the future



To create value under the principle of **corporate governance** and foster **sustainable development** for all stakeholders.

Core Values

Act like an Owner

Be Dynamic

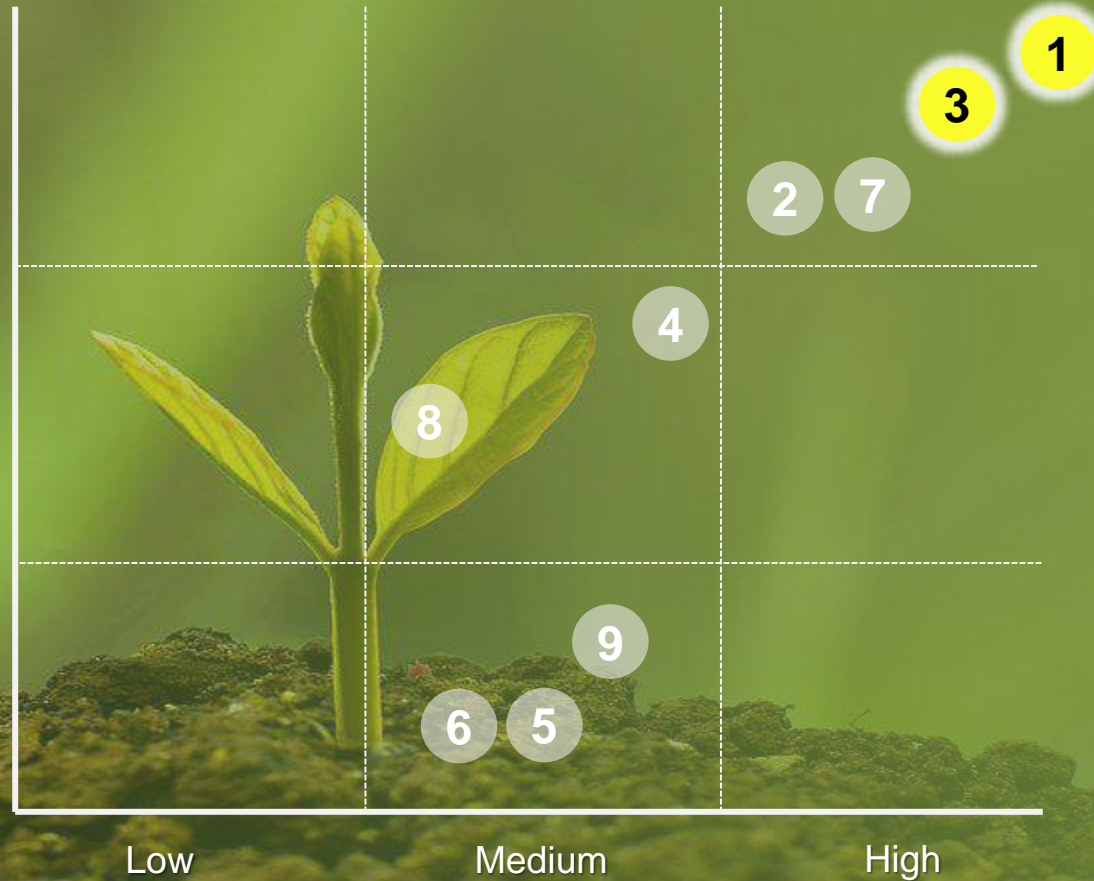
Build Partnership

Strive to be Best-in-Class



1. Managing Material Topics in the Economic Dimension

Importance of an issue to our Stakeholders



Importance of an issue to Thaicom

Economic

**1. Sustainable profitable growth/
Economic performance**

2. Ethical business practices & Good Corporate Governance

**3. Build good relationships with
business partners & regulators**

Environmental

4. Emissions

5. Energy Management

6. Effluents & Waste

Social

7. Employee's Engagement, Well-Being, Quality of Life and Development

8. Data Security & Customer Privacy

9. Community Contribution





CORE SATELLITE BUSINESS

Strategy

To ensure service continuity of broadband businesses and expand to serve additional demands

Goal



Achievements



Secured core satellite businesses through 20-year orbital slot licenses

- 119.5E: broadband services
- 78.5E: hybrid broadcast/broadband



Secured anchor customer, Eutelsat, to lease and operate the service for 50% of the satellite capacity during its lifetime of 16 years

Business expansion in key markets, e.g., India, Philippines, Australia, etc.





NEW SPACE TECHNOLOGY BUSINESS

Strategy

1. To expand business horizon to capture new opportunities in Space Tech
2. To establish Growth Council to drive innovation within the organization

Goal

PHASE I
(2022 - 2023)



Develop New Space Service Platform

PHASE II
(2023 – 2024)



Commercialize New Space Services in Thailand and Region

PHASE III
(2024 onwards)



New Space Service International Expansion

Achievements



Earth Observation Platform for Crop Insurance solutions



Emergency Service Platform through the First Commercial LEO satellite in Thailand



Mobile Tower Inspection platform with Drone technologies



BUSINESS PARTNERS

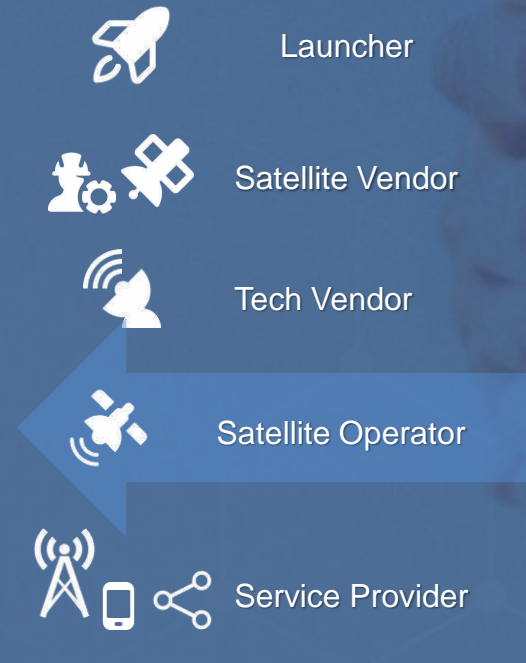
Strategy

To utilize our strong brand equity to seek strong and international partners to strengthen services

Goal

Develop horizontal and vertical integrations to create synergy

Achievements



SPACE X	arianespace arianeGROUP					
AIRBUS	BOEING	THALES	MAXAR	NORTHROP GRUMMAN	ASTRANIS	
KROTOS DEFENSE & SECURITY SOLUTIONS	Gilat	HUGHES	ST Engineering	aws	Orbital Insight	
eUTELSAT	Globalstar	ASIASAT	China Satcom Group	SES	Horizontal Integration	
true	AIS	PSI	nt National Telecom	BSNL Connecting India	NXT DIGITAL	
				HUGHES	nbn	
				SoftBank	KDDI	



REGULATORS

Strategy

To work closely with key regulators to promote and support technologies and drive opportunities in the space economy

Goal

Comply with and contribute to regulations to promote local businesses



Thailand



International



International organizations



India



Malaysia



Japan



Australia



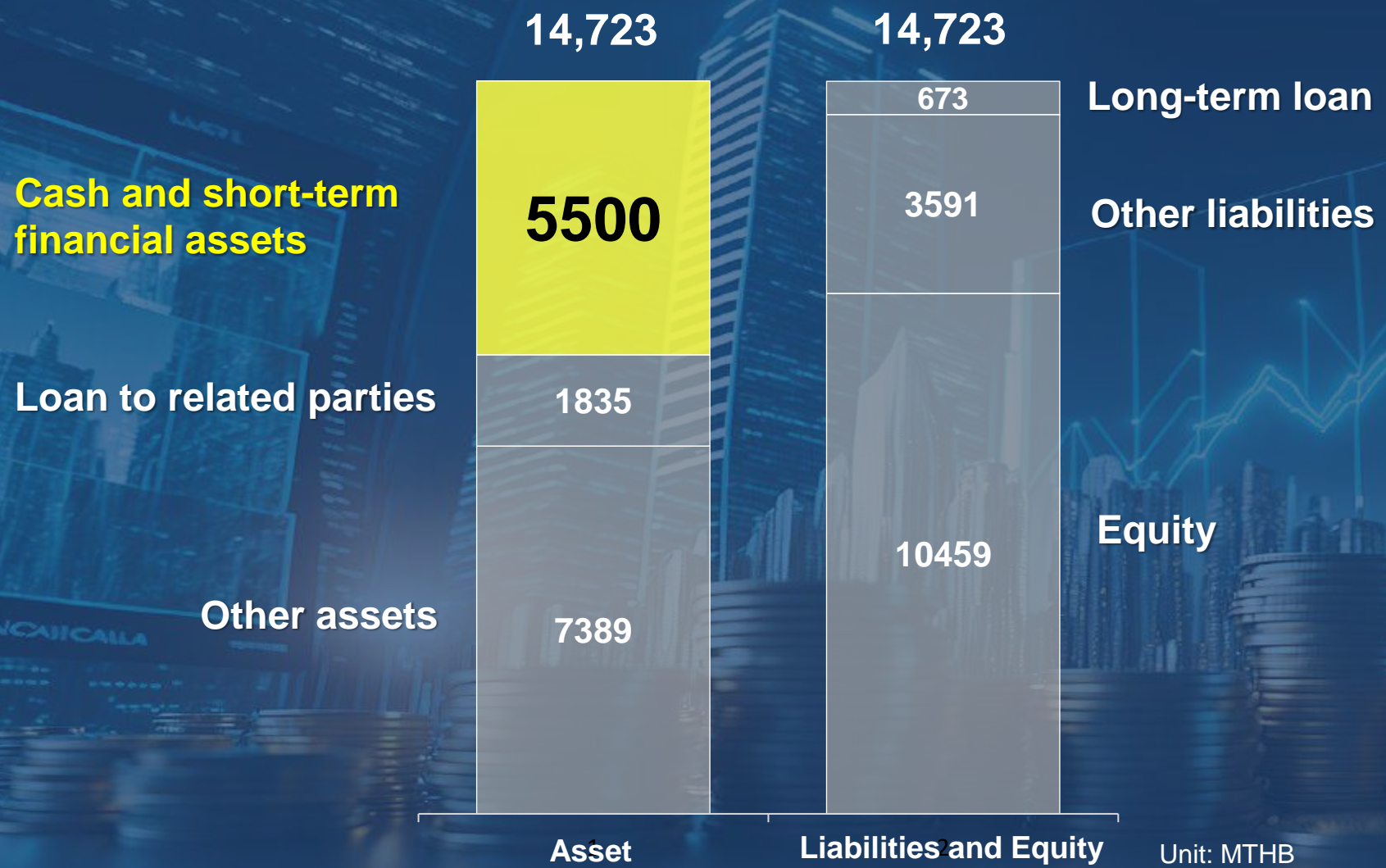
Laos

Achievements

Successful and sustainable business establishments in Asia-Pacific



Strong balance sheet with robust cash position for future investment opportunities



0.4 Debt-to-Equity Ratio

Unit: MTHB

How the Board of Directors drive and monitor the organization



Corporate Committees

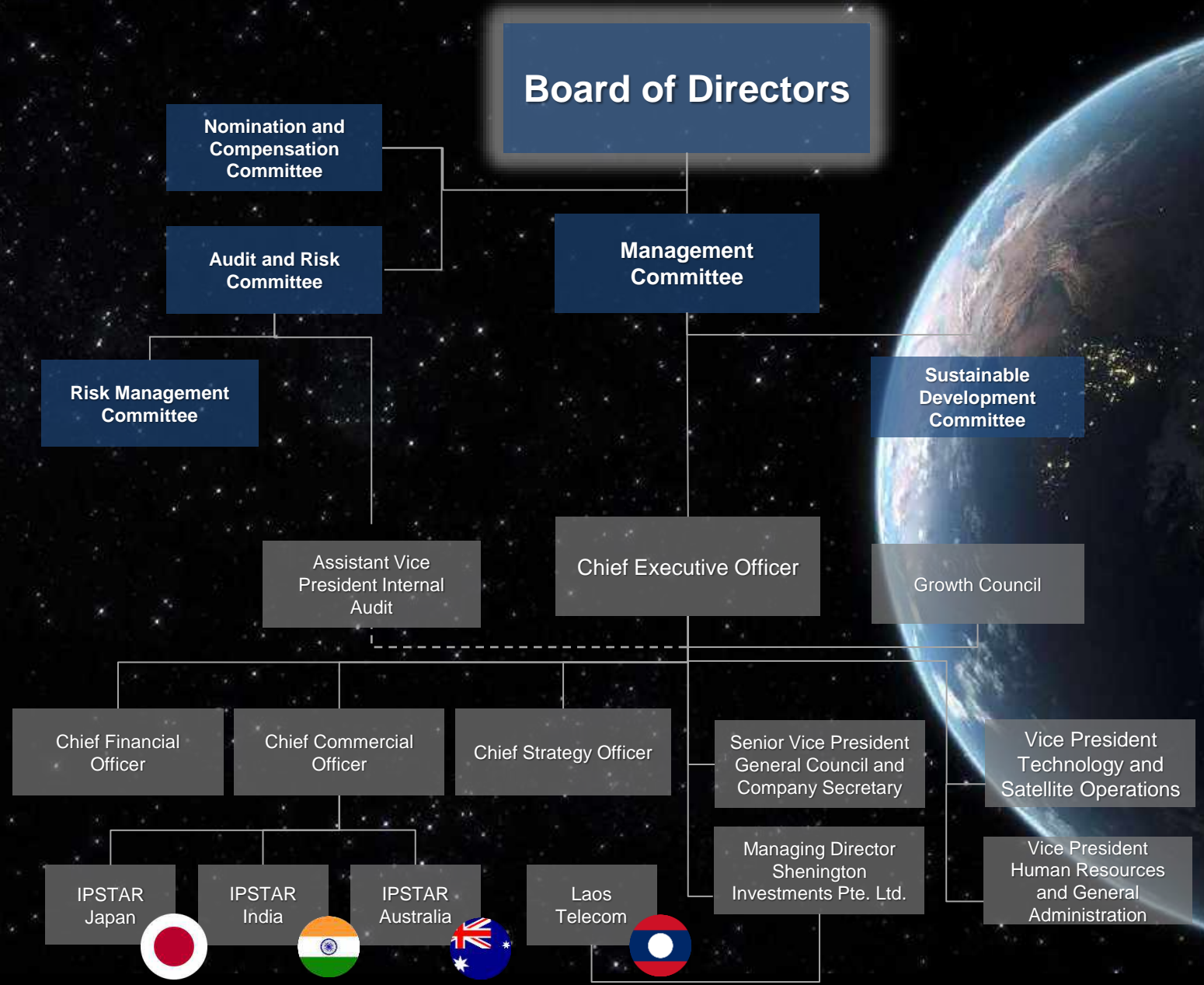
Formulate and drive corporate policies for efficient management

1. Corporate governance policy
2. Code of conduct and relevant guidelines
3. Anti-corruption policy
4. Whistle-blowing policy
5. Misconduct & fraud investigation policy
6. Enterprise Risk Management framework and policy
7. Human resources management policy and regulations
8. Sustainable Development policy

For more information: <https://www.thaicom.net/corporate-governance/corporate-governance-policy/>

Corporate Management

1. Implement and execute the corporate policies
2. Regularly (monthly/quarterly) review and monitor the policy implementation and execution





The Winner of Supplier Awards 2022

ipstar*

By National Broadband Network (NBN) of Australia



2. Managing Risks and Opportunities under Climate Changes



Risk impact for business operations

Physical risks

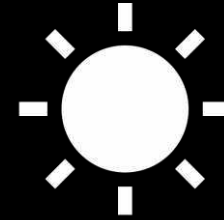


Flooding

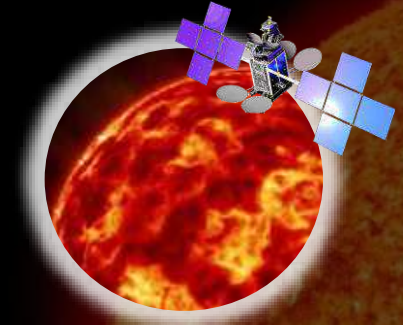


Flood at Thaicom Teleport in Pathum Thani province in 2011

Outer space risks



Solar Flare



Potential impact on the satellite and business operations

Risk management

Thaicom successfully executed contingency plan during the flood in 2011

- ✓ No business interruption
- ✓ Preventive actions to mitigate future risks



Pile Sheet Construction



Monitoring System



BCMS
Business continuity management systems



Backup Station



Robust Satellite Design



Backup Satellite



Satellite Stimulator

Risk management

Thaicom adopts advanced technical solutions to address the impact from solar flares to ensure

- ✓ Service continuity
- ✓ Business sustainability

Transition risks



Technology



Policy & Liability

Mitigation Actions

Adopting green energy technology (solar farm at satellite station)

R&D for climate change technology solutions (carbon credit assessment)

Green House Gas (GHG) verification

Opportunities

Generating new business opportunities through product and service development that positively impacts the environment



Next generation broadband services for rural areas without environmental impact



Carbon credit assessment solution

Cooperation between business and non-governmental organizations to promote sustainable development



Crop insurance solutions



Disaster monitoring platform

Our strategies and mid & long-term goals

Strategies

1. To provide products and services in responses to climate changes

2. To adopt green business principles

- Energy conservation and alternative energy
- Water usage and wastewater management
- Green House Gas (GHG) management
- Green workplace (Effluent and wastes)



Goals

2030
YEAR

GHG Reduction
30%

2050
YEAR

Carbon Neutrality
CO₂ (Country Benchmark)

* 3.75% GHG Reduction rate for each year (base year 2022)

GHG emission reduction plan

2030
YEAR

-28% Renewable energy

-2% Energy efficiency

70% GHG emission

2050
YEAR

-50% Renewable energy

-35% CO₂ offset

-15% Reforestation, EV car, and others



Thaicom Greenhouse Gas (GHG) emission



TARGET

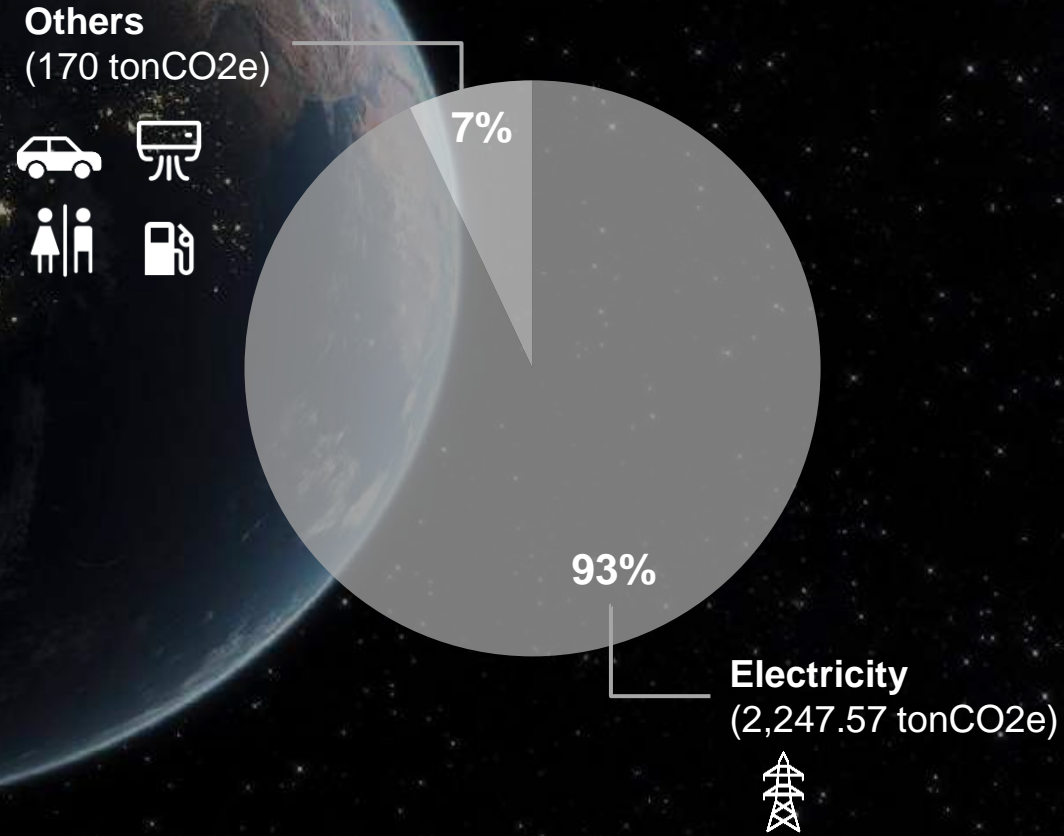
2030

Reduction of GHG emission
30% from base year (2022)

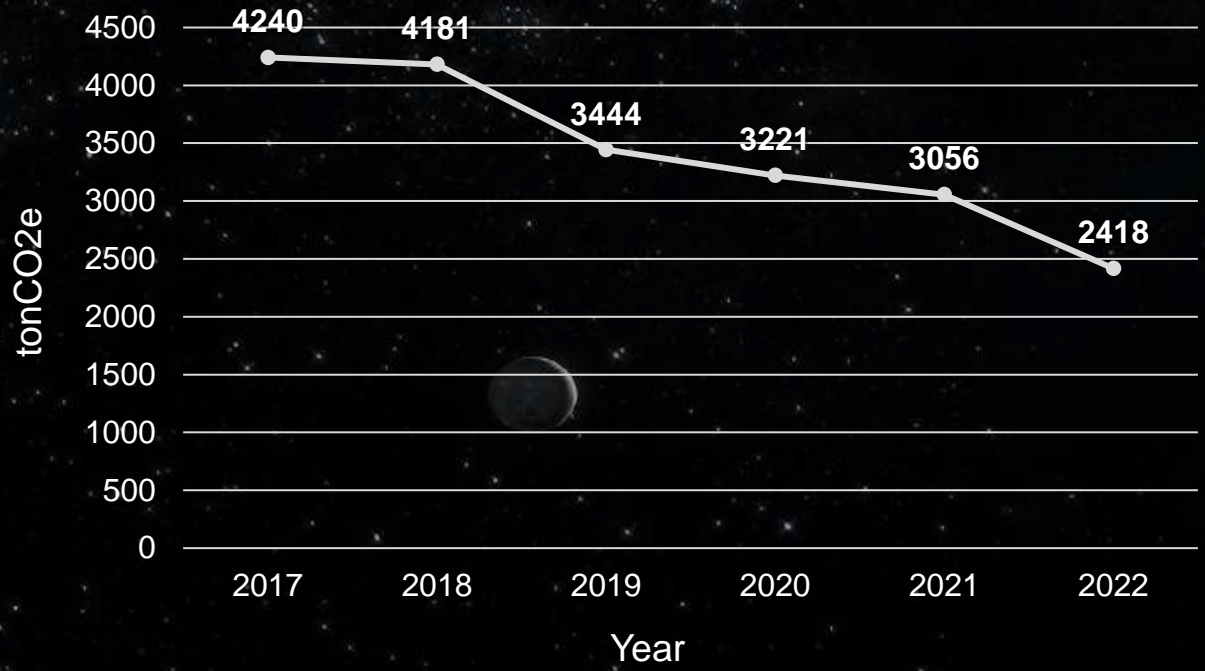
2050

Carbon
Neutrality

Thaicom GHG Emission in 2022

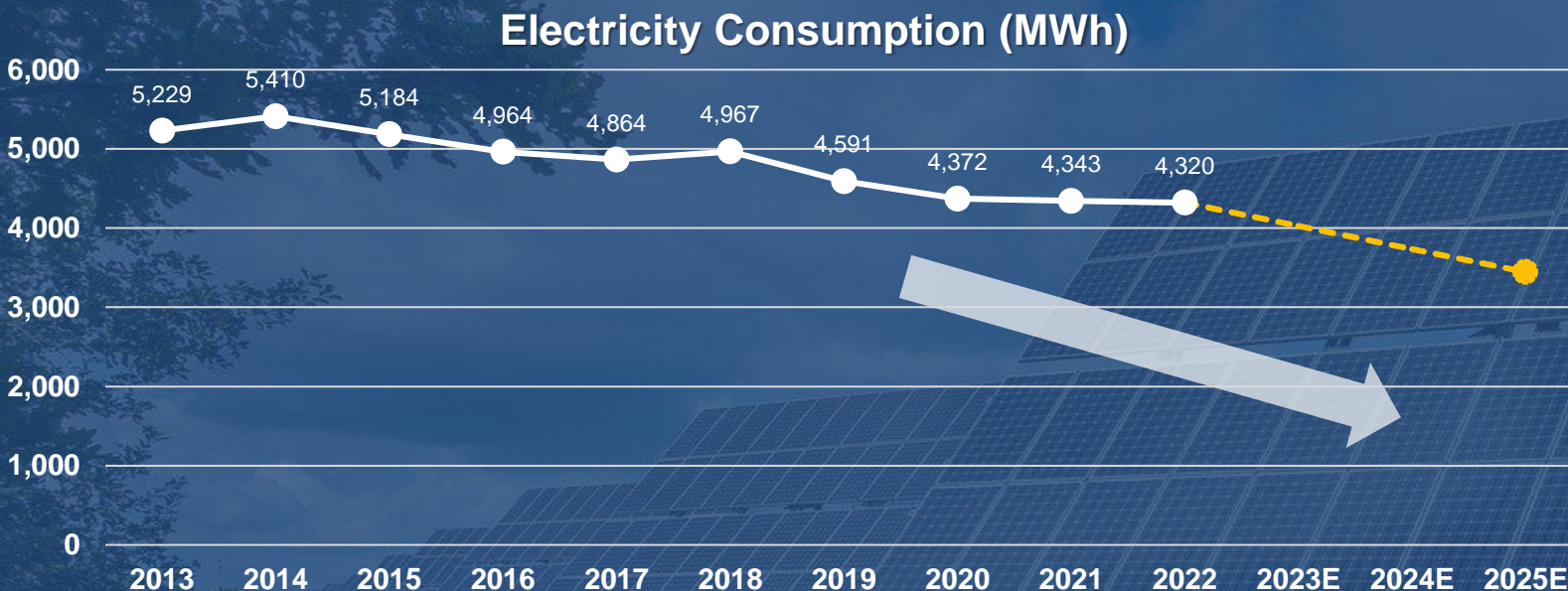


Thaicom GHG Emission (2017 – 2022)



Energy conservation and alternative energy

Energy Saving 1,090 MWh From 2014 -2022



Solar panel installation at Thaicom Satellite Station in Pathum Thani (Q1 2024)



THAICOM PPA
(Power Purchasing Agreement)
Annual estimated energy production: 876.40 MWh/year
(Installed capacity: 0.690 MW)



CO2 Reduction for 20 Years
8,762.20 TonCO2e
(438.11 TonCO2e/year)



Equivalent to Growing
584,146 - 973,578 plants



AC Units Replacement
Energy Saving 196,890 kWh/year
CO2 Reduction 98,425 kgCO2e



20 Sets Cooling pad Installation
Energy Saving 145,069 kWh/year
CO2 Reduction 72,520 kgCO2e



2 Electric transformer Replacement and combined transformer loads
Energy Saving 14,788 kWh/year
CO2 Reduction 7,393 kgCO2e



On grid Solar cell 20kWp Installation phase I,II,III
Energy Saving 109,500 kWh/year
CO2 Reduction 54,739 kgCO2e



LED Replacement
Energy Saving 36,605 kWh/year
CO2 Reduction 18,299 kgCO2e



AC Cleaning CDU and Filter
Energy Saving 136,827 kWh/year
CO2 Reduction 68,400 kgCO2e

3. Sustainable Corporate Social Responsibility



Our businesses always support rural communities and disaster relief at regional and international levels



Government project to provide **digital technology access** to connect **24 rural communities** for **lifelong education initiatives**



Government project connected **1,407 remote villages** & provided internet access to people in most difficult terrains in India.



Awarded **5-year contract** for **National Broadband Network (NBN)** project from the government to provide internet access to rural Australia.



Backup communications system provided mobile connectivity during **Earthquake and Tsunami** in Japan



Provided **internet access** to the affected residents and for rescuer team for **disaster recovery** for an **earthquake** at **Cianjur (West Java)**.



Established **emergency communications** to the community with a total population of **over 700,000** after **Super Typhoon Haiyan**



THAICOM connects the unconnected people through digital technology for lifelong education (4 สอ)



Communications
Rural Internet Access



Health
Telemedicine



Education
Long Distance Learning



Environment
Community Forest Management



Ensure healthy lives and promote well-being for all at all ages



Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all



Reduce inequality within and among countries



Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss



Goal

Short Term
2023

Expansion of technology access to reach 24 communities

Long Term
2026

Expansion to cover remaining segments including health, education, and environment

Digital technology access for rural communities



Broadband internet access through Thaicom's satellites for rural people and communities

- ✓ 14 communities (3,922 people) in 2022
- ✓ 24 communities (6,890 people) in 2023



- ✓ Community development
- ✓ Quality of life improvement
- ✓ Promote social equality
- ✓ Healthcare and environmental management
- ✓ Career/professional development

Professional trainings for public and technical institutions

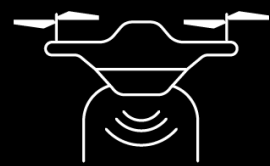
Wiang Pa Pao technical college
✓ 50 students

Maesod technical college
✓ 48 students

Office of the Non-Formal and Informal Education, Chiang Mai
✓ 25 students



- ✓ **Thaicom Express Net/Wi-Fi installation and maintenance**
- ✓ **Agricultural drone control and maintenance**



Online learning platform for hearing-impaired children at Setsatian school for the deaf

✓ 79 Online Lessons

✓ 158 Students (Online 97% / On site 3%)



Due to the teaching suspension during the lock-down period, the students were **unable to attend regular classes** and were **unable to study via the DLTV (Distance Learning TV) channels**.

✓ **Equal opportunities for education**

✓ **Continuously supporting other education initiatives**

Thaicom's contributions in expert knowledge and insights to increase the public awareness on Global and Thai space economy development



SATELLITE 2023
Washington DC, USA

Panel Discussion on the topic: Can Satellites Fulfill the Increasing, Insatiable Demand to Extend 3G, 4G LTE, & 5G Beyond Cities?



APSCC 2022
Seoul, South Korea

Panel Discussion on Asian Satellite Operators: The emergence of a new dynamic in the region



ITU Telecom World

Academic Conference of Collaborating in the Digital Economy



Thailand Connex

Panel Discussion on The Next Generation of Connectivity (X) in Asia



27th Insurance Seminar organized by TGIA

Knowledge Sharing Session on Challenges and Critical Success Factors for Digital Transformation



MIT Media Lab Southeast Asia Forum

Panel discussion on Defying Gravity: From Space Exploration to Democratization

Note: APSCC is Asia-Pacific Satellite Communications Council

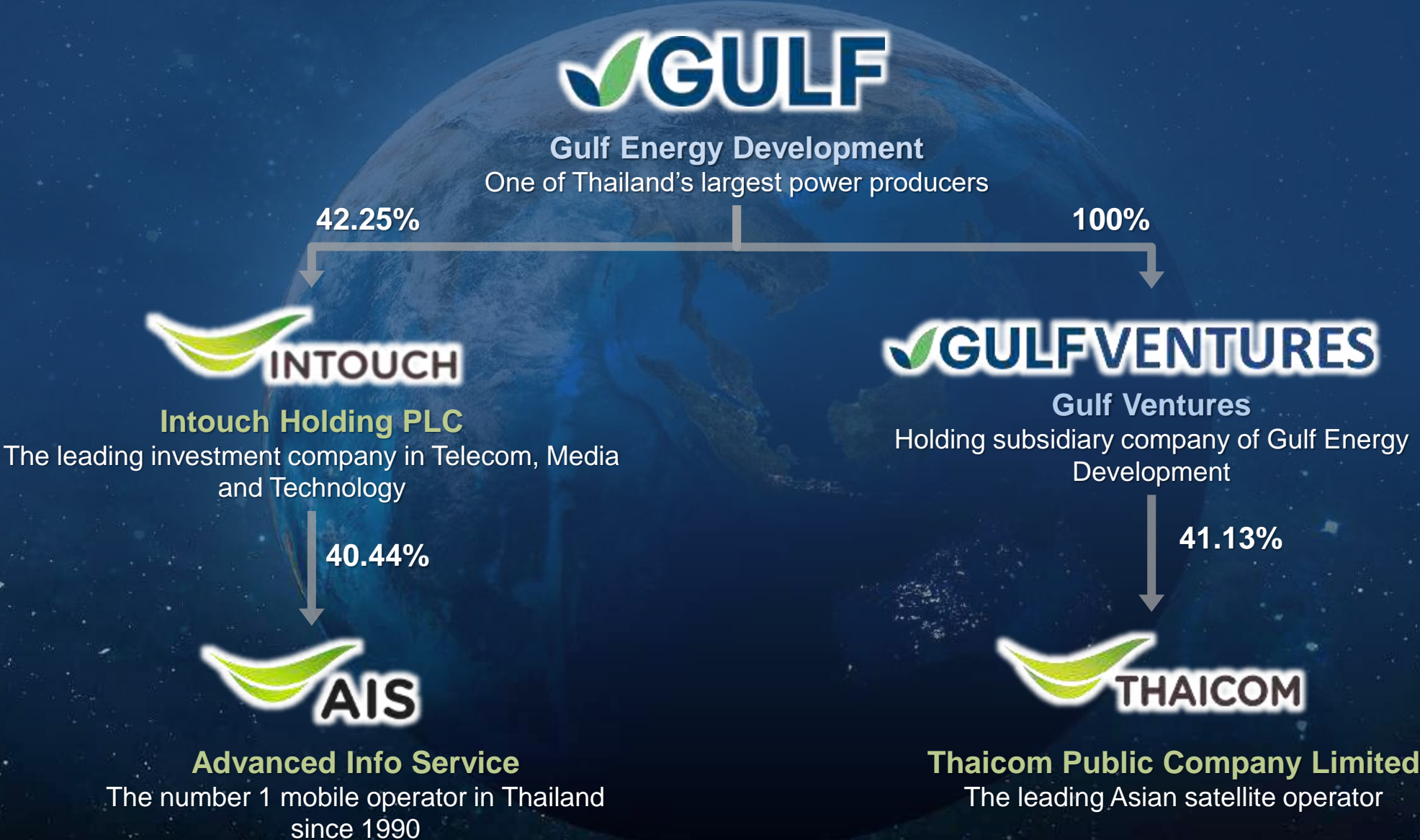
Q&A

THAICOM PUBLIC COMPANY LIMITED

Appendix

01 September 2023

Corporate Shareholding Structure



THAICOM is a world leading satellite operator providing services in Asia-Pacific.



30+

Years of Experiences



8

Satellites Launched



10+

Local Presences in
Asia-Pacific
Countries



Worldwide

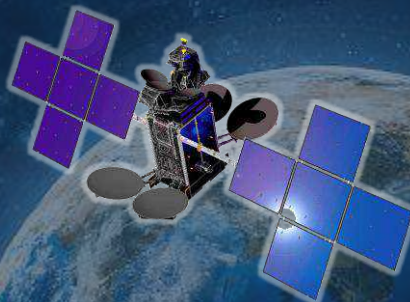
Customers in Asia-
Pacific, Africa, and
Europe



20+

Workforce
Nationalities

Satellite Broadband



Pioneer

World's First High Throughput Satellite
(HTS) : IPSTAR (THAICOM 4)

Satellite Broadcast



Pioneer

Asia's First Ku-band Direct-to-Home (DTH)
broadcasting in Asia



SATELLITE COMMUNICATIONS

END-TO-END SATELLITE SOLUTIONS



Government



Cellular
Backhaul



Residential

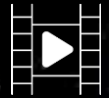


Maritime

BROADBAND



Satellite TV
DTH and
Distribution



Satellite Capacity

VIDEO

NEW SPACE TECH SOLUTIONS



Agriculture



Government



Enterprise



Carbon Credit

EARTH INSIGHTS
(GEOSPATIAL DATA ANALYTICS)



Agriculture



Enterprise

DRONE ANALYTICS



IoT solutions

INTERNET OF THINGS
(IoT)

NEW SPACE TECH

Doing Business with Responsibility

1. Strategize partnerships to ensure long-term business sustainability
2. Develop innovative products and services, and new businesses

Caring for People and Society

1. Develop employees' skills, working performance, and knowledge
2. Promote employee well-being and engagement
3. Launch Corporate Social Responsibility (CSR) project for promoting education
4. Promote innovations and projects to create learning opportunities and access to digital technology

Thaicom loves Earth

1. Energy conservation and alternative energy
2. Water usage and wastewater management
3. Green House Gas (GHG) management
4. Green workplace (Effluent and wastes)