

Climate Chatter

Carbon Credits & Carbon Pricing in Asia Pacific

27 May 2020



Welcome to our Climate Chatter - Carbon Credits & Carbon Pricing in Asia Pacific

Default audio setting: mute on joining

Questions via the **Question box** are welcome at any time

Technical support: we will aim to resolve ASAP

Topic-related questions for the discussion: Q&A at the end. If we cannot answer your question in the Q&A we will get in touch via email

Many of us are broadcasting from **our homes**. Please bear with us in case of technical issues



Carbon offsetting is essential to tackling climate change

If the world is to achieve net-zero emissions, then offsets are part of the plan



World's carbon markets grow 34% in value to \$215 billion in 2019 -report

 carbon-pulse.com/90631

In a report published Wednesday, the company said the value of almost every major carbon market worldwide had increased markedly year-on-year, in spite of overall trading volumes dipping by some 370 million tonnes or 4% to 8.73 billion tonnes.



REUTERS

ENVIRONMENT JANUARY 25, 2020 / 1:43 AM / 4 MONTHS AGO

Global carbon trading turnover at record \$214 billion last year: research

Who We Are

South Pole helps clients address climate change impacts, while mitigating risk and creating value on their sustainability journey

Innovative Solutions

An award winning, 14-year history of providing sustainability solutions

Diverse Expertise

Across 19 offices, our team of 350+ sustainability advisors, scientists, and engineers are leading experts in their fields

Project Developer

Largest developer of emission reduction projects globally

Your Panel

Host



Leah Wieczorek

Business Development Manager - Asia
South Pole

Speakers



John Davis

Commercial Director - Asia Pacific
South Pole



Jeff Swartz

**Director Climate Policy
and Carbon Pricing**
South Pole



Peter Zaman

Partner
Reed Smith

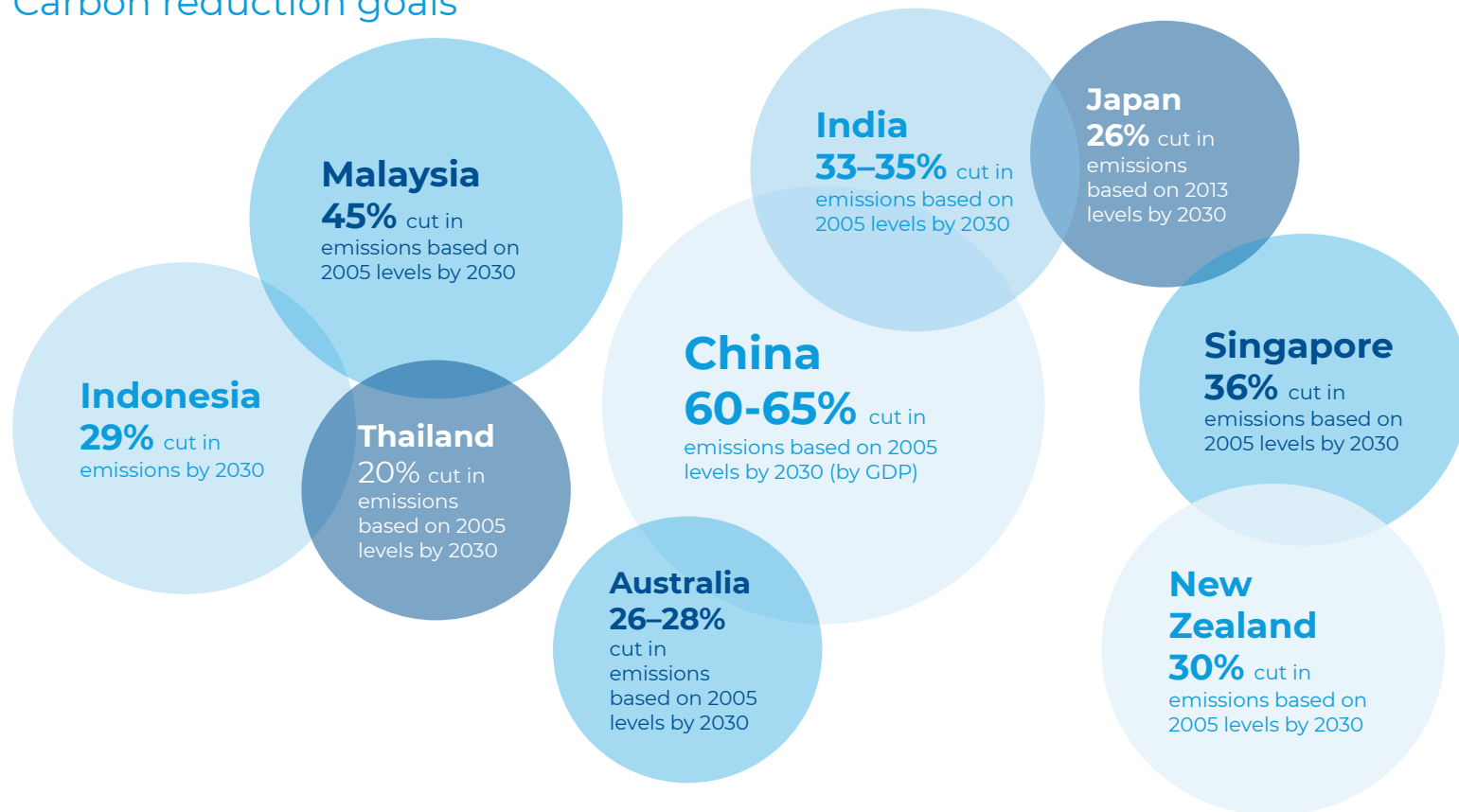
Climate Ambition and Voluntary Carbon Market Trends in Asia Pacific

John Davis



Commitments by country in Asia

Carbon reduction goals



What's happening to countries' financial systems in Asia Pacific?

Some examples of environmental governance and disclosure

Growing commitments across APAC stock exchanges, with trends towards ESG and climate risk disclosure led by Hong Kong:

Hong Kong — listed companies display sustainability credentials

- **China** — listed companies must display ESG status

Singapore — SGX listed companies must integrate ESG

- **Australia** — ASX listed companies encouraged to report on material climate risks

Integration of sustainability issues into green regulation and stock exchanges also happening in **Indonesia and Thailand**

Climate Ambition - Net Zero

Big business, investors & governments

Supply chain impact of Net Zero & 2 degree aligned companies in Asia Pacific



RioTinto

Asset Owner and bank commitments

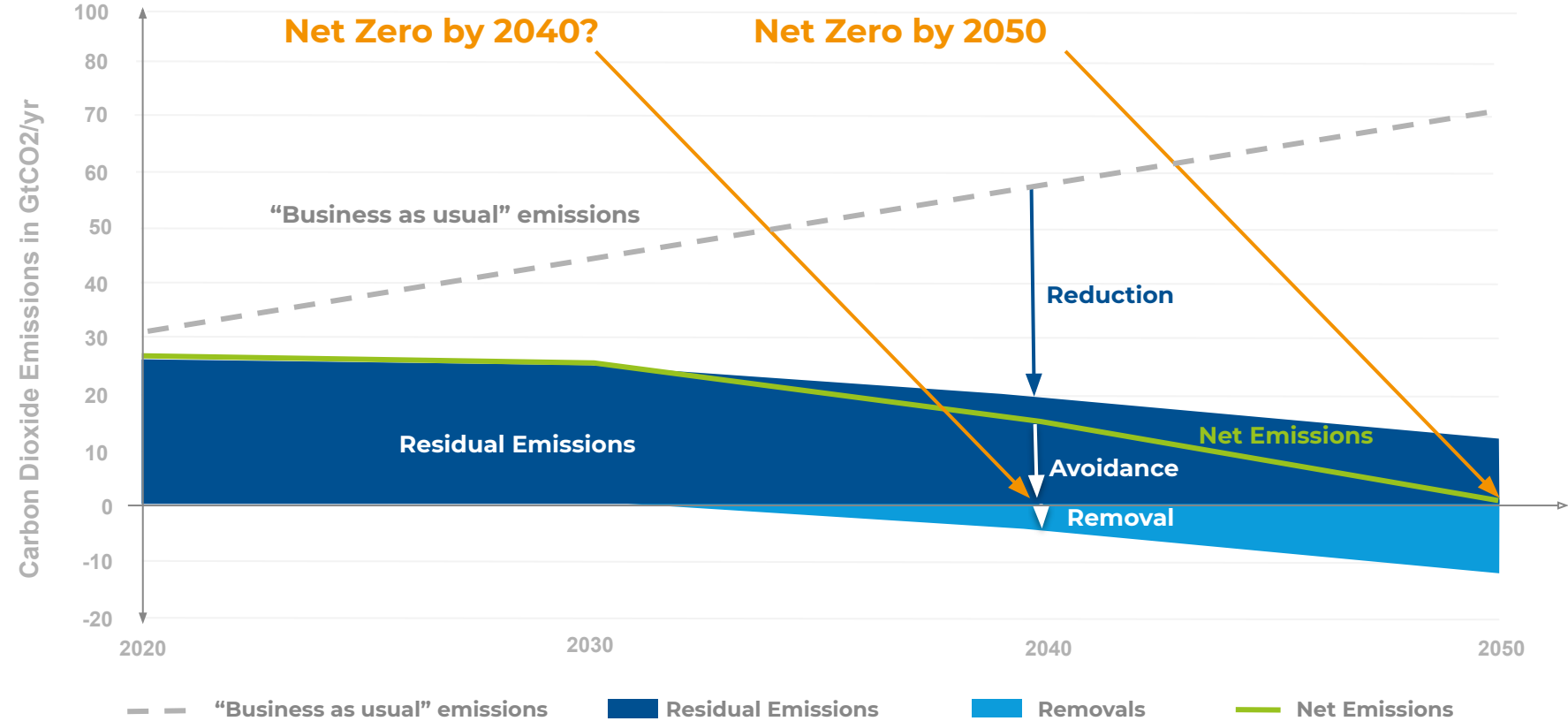


AustralianSuper

TEMASEK



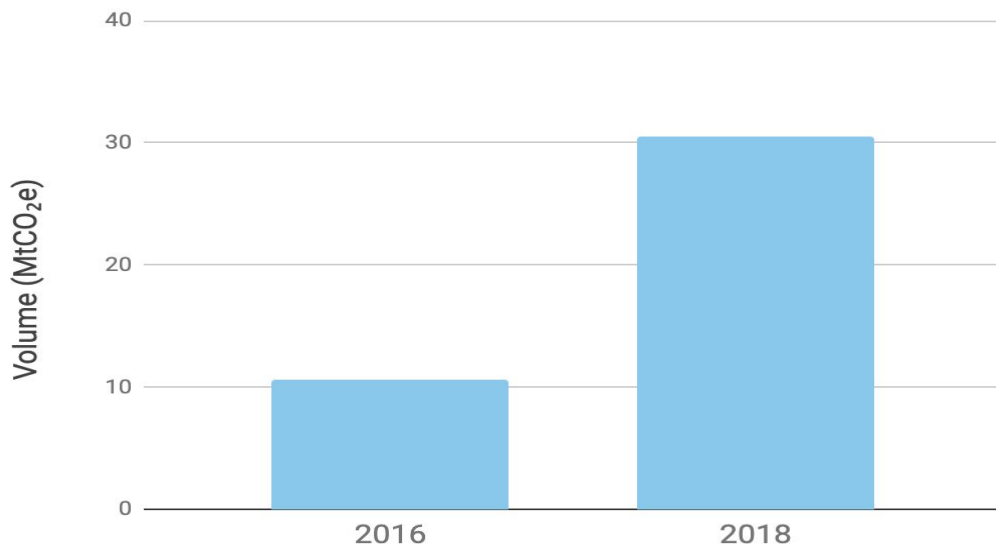
Visualising Net Zero



Trends in the Voluntary Carbon Market

Nature-based solutions (NbSs)

Volume of offsets from REDD+ projects: 2016 vs. 2018



(Source: Ecosystem Marketplace (2019), [Financing Emissions Reductions for the Future](#))

**Protect,
Sustainably manage &
Restore**

natural or modified
ecosystems (...) providing

**human well-being and
biodiversity benefits**

Carbon offsets as a SDG conveyor

Environmental SDGs are the foundation on which social and economic progress is built



What's happening in the voluntary space?

Main takeaways

We are currently witnessing a surprisingly optimistic response to a huge economic downturn

Market movement

- Asset owners
- Large multinationals in industries without many immediate carbon reduction technologies

Mandates

- Market assessments on offsets and integration of net zero strategies
- Local impact vs economic impact
- Permanent sequestration
- Long term offtake

Carbon Pricing in Asia

Jeff Swartz



Carbon Market Overview

Global corporate support for climate action is increasing

Carbon Market Size and Trajectory¹:

Offset since **2005**: Over **437.1 million tonnes CO₂e**

Global Offset **2018**: **98.4 million tonnes of CO₂e**

17% of companies use **offsetting as part of their carbon reduction strategy**

Nearly **¼ of all Fortune 500** global companies have made a public commitment that they are, or by 2030 will be, **carbon neutral**²

***Note:** supply/demand figures come from listed publications or South Pole's own data points. Most figures are pre-COVID.*

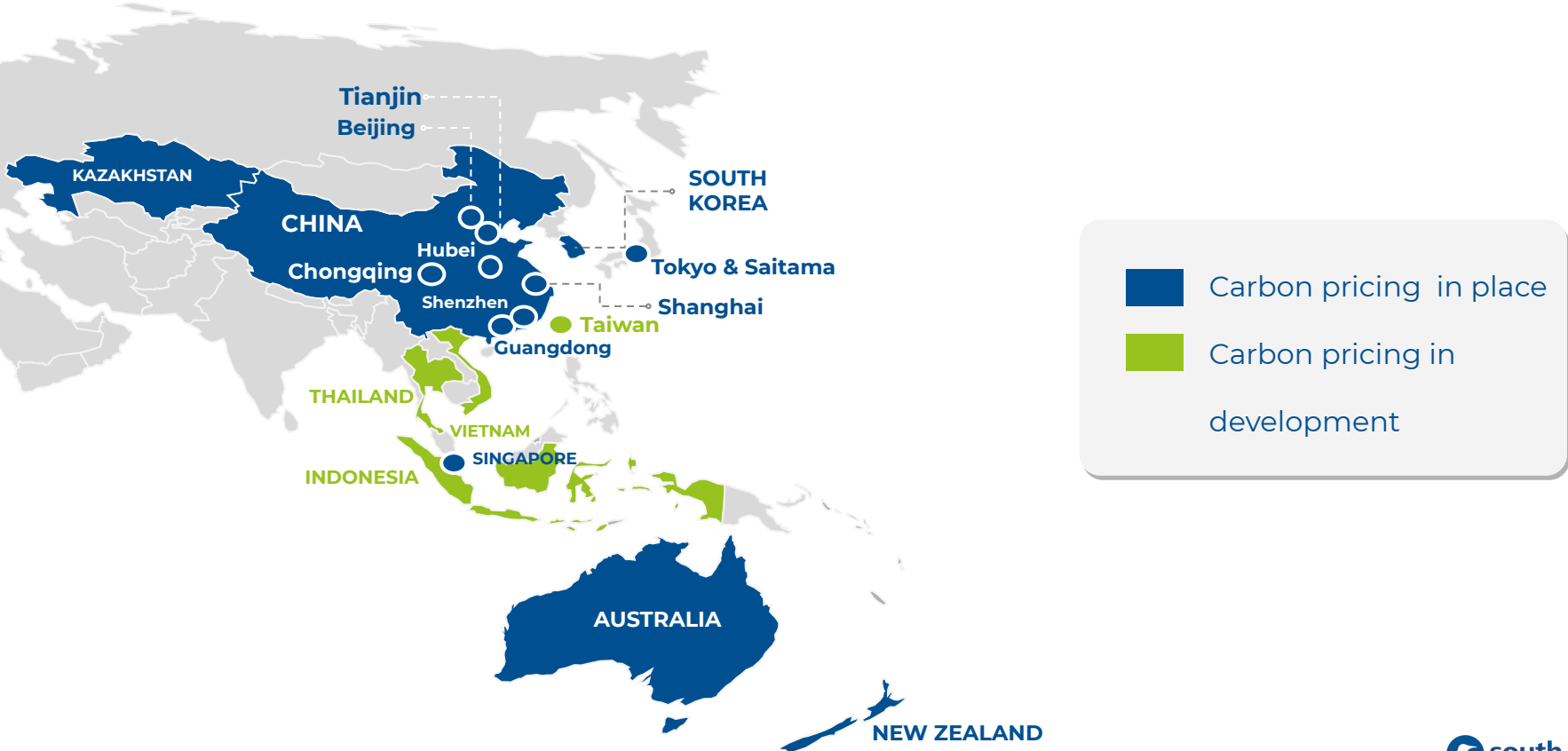
Major public/private held carbon credit buyers:



¹ Sources: South Pole; Forest Trends Market Report 2017; Ecosystem Marketplace

² Carbon neutrality is achieved by calculating a carbon footprint, and reducing it to zero through a combination of in-house efficiency measures and supporting external emissions reduction projects (i.e. offsetting)

Carbon Pricing in Asia Pacific



What's happening in Asia?

Carbon pricing activity is growing

In Force

China

- **8 pilot** ETS's
- national **ETS evolving** covering +3 billion CO2 emissions.
- Prices mostly **below \$5**

South Korea

- **Phase III** of ETS will begin in **2021**
- Allowance trading will expand
- Prices **above \$15**
- **Offsets** allowed with **restrictions**

Singapore:

- Carbon tax **since 2019** with prices at **\$5**
- Expected to eventually include **offsets, or shift to carbon market**

Under Consideration

Indonesia:

- ETS plan to be in **operation by 2024**.
- Stakeholder consultation and draft plans in place

Vietnam:

- Exploring ETS and carbon tax.

Thailand:

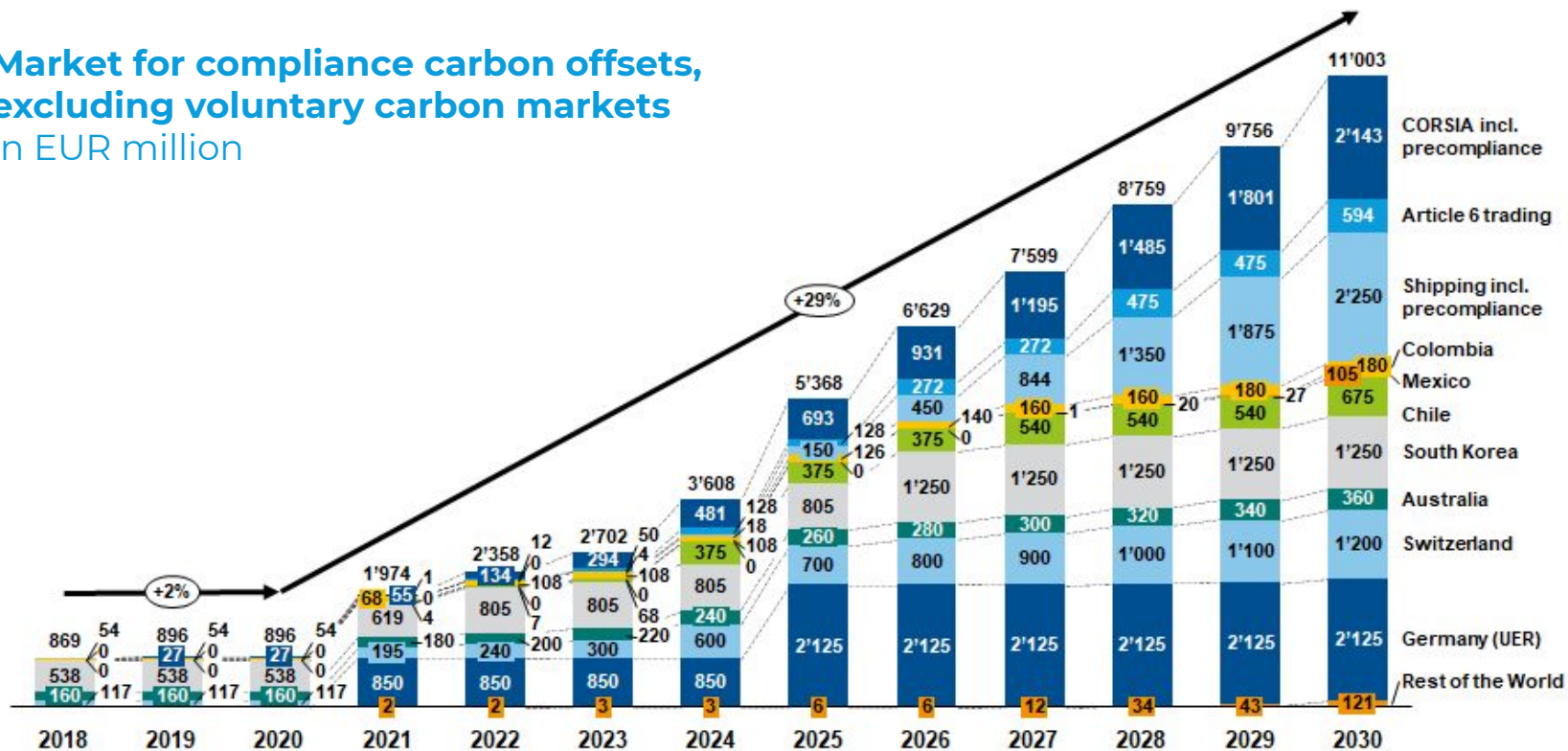
- Voluntary system in place, carbon market under development.

Taiwan:

- ETS under development since 2017.

Context: Many Compliance Markets accept or are based on Project Certificates

Market for compliance carbon offsets,
excluding voluntary carbon markets
in EUR million



Source: South Pole, based on various publications

Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA)



Overview

Enforces **carbon neutral** growth for the aviation sector from 2020 on

- Likely to **increase** carbon offset demand
- Estimation that airlines will need to offset ~**2.5 billion** tons of CO₂ from 2021–2035 to comply with CORSIA



Country participation

Phases of Country participation in CORSIA

Voluntary from 2021–2026

Mandatory from 2027–2035 — with very few exceptions

Intended APAC participation

- | | | |
|---------------------|---------------------|--------------|
| 1. Australia | 6. New Zealand | 11. Thailand |
| 2. Indonesia | 7. Papua New Guinea | |
| 3. Japan | 8. Philippines | |
| 4. Malaysia | 9. Singapore | |
| 5. Marshall Islands | 10. South Korea | |

ž' J b! > J b x' | J m | J ö

" Ä D! ž! ö! ž! Ö! ž ö b

ž' J b! > J b x' |

ö ž x! | | | J ö L

" a x; ! Ú J | ' J m <

ö ž x m k ö ž ^!'

> ž x [! ' | J m | J ö

x ¼ b > x' ! m' J ö b b Ů

• ¼ ö b J; Ů ¼ m ! ž

ž' J b!

² x ¼ ž ! F m ö m | ö > ! x; ž' J b! S J b x' | G y x ž J X m J' J ö' J Ö! ; x ž ! x x > ! ž ö' J Ö! > > ž x ö D! | ö m ! b

ž'J b! >Jbx'| Jm ÀDöJbö m

ÀD! ²RXIÀ šžx[! 'F öm ž'J b! >Jbx' >žxkx'Jm< !b! 'žJ Ô!DJ b!|

²RXIÀ a šžx[! '

JkF

a a! ¼ ! 'žö m|>xž' !kJ||Jxm|
a !b!žö'! JmÔ!|'k!m' Jm'x
!a J^!| öm Jm;žö|'ž¼ '¼ž!
ÀDöJbö m L

w!ö m|F

a XÄw„ ëmöm Jm<
a ²¼>>xž'Jm< ÀDöJ
<xÔ!žmk!m'| xkkJ'k!m'
'x !akx JbJ'Û Ä bJkó'!
>xbJ Û 'öž<!'|L

ReedSmith

ž'J b! x; 'D! š ö ž J | < ž !! k ! m
X k > ö ' x m | ¼ > > b Ů Ä ! k ö m

Paris Agreement market mechanisms

Article 6.2

- Cooperative Approaches (CA) involving at least two Paris Agreement parties
- Transfer of ITMOs (Internationally Transferred Mitigation Outcomes)
- Used towards meeting NDCs
- Unlimited scope in terms of types of activities that can qualify as a CA

Article 6.4

- Establishes the Sustainable Development Mechanism (SDM) generating Art 6.4 credits.
- Centrally managed by the Secretariat for the UNFCCC
- Limited in scope to mitigation activities
- Unlike CDM, any country can be the host of an SDM activity

Once operational, it is envisaged that CA or the host countries of SDM, will create supply of ITMOs and Art 6.4 credits to countries that need credits to meet their PA, NDC obligations.

The Inside NDC / Outside NDC debate

Every 5 years, countries must publish a Nationally Determined Contribution (“NDC”)

Each NDC must increase in scope (greenhouse gases) and coverage (sectors and sources) every 5 years

The question is, in order to qualify for CA or SDC, does the scope and coverage of the activity have to be Inside the NDC of the host country, or can it also be Outside NDC?

Question resolved by the ‘Article 6 Guidelines’ – hopefully by a date TBC in 2021 at COP26 in Glasgow

If Article 6 activity must be from scope and sectors Inside NDC only, then any potential project activity that is Inside NDC become essentially an asset for that host country because of their potential to be activities under CA or SDM.

The Inside NDC / Outside NDC debate

Both mechanisms at inter-governmental level — SDM allows for private sector participation but CA is silent. Past experience says, access to SDM or CA will be through government approval process (e.g. LOA under the CDM)

Current draft of the Art 6 Guidelines contemplate that there may be a category of Mitigation Outcomes used towards Other International Mitigation Purposes (e.g. ICAO)

So what is to happen to voluntary projects that currently sit in areas covered by the NDCs once the NDC periods begin from 2021?

At a minimum, voluntary projects that fall within a host country's NDC will be subject to host country approval process and monitoring and reporting

Nationalisation risk exists where a country wishes to have full control of its carbon inventory (e.g. China during the years of the CDM).

What markets may look like

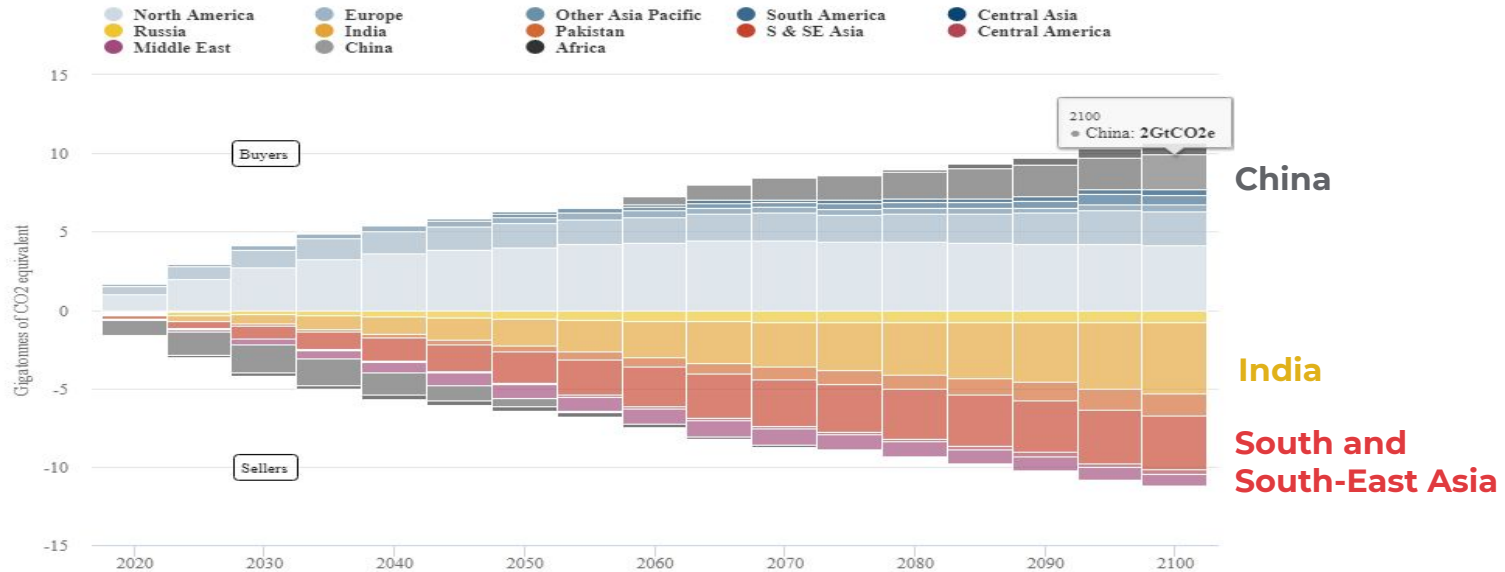
Inside Paris Agreement		Outside Paris Agreement
Inside NDC	Outside NDC	
Cooperative Approaches (CA)	Voluntary Markets (VCS, GS, CCB etc.)	Voluntary Markets
Sustainable Development Mechanism (SDM)	ICAO/CORSIA [CA?] [SDM?]	[ICAO/CORSIA?]

What markets may look like (longer term)

Inside Paris Agreement		Outside Paris Agreement
Inside NDC	Outside NDC	
Cooperative Approaches (CA) Sustainable Development Mechanism (SDM)	Voluntary Markets (VCS, GS, CCB etc.) ICAO/CORSIA [CA?] [SDM?]	Voluntary Markets [ICAO/CORSIA?]

Net buyers versus net sellers

Carbon credit **buyers** and **sellers** in a modelled Article 6.4 global market



Q&A session



Upcoming Climate Chatter

- **Greenhouse Gas Calculation & Assurance**
Date: 9th June
- **Building resilient supply chains**
Date: 18th June

More will be announced shortly...



More information: <https://www.southpole.com/climate-chatter>

Thank you for joining us!

Feel free to get in touch



Leah Wiczorek

**Business Development
Manager - Asia**

South Pole
l.wiczorek@southpole.com



Jeff Swartz

**Director Climate Policy
and Carbon Pricing**

South Pole
j.swartz@southpole.com



Peter Zaman

Partner
Reed Smith
pzaman@reedsmith.com



John Davis

**Commercial Director
Asia Pacific**

South Pole
j.davis@southpole.com



Offices & Global Representations:

*Amsterdam, Bangkok, Beijing, Bogotá, Hanoi, Jakarta, London, Madrid, Medellín, Melbourne, Mexico City,
New Delhi, New York, San Francisco, Singapore, Stockholm, Sydney & Zurich*
