



**AAM 2024** ICAO'S FIRST ADVANCED  
AIR MOBILITY SYMPOSIUM

# Environmental Panel

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# ENVIRONMENTAL PANEL

ICAO AAM Symposium

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# URBANIZATION & CLIMATE CHANGE

pose new challenges for cities ...

- ~70%** of world's population will live in cities by 2050<sup>1</sup>
- ~20%** of global CO<sub>2</sub> emissions result from the transportation sector<sup>2</sup>
- ~3%** of global CO<sub>2</sub> emissions result from the aviation sector<sup>3</sup>

1. UN 2. IEA 2022 3. Deloitte

# ... and calls for ELECTRIC AIR MOBILITY



- No m<sup>2</sup>** Except vertiports, no valuable ground space is necessary for network operations
- No NO<sub>x</sub>** No harmful fine particulate matter or nitrogen dioxide emitted during flight
- No CO<sub>2</sub>** No emissions emitted during flight



# DRIVING MULTIPLE EFFORTS TO DECARBONIZE AVIATION

Sustainability is  
at the core of  
our mission  
at Volocopter



## Fully electric

The Volocity's 18 motors are powered by nine rechargeable batteries, which means it produces no direct emissions during operation.



## Low noise impact

Due to electric motors and design, the Volocity contributes to significantly lower noise levels, i.e. 65 decibels at a 120m distance, making it inaudible within a city environment.



## Highest safety

The Volocity's design adheres to highest level of safety, with the likelihood of a catastrophic failure being less than one in one billion flight hours.

# ENSURING A SUSTAINABLE ECOSYSTEM THROUGH THE DEVELOPMENT OF REGULATORY FRAMEWORK

## AIRCRAFT CERTIFICATION

- Certification specifications for eVTOLs, i.e., EASA SC VTOL and MOC.
- Standards development for eVTOLs, such as EUROCAE.
- Noise levels and measurement procedures for VTOLs, i.e., EPTS.


## OPERATIONAL FRAMEWORK

- Rules enabling eVTOL operations, i.e., Part-IAM.
- Training and licensing of eVTOLs personnel, i.e., pilots, maintenance staff.

## INTERNATIONAL HARMONIZATION

- Close collaboration with global regulators.
- Enabling international validations.
- Common industry positions e.g., GAMA paper on Battery Range and Endurance; Interoperability of charging infrastructure.

SC VTOL – Special Condition VTOL  
 MOC – Means of Compliance  
 EPTS – Environmental Protection Technical Specifications  
 Part-IAM – Part-Innovative Air Mobility  
 GAMA – General Aviation Manufacturers Association

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# SOCIETAL TRUST & ACCEPTANCE

is key to unlock  
AAM potential

- AAM enables a **safe and sustainable** mode of transport, and fosters **technological advancements and innovations** in the field of air mobility.
- **Initial adoption** of any new technology faces certain **resistance**. We can only fully benefit from AAM when we ensure **societal trust and acceptance**.
- As an OEM, through **public demonstrations and product certification**, we need to show to the public how safe, sustainable and quiet our aircraft are.
- We need concerted efforts from **regulators, government and cities**, to boost the creation of the AAM ecosystem and create **better awareness** about the benefits of introducing sustainable aircraft into the airspace.

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# THANK YOU



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Thank You!