



Future production and deployment of sustainable aviation fuels

Montreal February 2017

 virgin australia

Overview

1. The Virgin Australia Group's approach to sourcing alternative fuels
2. Industry challenges
3. Traditional aviation fuel industry approach
4. Flipping the problem on its head
5. How could this work
6. How can ICAO assist this change

Sustainable Aviation Fuels

BACKGROUND




Virgin Australia has been actively engaged in the sustainable aviation fuels market since 2008.



Domestic &
International
policy discussions



Project
development



Direct
negotiations with
fuel producers

Sustainable aviation fuels are key to meeting our long-term emissions goals.

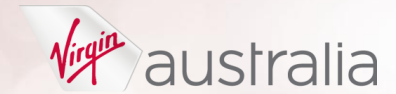
Virgin Australia & Air New Zealand

REQUEST FOR INFORMATION



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- Launched in March 2016
 - 200 million litres of fuel produced in Australia or New Zealand for 10 years from 2020
 - Responses closed 30 May 2016
 - Strong response:
 - Responses from all parts of the supply chain
 - Strong interest from our region and internationally
 - Strong interest from Governments, industry stakeholders
 - Currently in commercial negotiations with short-listed respondents

What is delaying commercialisation and scale?



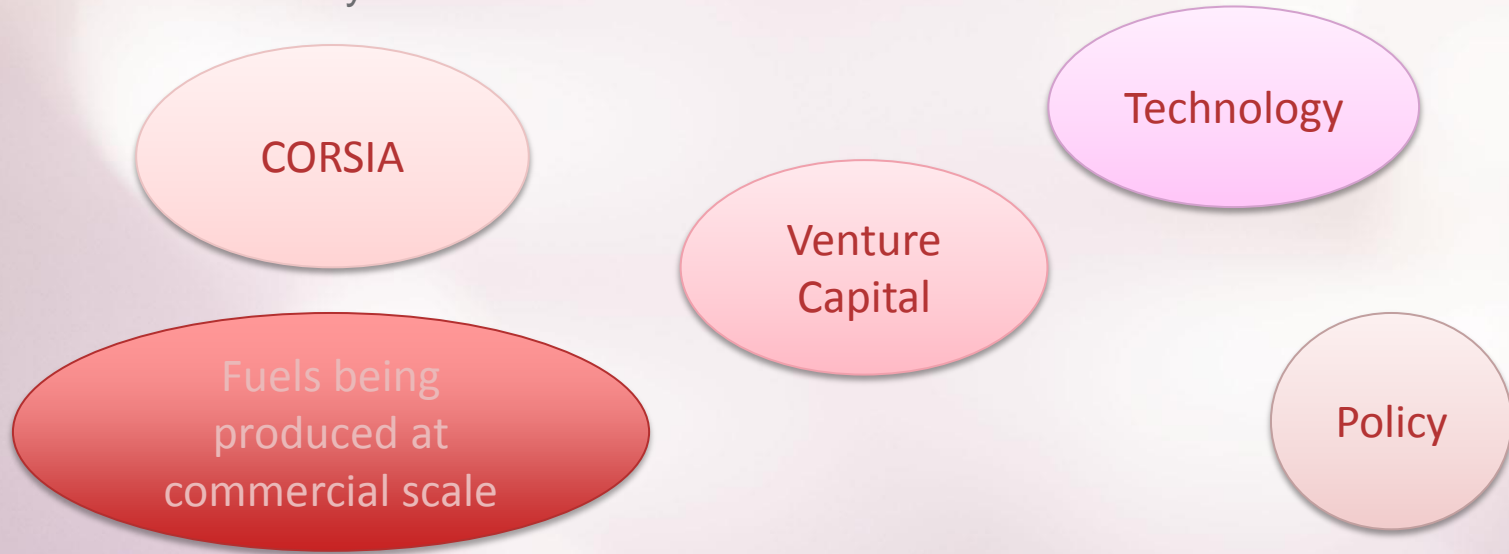
We know that the development of the market isn't happening nearly fast enough.

Why?

1. Technology challenges with scale up
2. Embedded fossil fuel subsidies
3. Significant capital requirements
4. Policy

Where is the industry in 2017?

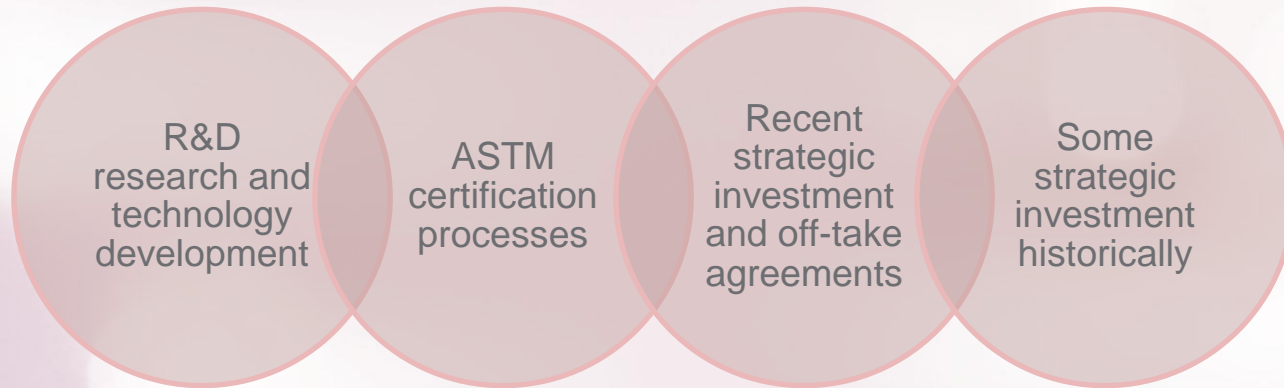
2016 saw some very positive developments...but the industry is still in its commercial infancy.



The aviation fuel industry's role to date



The fossil fuel industry have demonstrated interest in the development of the sustainable aviation fuels industry:



But they are not currently driving the development of the industry...

What to do?

The traditional fuel companies have:

- The required capital
- The technical/scientific expertise
- The infrastructure and distribution channels
- The incentive

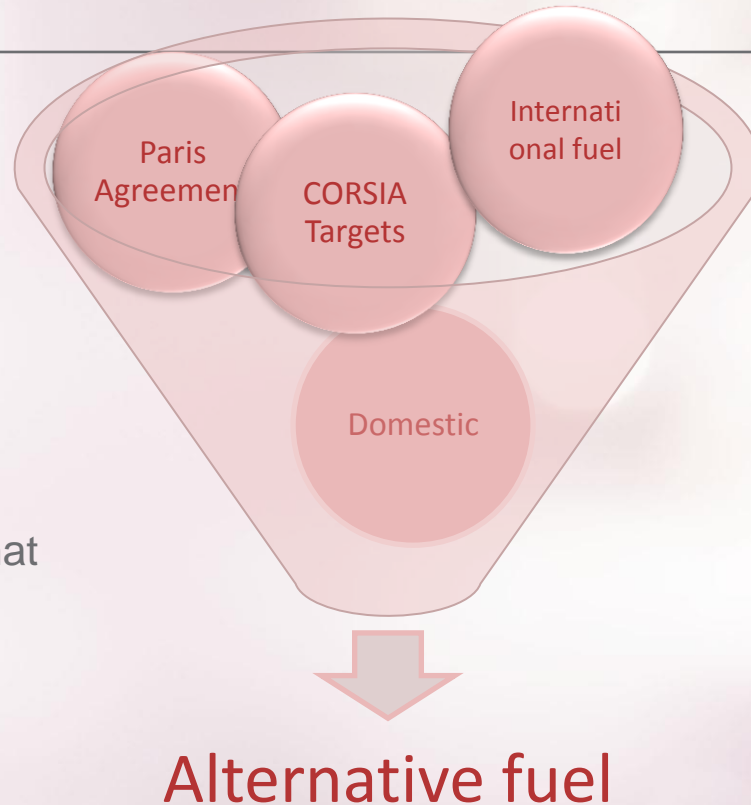
And

- Existing subsidies

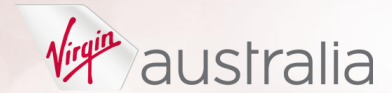


How could this work?

ICAO Member States could create a global jet fuel mandate applying to all fuel suppliers – ‘x’% of fuel supplied globally must be made from AFTF compliant sustainable sources by ‘y’ date. California LCFS is one model that could be drawn upon.

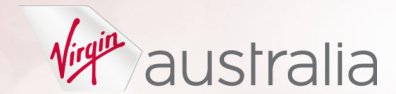


This approach would



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- Help fast track the development of the sustainable aviation fuel industry
 - Improve the technologies and efficiencies of alternative fuel production
 - Facilitate the required logistics to get fuel into wing – transport/blending
 - Help address ASTM bottlenecks
 - Help the aviation industry meet/exceed CORSIA targets
 - Reduce the cost of sustainable aviation fuels
 - Make traditional fuel companies money and sure up their existing investments.

Should this approach be part of ICAO policy discussions?



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- All new industries – particularly capital intensive industries - need support
 - If there isn't direct support for alternative fuels there needs to be a level playing field
 - A carbon price alone is not enough to drive the development of the industry

Questions?



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