



## **Jet Zero Council – Fifth Meeting**

**15:00 – 16:00, 20 April 2022**

**Hybrid Meeting at The Department for Transport, Great Minster House**

### **Attendees**

#### Ministerial Attendance

- Rt Hon Grant Shapps MP, Secretary of State for Transport, Joint Chair
- Robert Courts MP, Parliamentary Under Secretary of State for Transport
- Trudy Harrison MP, Parliamentary Under Secretary of State for Transport
- Lee Rowley MP, Parliamentary Under Secretary of State for Business and Industry

#### Jet Zero Council CEO

- Emma Gilthorpe, Chief Operating Officer, Heathrow Airport

#### Member attendance

- Andrew Mennear, Director, UK Government Affairs – deputising for Louise Kingham OBE, UK Head of Country and Senior Vice President for Europe, bp
- Bronwyn Fraser, Principal European ATM – deputising for Richard Moriarty, Chief Executive Officer, Civil Aviation Authority
- Camilla de Coverly Veale, Policy Director – deputising for Dom Hallas, Executive Director, The Coalition for a Digital Economy
- Charlie Cornish, Group Chief Executive, Manchester Airports Group
- Chris Gadsden, Director of Government Affairs – deputising for Johan Lundgren, Chief Executive Officer, easyJet
- Colin Tattam, Director – deputising for Dr Alicia Greated, Chief Executive Officer, Innovate UK KTN
- David Bunch, UK Country Chair, Shell
- Gary Elliott, Chief Executive Officer, Aerospace Technology Institute
- Grazia Vittadini, Chief Technology Officer, Rolls-Royce
- Holly Boyd-Boland, Vice President Corporate Development and Sustainability – deputising for Shai Weiss, Chief Executive Officer, Virgin Atlantic
- Professor Iain Gray, Director of Aerospace, Cranfield University



- Jacqueline de Rojas CBE, President, techUK
- Baroness Brown Julia King DBE FREng FRS, Crossbench Member of the House of Lords (and Jet Zero Council Adviser)
- Jim Woodger, Managing Director – deputising for Dr Jennifer Holmgren, Chief Executive Officer, LanzaTech
- John Holland-Kaye, Chief Executive Officer, Heathrow Airport
- Jonathon Counsell, Group Head of Sustainability, International Airlines Group (and Jet Zero Council Sustainable Aviation Fuels Delivery Group Chair)
- Kyle Martin, Vice President, European Affairs, General Aviation Manufacturers Association
- Malcolm Sutherland FRAeS, Managing Director, TUI Airways
- Sir Martin Donnelly, President, Boeing Europe and Managing Director of Boeing U.K and Ireland
- Sir Mike Wigston KCB CBE ADC, Air Chief Marshal, Royal Air Force
- Neville Hargreaves, Vice President, Waste to Fuels, Velocys
- Dr Nina Skorupska CBE, Chief Executive, The Association for Renewable Energy and Clean Technology
- Oriel Petry, Senior Vice President, Public Affairs UK – deputising for Julie Kitcher, Executive Vice President Communications and Corporate Affairs, Airbus
- Professor Peter Littlewood, Executive Chairman, The Faraday Institution
- Rachel Gardner-Poole, Jet Zero Council Zero Emission Flight Delivery Group Chair (and Chief Operating Officer, Connected Places Catapult)
- Russ Dunn, Chief Technology Officer and Head of Strategy, GKN Aerospace
- Sean Doyle, Chief Executive Officer, British Airways
- Tim Johnson, Director, Aviation Environment Federation
- Trevor Woods, Independent Consultant
- Val Miftakhov, Chief Executive Officer, ZeroAvia

Department for Transport official attendance

- Rannia Leontaridi, Director General for Aviation, Maritime and Security
- Ben Smith, Director for Aviation
- Holly Greig, Deputy Director, Aviation Decarbonisation
- Debbie Stockwell, Deputy Director, Low Carbon Fuels

Department for Business, Energy and Industrial Strategy official attendance



- Paul Griffiths, Head of Aerospace Team

#### Additional Attendees

- Kevin Craven, Chief Executive Officer, ADS
- Professor Sarah Sharples, Chief Scientific Adviser for the Department for Transport
- Ryan Hopkins, Special Adviser to the Secretary of State for Transport
- Ministerial Private Secretaries
- Jet Zero Council Secretariat

#### Apologies

- Rt Hon Kwasi Kwarteng MP, Secretary of State for Business, Energy, and Industrial Strategy, Joint Chair
- Jonathan Hinkles, Chief Executive, Loganair

#### **Actions**

- The Jet Zero Council Secretariat to setup a meeting between the Jet Zero Council CEO and Ministers to discuss the steps required to secure investment in SAF.
- The Jet Zero Council Secretariat to ensure that the sixth Jet Zero Council meeting discusses the non-CO<sub>2</sub> impacts of aviation.
- Council members (and Zero Emission Flight stakeholders) with an interest in the Zero Emission Flight Delivery Group to contact the Jet Zero Council Secretariat.
- The Jet Zero Council Secretariat to circulate more information on the Members' Charter. Council members to provide feedback and then sign the charter ahead of the next Jet Zero Council meeting.
- The Jet Zero Council Secretariat to ensure that future Jet Zero Council meetings include opportunities for discussion, networking and displays.

#### **Summary of Meeting**

- The Secretary of State for Transport reflected on the significant government and industry achievements since the fourth meeting of the Jet Zero Council (JZC) and highlighted upcoming priorities, including the 41st ICAO Assembly.
- Representatives from Cranfield University, Airbus, the Aerospace Technology Institute (ATI) and the Department for Transport (DfT) summarised activities that would support the ambitions of the Council.
- The Zero Emissions Flight (ZEF) Delivery Group was launched. Rachel Gardner-Poole, Chief Operating Officer, Connected Places Catapult was announced as the group's Chair.



## Readout

### 1. Opening remarks, actions from last meeting

The Secretary of State for Transport reflected on the key milestones since the last meeting, including industry's achievements, progress of the Sustainable Aviation Fuels (SAF) Delivery Group, publishing the [summary of responses](#) to the SAF mandate consultation and the [further technical consultation](#) for the Jet Zero Strategy. He also highlighted that, whilst the fifth JZC meeting is focused on Zero Emission Flight, SAF remained a key priority of the Council and government and raised the need for an increased focus on the non-CO<sub>2</sub> impacts of aviation.

### 2. Member updates

The JZC CEO gave an overview of the two industry updates and flagged the need to increase understanding of the non-CO<sub>2</sub> impacts of aviation, and suggested that the Council discuss it at the next meeting.

Council member updates:

- Professor Iain Gray, Director of Aerospace, Cranfield University gave an overview of The UK Aerospace Research Consortium (UK-ARC). He highlighted that the UK-ARC fed into the ATI's FlyZero project and encouraged engagement with the consortium to support Jet Zero. He also provided an academic perspective on the non-CO<sub>2</sub> impacts of aviation, recommending that research on the area should be increased.
- Oriel Petry, Senior Vice President, Public Affairs UK, Airbus outlined Airbus' ZEROe demonstrator project, which aimed to test hydrogen propulsion technologies both on the ground and in the air within the five years. She highlighted the importance of SAF in the near-term and the importance of hydrogen technology in the longer term. She flagged the critical need for research and development (R&D) support to continue and welcomed the Government's increased funding for the ATI.

Key discussion points included:

- It was suggested that, alongside the welcome focus on hydrogen, the Council should look to increase the pace of policy development to support the commercialisation of UK-produced SAF. The Secretary of State for Transport highlighted that DfT had doubled its resource focusing on SAF. The JZC CEO welcomed the additional resource and recommended a meeting between her and Ministers to discuss whether anything more could be done to reassure investors ahead of policy finalisation.
- It was raised that more work was required to understand the comparative non-CO<sub>2</sub> impacts of using SAF and hydrogen in aviation. Council members agreed that the next meeting should consider the non-CO<sub>2</sub> impacts of aviation.

### 3. Zero Emission Flight (ZEF) update

Lee Rowley MP, Parliamentary Under Secretary of State for Business and Industry announced the launch of the ZEF Delivery Group and thanked FlyZero for their work



up to that day on ZEF. He signposted Council members to the objectives of the Delivery Group, included in the draft [Terms of Reference](#). He highlighted the next steps; to ensure that the right membership is formed to enable pragmatic conversations on ZEF with the ambition to commercialise it.

Robert Courts MP, Parliamentary Under Secretary of State for Transport gave an overview of the three ZEF Delivery Group subgroups. He said the *Zero Emission Aircraft* subgroup would anchor R&D and manufacturing of zero carbon emission aircraft technology in the UK, the *Ground Infrastructure* subgroup would facilitate the adoption of zero emission aircraft within airports and airfields, and the *Regulation* subgroup would inform technology regulation and certification. He introduced and welcomed the Chair of the ZEF Delivery Group, Rachel Gardner-Poole.

Rachel Gardner-Poole said it was an immense privilege to take on the role and gave an overview of her extensive experience in aviation. She invited organisations with an interest in the ZEF Delivery Group to contact the Jet Zero Council Secretariat.

Gary Elliott, Chief Executive Officer, ATI outlined the ATI's next steps, including the re-opening of the ATI programme and the launch of the [ATI Strategy and roadmaps](#), which build on the conclusions of FlyZero to set out commercialisation opportunities in the UK. He also highlighted the ATI's ambitions to leverage further private sector funding.

Holly Greig, Deputy Director, Aviation Decarbonisation, DfT provided an update on the outcomes of the Zero Emission Flight Infrastructure project, the findings of which will support the ZEF Delivery Group Infrastructure subgroup. She also highlighted the Government's £377 million commitment for transport decarbonisation R&D.

Key discussion points included:

- Council members welcomed the progress made on the ZEF Delivery Group and its Terms of Reference.
- It was suggested that Council members could peer review conclusions made by the ZEF Delivery Group to ensure effective prioritisation of investment and resources.

#### **4. Closing remarks & AOB**

The Secretary of State for Transport highlighted an ongoing review of the Council's membership, which would ensure the Council remains world leading and invited Council members to commit to a new Members' Charter.

Robert Courts MP encouraged Council members to join the Jet Zero Communications and Engagement Network and reminded members of the need to amplify the progress on Jet Zero.

The Secretary of State for Transport thanked Council members for attending and praised the JZC CEO for their role in driving forward the Council's agenda.