

The background of the slide is an aerial photograph of Dublin, Ireland, showing the city's dense urban landscape and the River Liffey. Two eVTOL (electric vertical takeoff and landing) aircraft are visible in the sky, one in the foreground and one further away, flying over the city. The image has a blue color overlay.

SKYBOUND

THE FUTURE OF ADVANCED AIR MOBILITY

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COVER SLIDE BY:
CHATGPT AND DALL-E

PREPARED FOR:
REVOLUTION.AERO DUBLIN 2023

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CHATGPT created the presentation title with the prompt: "movie title for Advanced Air Mobility"

DALL-E created the cover image with the prompt: "eVTOLs flying over Dublin's river Liffey in a bright sunny day"

CRYSTAL BALLING MARKET SIZING



\$61

PWC

(billion, 2030)



\$115

Deloitte

(billion, 2035)



\$1,000

Morgan Stanley

(billion, 2040)



How big will the AAM market be?

Is the actual figure even important?

It is BIG

It is not the second coming of the VLJ market

Is it worth for an aerospace company to miss out on this market?

THE ZOMBIE APOCALYPSE MARKET EVOLUTION



800

Concepts

1 ↓
2

28

ARI OEMs



>70

OEMs tracked



Too many OEMs to survive...

Top 15 OEMs still need \$2.5 to \$4 billion to EIS

The case for consolidation or failures followed by IP and talent grab?

The case for the minimum viable product

- ARCHER
- VOLOCOPTER

The case for national champions

SHOW ME THE MONEY URBAN AIR MOBILITY (UAM)



60%
ARI OEMs



36%
AAM market share
(2025)



65%
AAM market share
(2040)



The biggest market...at some point

Coming in 2024 at an Olympics near you

Events acting like catalysts (i.e. World Expo)

Push demand/Customer adoption

Slowest growing AAM segment in the 2020s

Infrastructure needed to grow

THERE IS NO PACKAGE ACCEPTANCE CARGO/LOGISTICS



25%
ARI OEMs



10%
Total orders



64%
AAM market share
(2030)



The biggest short-term opportunity

CAAC Cargo UAV cert at the end of 2023

Replace old, polluting, (cheap!) feeder planes

Pull demand/No customer adoption issues

Fastest growing AAM segment in the 2020s

The challenge of autonomous trucking

BACK TO 1999 REGIONAL AIR MOBILITY (RAM)



19

Pax smallest regional aircraft (1999)



70

Pax smallest regional aircraft (2023)



76%

Frequencies decline small markets in the last 2 years



Bring air service back to communities

Pull demand/No customer adoption issues

Plenty of airports to operate from

eVTOL is a plus

Connection between secondary markets and hub feeders from secondary markets

Fleet diversification and constrained flexibility

TO RUNWAY OR NOT TO RUNWAY eCTOL



10%
ARI OEMs



Batteries love wings and RUNWAYS

Best configuration for electrification

Longer range (BETA TECHNOLOGIES +54%)

Best configuration for RAM

Less capital raised

Did not capture investors interest like eVTOL



109
Max range regional
eVTOL (mi)



386
Max range regional
eCTOL (mi)

THERE WAS A PRIUS BEFORE TESLA HYBRID-ELECTRIC



25%
ARI OEMs



250
Average energy
density battery (kWh)



850
Average energy
density hybrid (kWh)



Jet A - 12x energy density of a battery

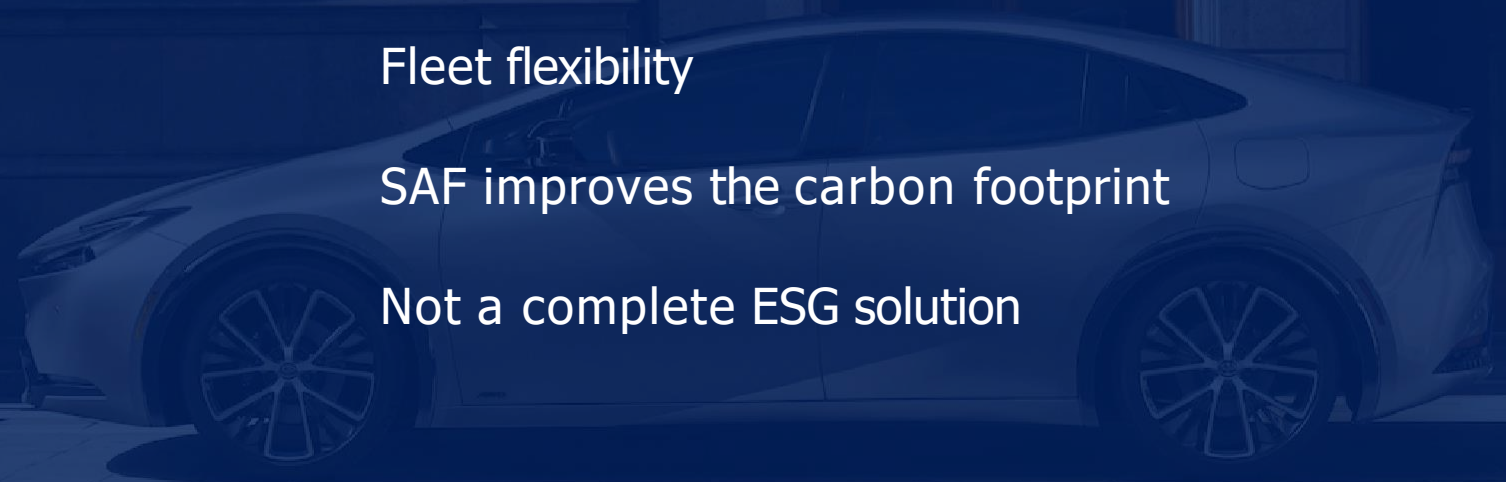
Benefits cargo and regional use cases

Trade range for payload (and vice versa)

Fleet flexibility

SAF improves the carbon footprint

Not a complete ESG solution



I, ROBOT AUTONOMY



18%

ARI OEMs



26%

Pilot as a % of
DOC/Flight Hour



5%

Supervisor as a % of
DOC/Flight Hour



Small aircraft = expensive pilots

CAAC only regulator certifying autonomy

FAA and EASA - 2030s

Cargo first

Needed to bring pricing down to ride hailing

LVL 5 car: not a LVL 4 without steering wheel

The case for out-of-the-box autonomy

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