

OFFICIAL OPEN

# **Singapore's Institutional Arrangements for Climate Change**

# Singapore's approach to Climate Change

Our national circumstances limit our solution space



## Dense Urban Landscape

- High population density of 7,800 per sq km
- Low-lying, highly urbanised island-state
- Accommodate housing, commercial centres, air/sea ports, etc.



## Limited Alternative Energy Options

- Geography not suitable for hydro, wind and geothermal
- Solar energy limited by intermittency and land constraints
- 95% electricity generated from natural gas (switching from fuel oil since early 2000s)

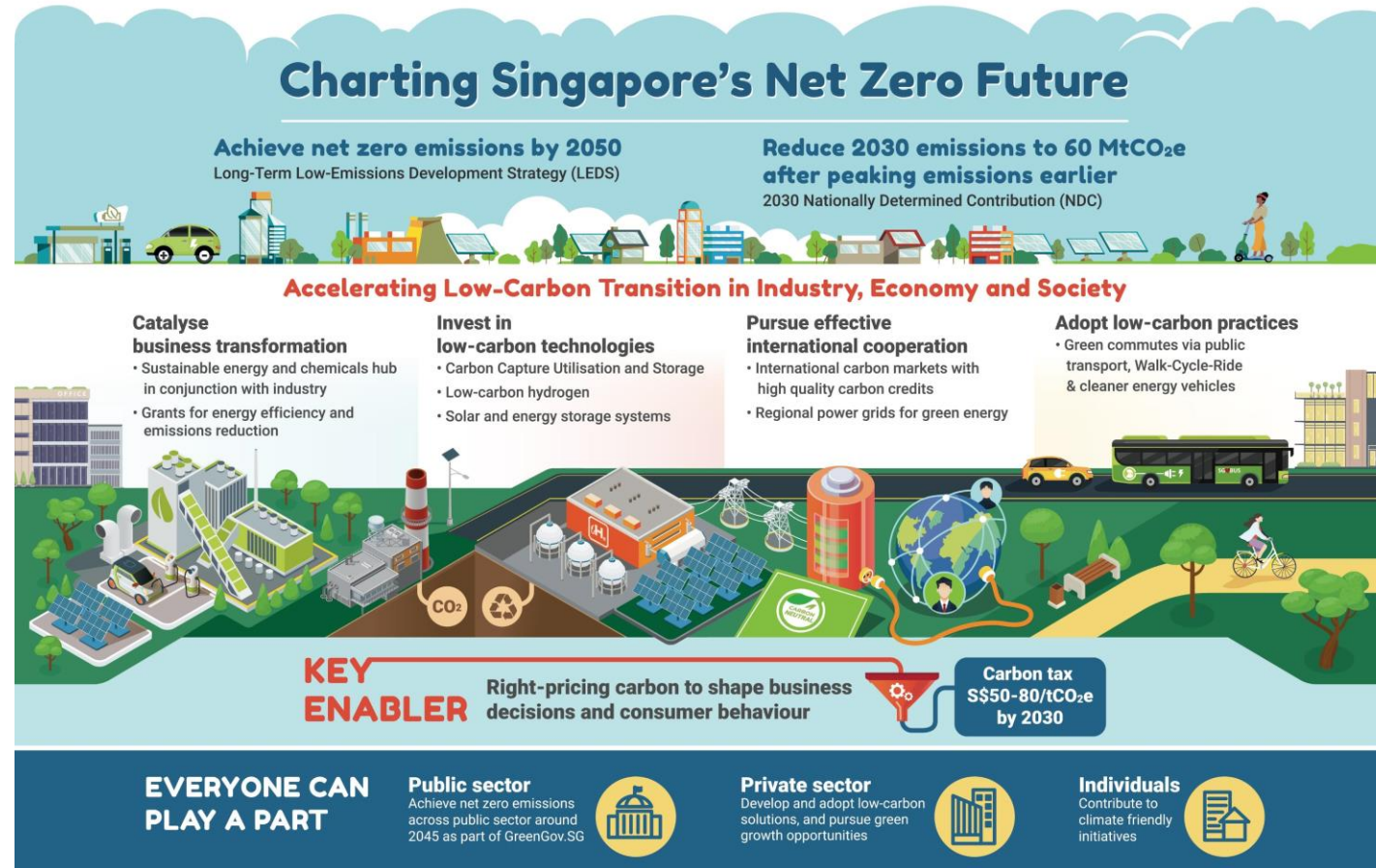


## Export-oriented and Open Economy

- Lack of natural resources and hinterland

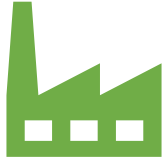
# Singapore is a committed early mover in global climate action

Among the first few countries to enhance 2030 Nationally Determined Contribution (NDC) and submit a Long-Term Low-Emissions Development Strategy (LEDS) in March 2020



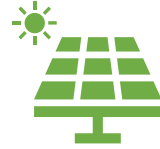
In November 2022, Singapore updated 2030 NDC and LEDS, to reduce 2030 emissions to 60MtCO<sub>2</sub>e after peaking earlier and achieve net-zero by 2050

# Mitigation plans across all sectors to achieve 2030 NDC



## Industry

- Energy Efficiency Grants
- Sustainable Jurong Island Plan to enable 2 Mt of CCUS by 2030



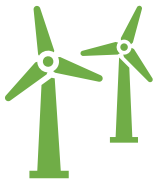
## Power

- Solar – 2GWp by 2030
- Electricity imports – 4GW by 2035



## Transport

- No more new ICE vehicles from 2030 onwards
- 60,000 EV chargers by 2030



## Buildings

- Green Building Masterplan – 80% green buildings by 2030, 80% new buildings SLE by 2030



## Households

- Climate-Friendly Households Programme to allow households to change to more energy efficient equipment



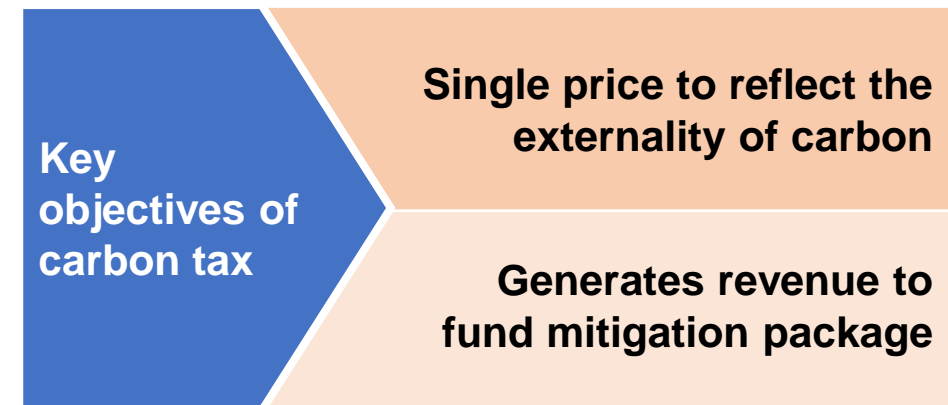
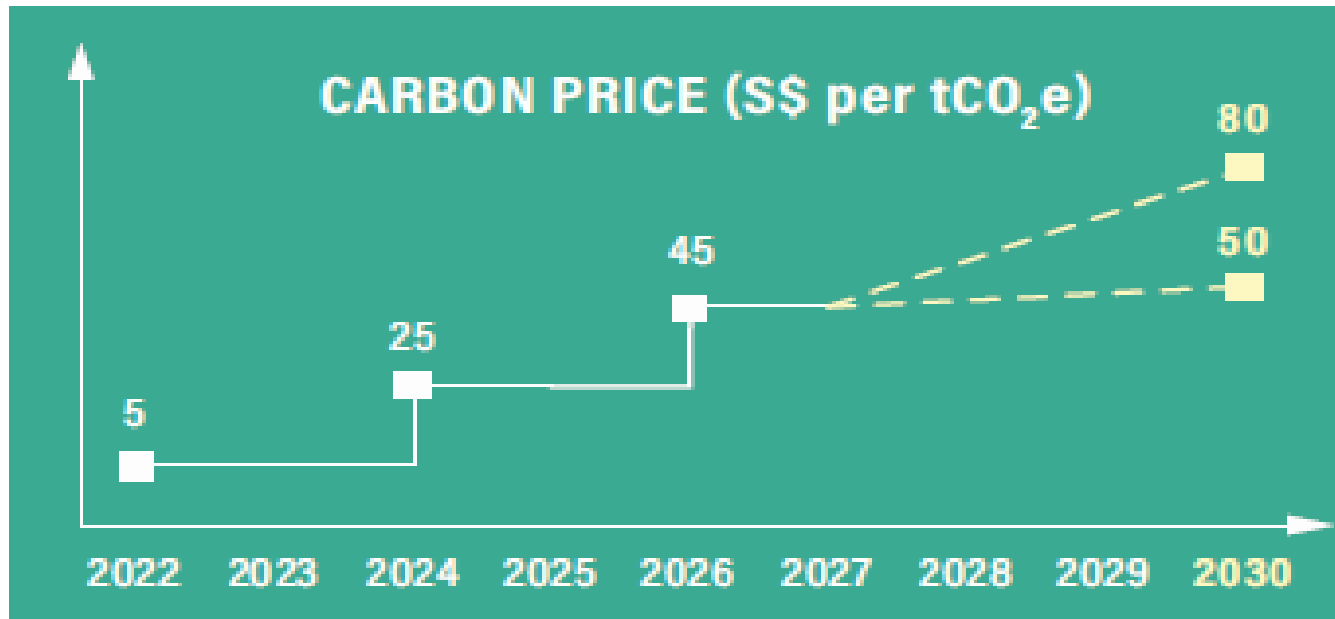
## Others

- Article 6 compliant carbon credits

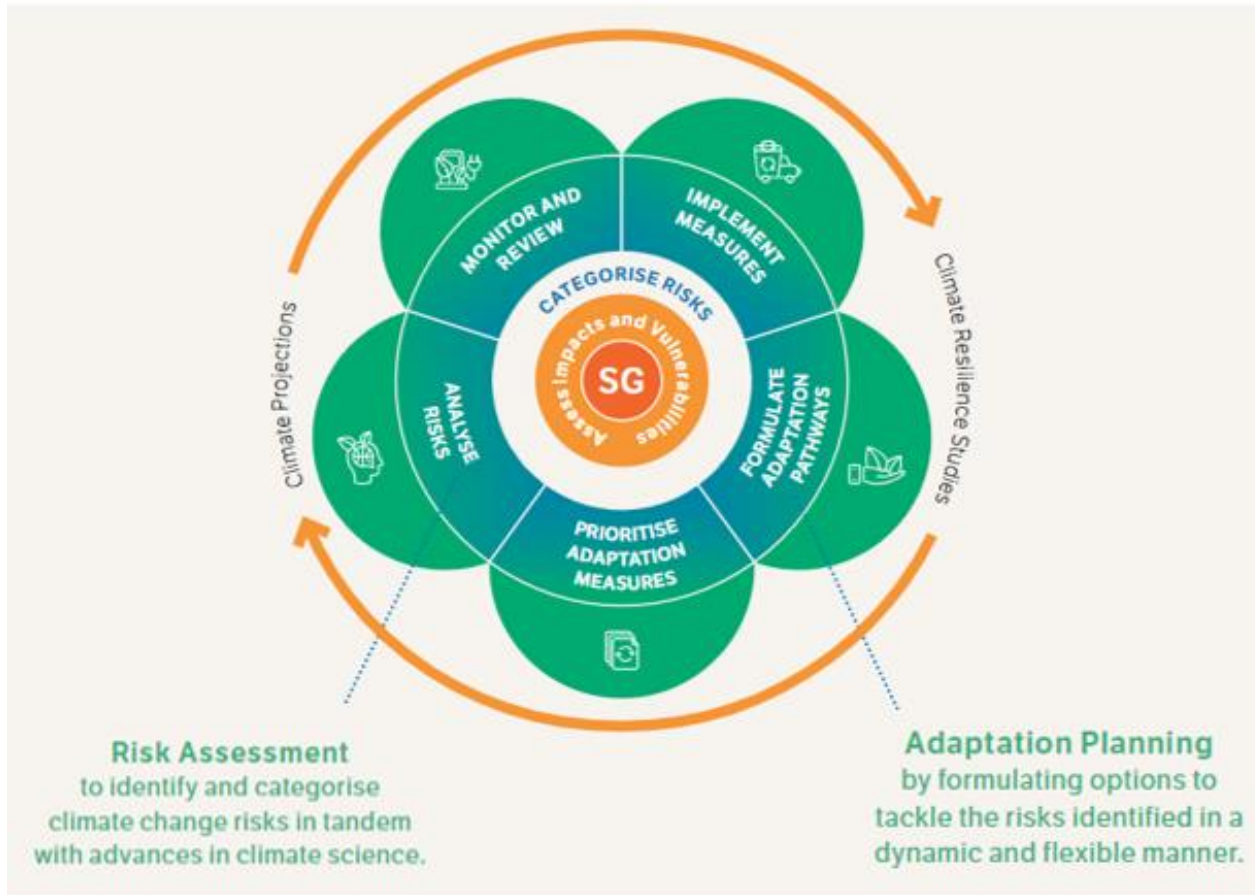
# Right pricing carbon is a key enabler to achieve plans

Singapore implemented a carbon tax in 2019 to put a price tag on the externality of carbon

- First country in Southeast Asia to implement a carbon tax
- Covers about 80% of carbon emissions
- At Budget/COS 2022, announced plans to progressively raise carbon tax to around S\$50-80 (US\$36.90-US\$59)/tonne by 2030



# Strengthening resilience to heightened climate change risks



*Singapore's climate resilience framework (Singapore's Fifth National Communication and Fifth Biennial Update Report, 2022)*

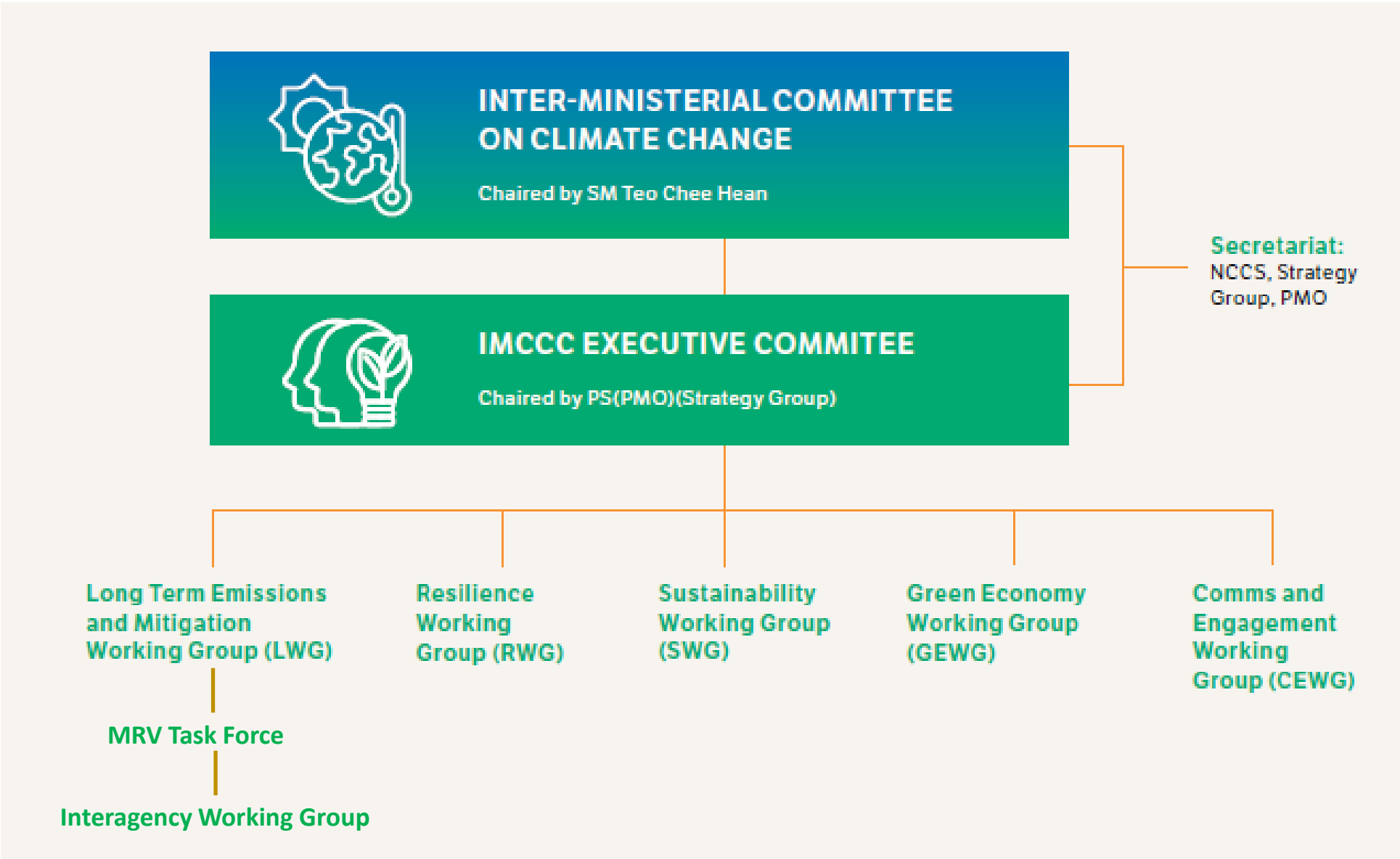
## Key Climate Resilience Focus Areas

1. Mitigate Urban Heat Island effect
2. Coastal protection to adapt to rising sea levels
3. Manage coastal and inland flooding due to extreme weather events (e.g. storms)
4. Strengthen food security as global food production productivity is affected
5. Strengthen public health security in the face of novel disease threats and increased prevalence of vector/illnesses

# Strengthening Transparency Efforts

- Singapore has submitted 5 Biennial Update Reports (BURs), 5 National Communications, and undergoing International Consultations & Analysis (ICA) for 5th BUR.
- Preparing 1st Biennial Transparency Report (BTR) for submission by December 2024
- Building MRV capacity on:
  - Inclusion of GHG emissions from Agriculture Sector
  - Recalculation of GHG time series
  - Inclusion of new sectoral reporting tables
  - Enhancing data collection and analysis for Land Use, Land-Use Change and Forestry
  - Developing an emissions inventory for HFCs based on IPCC Tier 2 Methodology
  - Studying emissions data from Reference vs Sectoral Approach

# Institutional Arrangements



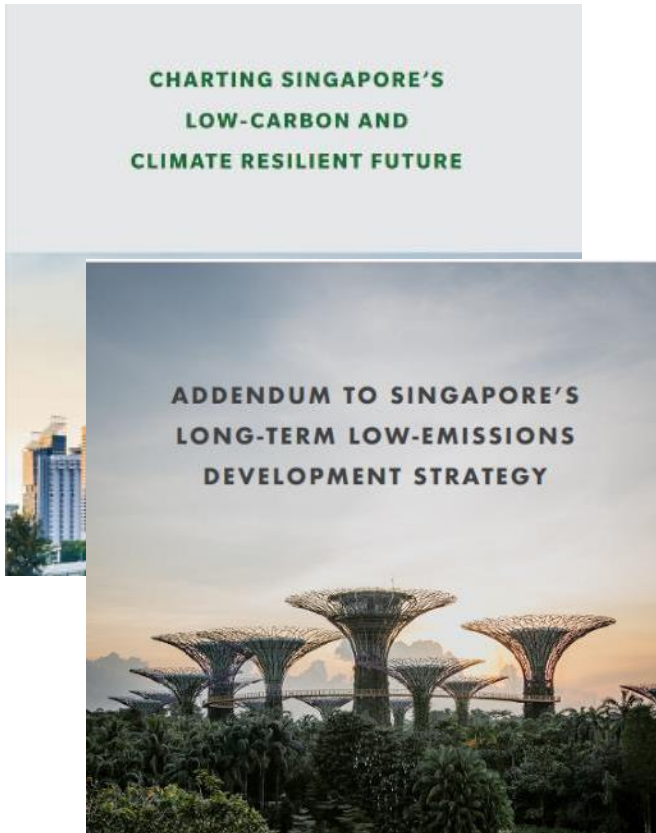


# Suggested Takeaways

- No “one-size-fits-all” approach
- “Learn by doing” and improve over time.
- MRV/Transparency obligations under UNFCCC are facilitative and non-punitive, but non-submission of BTR by Dec 2024 will trigger Article 15 Committee proceedings
- Climate Change policy coordination requires multi-ministry / Whole-of-Nation approach. Challenging for any 1 Ministry/Agency to set directions and manage trade-offs
- Support on Transparency capacity building is available. <https://unfccc.int/CGE>

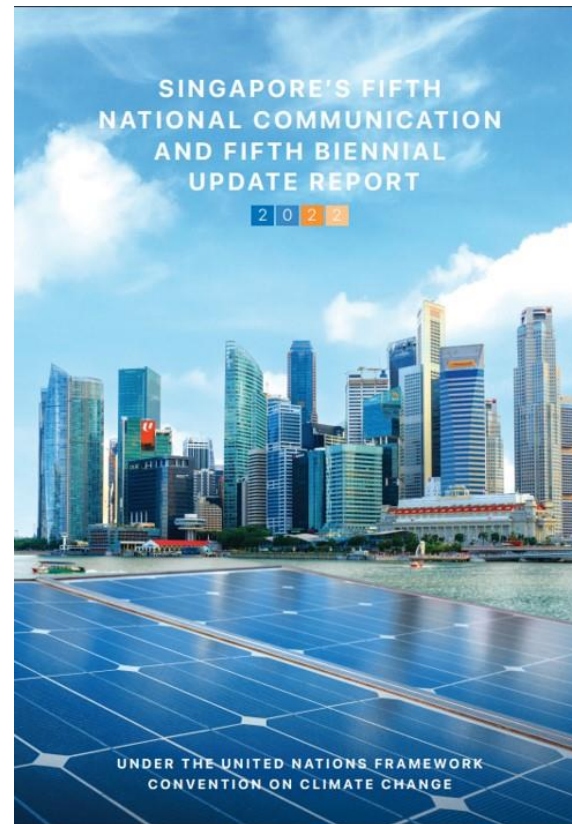
# Useful information

## Long-Term Low-Emissions Development Strategy



<https://www.nccs.gov.sg/media/publications/singapores-long-term-low-emissions-development-strategy>

## 5<sup>th</sup> National Communication and 5<sup>th</sup> Biennial Update Report



<https://www.nccs.gov.sg/files/default/docs/default-source/publications/Singapore-NC5BUR5.pdf>

## Singapore Green Plan 2030



[www.greenplan.gov.sg](http://www.greenplan.gov.sg)

# Useful information

## Climate Action Plan



<https://www.mse.gov.sg/resources/climate-action-plan.pdf>

## Climate Game Changer



<https://climategamechanger.sg>

## 2<sup>nd</sup> National Climate Change Study



<http://ccrs.weather.gov.sg/Publications-Second-National-Climate-Change-Study-Science-Reports>

# Q&A

# Transitioning to the ETF

## TRANSITIONING TO THE ETF

### TRANSITIONING FROM THE EXISTING MRV ARRANGEMENTS

- Final biennial reports submitted by developed country Parties no later than 31 December 2022
- Final biennial update reports submitted by developing country Parties no later than 31 December 2024
- National Communications reporting remains the same

### 1 BIENNIAL TRANSPARENCY REPORTS (BTRs)

- First BTRs [and national inventory report, if it is a stand-alone report] submitted at the latest by 31 December 2024

BTRs include the following information:

- National inventory report on GHGs ("shall")
- Information on tracking progress of implementation and achievement of NDCs ("shall")
- Information on climate change impacts and adaptation ("should")
- Information on support provided ("developed countries shall")
- Information on support needed and received ("developing countries should")
- REDD+ activities as a technical annex ("may")

\*The LDCs and SIDS may submit the information at their discretion.



### 2 TECHNICAL EXPERT REVIEW (TER)

A team of technical experts will review the Party's national GHG inventory, information on tracking progress the Party makes in implementing and achieving its NDCs, and information on support provided to developing country Parties. Information submitted by other Parties that provide support may undergo a TER at the Party's discretion.

The TER is carried out in a facilitative, non-intrusive and non-punitive manner, paying close attention to each developing country's national capabilities and circumstances. Following the review, the TER team will publish its report.

### 3 FACILITATIVE MULTILATERAL CONSIDERATION OF PROGRESS (FMCP)

The FMCP is undertaken with respect to a Party's efforts under Article 9 of the Paris Agreement and the Party's respective implementation and achievements of its NDC. It will consider the BTR, the TER report and other information provided by the Party. It takes place following the publication of the TER report and is conducted in two phases:

- A written question and answer phase
- A working group session held during the sessions of the SBI

If the TER report is not available within 12 months, the opportunity to participate in the FMCP will still be arranged by the secretariat.

The BTR is submitted every two years. During this process, there is opportunity for Parties to continue to build capacity, gain support, gather data and continuously improve their reporting and transparency over time.