

**REMARKS BY MINISTER ISWARAN AT THE 11TH APEC TRANSPORT  
MINISTERS MEETING, SESSION TWO: TRANSPORTATION'S ROLE IN  
CLIMATE CHANGE ON 16 MAY 2023**

1. Fellow Transport Ministers, distinguished delegates, I am pleased to join you today, and thank Secretary Buttigieg and his Department for the warm hospitality.
2. Emerging from the ravages of the pandemic, the future of the aviation sector remains bright. This is particularly so in the Asia-Pacific region.
  - IATA forecasts that the Asia-Pacific will be the fastest-growing region for air travel in the next two decades. Passenger traffic is expected to grow at an annual average rate of 4.5%, compared to the global average of 3.3%.
3. Given the need for urgent climate action, it is imperative that the growth in air travel is met at a significantly lower level of carbon intensity.
4. Under ICAO's leadership, and with the industry's support, there has been good progress on aviation sustainability.
  - The ICAO Assembly's agreement on a long-term aspirational goal (LTAG) for international aviation to achieve net-zero carbon emissions by 2050, is a rallying call to all stakeholders to work towards an ambitious common goal.
5. The next critical step is to translate these LTAG into concrete and actionable pathways. We believe there are three important ways to go about this.
6. **First, investing in the development of new and more fuel-efficient aircraft types** to reduce the Scope 1 Greenhouse Gas (GHG) emissions of airlines.
  - Compared to the A330-300 and B777-200ER, the newer A350-900 and B787-10 are both estimated to boost fuel efficiency by up to 25%. So just this transition promises significant benefits.
  - For the longer term, emerging technologies, in particular electric and hydrogen-based propulsion technology, offer the highest abatement potential, especially for short-haul flights of between 1,000 to 2,000 km.
7. **Second, we believe it is important to invest in Air Traffic Management (ATM) technology and concepts of operations (CONOPs), to increase flight efficiency and reduce emissions.**

- A good example of this is trajectory-based operations (TBO) – which enables air navigation service providers (ANSPs) to jointly plan and optimise an aircraft’s entire trajectory across boundaries. TBOs can thus fundamentally change the way air traffic is managed, yielding significant benefits for all airspace users.
  - We in Singapore are working closely with our partners to develop TBOs and other advanced ATM CONOPs, along with their technology enablers. We are collaborating with ANSPs from Canada, Japan, Thailand, and the US on the world’s first multi-region TBO trial, with the live flight trial taking place next month.
8. **Third, scaling the use of sustainable aviation fuels (SAFs)**, which requires three key building blocks:
- First, on the supply side – enhancing feedstock availability and developing the SAF supply chain. This is critical as countries around the world develop targets for SAF and plan for scaling up – we need to ensure that the supply of feedstock is sustained.
  - Second, on the demand side, through government incentives and mandates; as well as corporate initiatives like buyers’ clubs.
  - Third, through strong international collaboration and strategic industry partnerships, especially for international mechanisms like book-and-claim systems, and aviation green lanes.
9. All these elements are embedded in Singapore’s plans to develop a sustainable air hub blueprint. We must ensure, collectively, that our efforts remain one which is inclusive and involves all countries, with countries being provided with essential support for training and capacity building.
- For example, the ICAO launched the Assistance, Capacity-building, and Training on SAF initiative (ACT-SAF) in June 2022, which aims to provide tailored support for States in various stages of their SAF development and deployment. We in Singapore will fully support these and other such efforts.
10. Finally, as a major air hub, I want to conclude by reiterating Singapore’s commitment to work closely with ICAO, Governments, industry partners and other aviation stakeholders, through multiple modalities, to ensure that we are successful in this mission to decarbonise the aviation sector. Thank you.