## 📌 LILIUM

# Revolutionizing sustainable, high-speed regional air mobility

August 2023

## Company key facts



German-based aerospace company founded in 2015 and listed on Nasdag since 2021



A Global leader in electric jet aviation with unique aircraft design and proprietary technologies



~850 employees, including 450+ engineers with deep aerospace experience

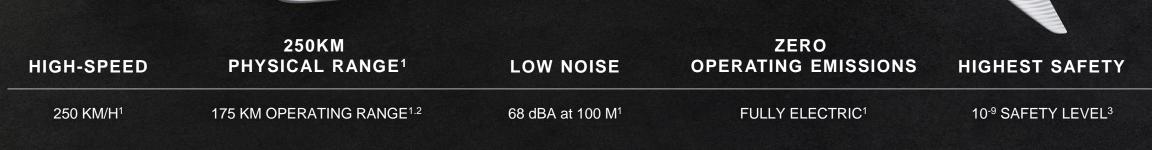


**Co-located and fully integrated** design, prototyping, testing, and production capabilities



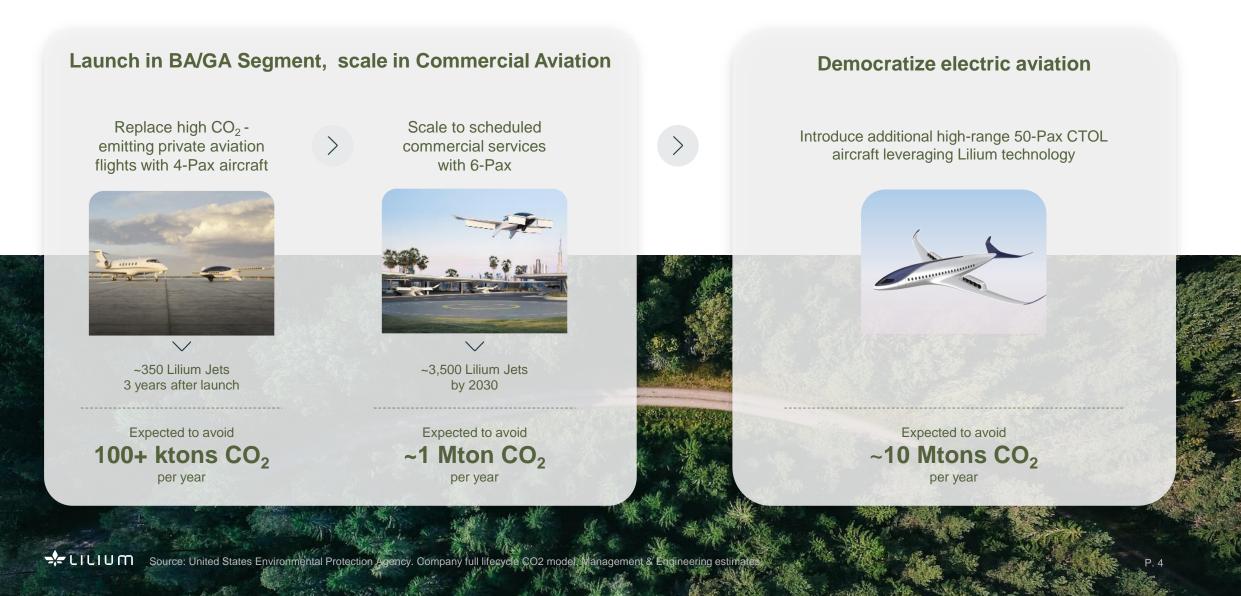
Advanced electric jet aircraft program in regulatory approval process, with expected type-certification in 2025

## The Lilium Jet



\* LILIUM <sup>1</sup>Performance targets based on current development status of aircraft. Cruise speed based on Lilium engineering assessment assuming flight at 10,000 ft. <sup>2</sup>Operating range refers to service range (after accounting for reserves). <sup>3</sup>Lilium's primary certification authority (EASA) stipulates probability of less than one aircraft loss per billion flight hours.

## Our vision is to democratize electric aviation



## Our management team comprising outstanding leaders in aerospace

#### BOARD

#### ENGINEERING, PROGRAM, AND MANUFACTURING

Tom Enders Chairman & Investor



Former CEO of Airbus

AIRBUS



Klaus Roewe

Chief Executive Officer

Former Airbus executive. leading the A320 family and Airbus Services **Business** 

AIRBUS



A320

Airbus services business

Daniel Wiegand Chief Engineer for Innovation & Future Programs / Co-Founder



Inventor of Lilium aircraft architecture and propulsion expert

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Alastair McIntosh

Chief Technology

Officer

Former Chief Engineer & MD of Rolls Royce

Engines of Airbus A350 and Gulfstream G650

ROLLS R

ROYCE



Yves Yemsi

**Chief Operating Officer** 

Former SVP Procurement & Supply Chain, VP Program Quality at Airbus

AIRBUS





A380



**Oliver Vogelgesang** Chief Financial Officer

Sebastien Borel Chief Commercial Officer

Former Airbus executive.

Finance Airbus Germany

leading controlling for

A320 Program & MD



Various senior Sales & Marketing leadership roles at Honevwell & Airbus

Honeywell





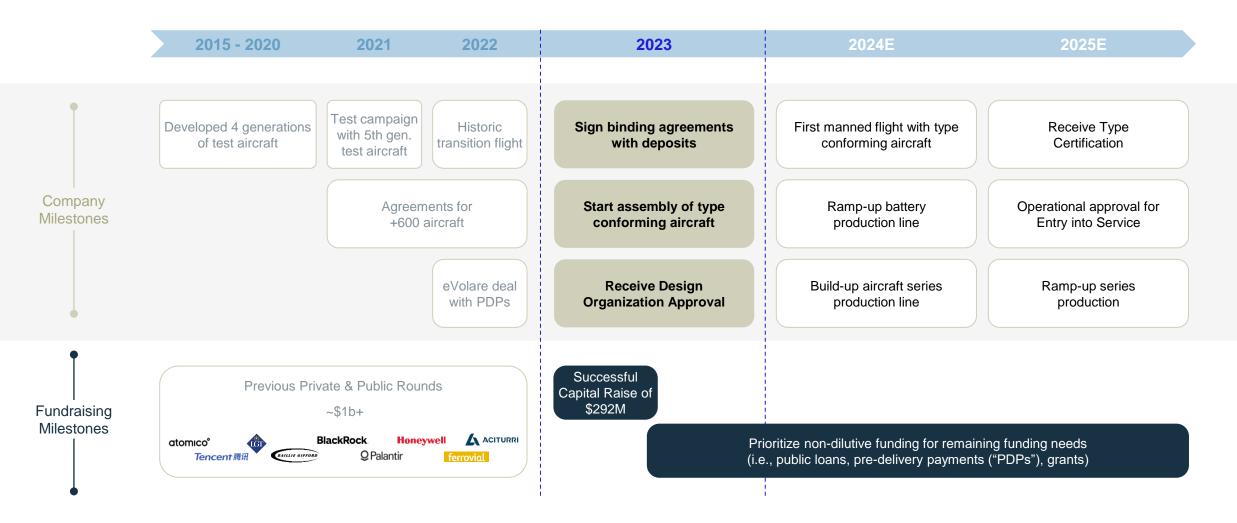






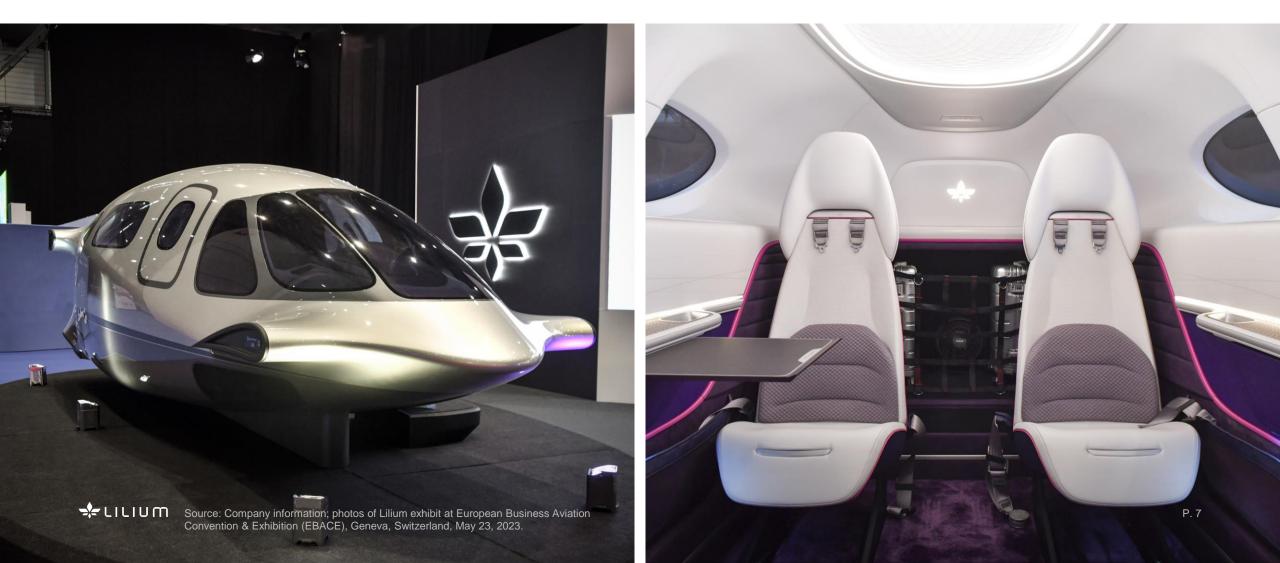
AIRBUS

## Lilium continues to unlock key value drivers



Source: Company information. Statements with respect to future value drivers are forward-looking, subject to significant business, economic, regulatory & competitive uncertainties & contingencies, many of which are beyond the control of the Company & based upon assumptions with respect to future decisions and events, which are subject to change. Actual results will vary & those variations may be material. Nothing in this presentation should be regarded as a representation by any person that the value drivers will occur as described herein. Note: Achievement of future milestones subject to successful delivery of respective preceding development, industrialization, and commercial milestones.

## The Lilium cabin – being designed to deliver a premium passenger experience



# Why we believe Lilium's design wins

PASSENGERS PREFER JETS<sup>1</sup>

SPACIOUS PREMIUM CABIN

HIGH PAYLOAD, HIGH SPEED, AND LONG RANGE<sup>2</sup>



SCALABLE AND VERSATILE PLATFORM

HIGHEST SAFETY STANDARDS IN THE INDUSTRY<sup>3</sup>

LOW PHYSICAL COMPLEXITY - SOFTWARE CONTROLLED



Source: Lilium engineering assessment & management estimates. <sup>1</sup>GAMA, JADC, Company information (Airbus, Boeing, Bombardier, Embraer), 2009 – 2019. <sup>2</sup>Estimate based on current development status of aircraft; top speed based on Lilium engineering assessment assuming flight at 10,000 ft.; range refers to physical range (service range + reserves); operating range of 175km. <sup>3</sup>Lilium's primary certification authority (EASA) stipulates probability of less than one aircraft loss per billion flight hours & management estimates.

## Versatile design can serve multiple business segments



#### **4 PASSENGER CLUB CABIN**

**6 PASSENGER SHUTTLE CABIN** 

FLEXIBLE CARGO CABIN: 6 m<sup>3</sup> volume

#### SCALABLE PLATFORM



Larger form factors on same technologies in the future

Source: Lilium engineering assessment & management estimates.

# Plan to launch in premium, scale with OEM sales – first Pre-Delivery Payments (PDPs) received

### LAUNCH IN PREMIUM MARKET

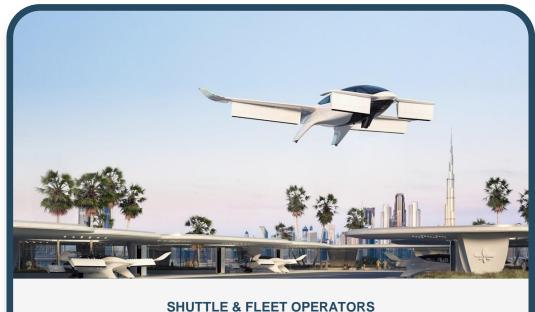


## PRIVATE AND FRACTIONAL OWNERSHIP & CHARTER SERVICES

Taking deposits and pre-delivery payments as of 2023

Aim to sell aircraft and aftermarket services to early adopters \_\_\_\_\_\_ in General and Business Aviation

### SCALING IN MASS MARKET



Plan to take pre-delivery payments by end of 2023

Aim to sell aircraft to commercial airlines, corporates, and governments

Source: Planned Lilium business model. Statements with respect to scaling are forward-looking, subject to significant business, economic, regulatory and competitive uncertainties and contingencies, many of which are beyond the control of the Company & are based upon assumptions with respect to future decisions and events, which are subject to change. Actual results will vary & those variations may be material. Nothing in this presentation should be regarded as a representation by any person that the scaling will be achieved as described herein.

## Lilium achieves breakthrough into the Chinese market



- Partnership announced with Shenzhen municipality
- Agreement signed with Heli-Eastern for the prospective sale of 100 Lilium Jets
- Lilium is the first non-Chinese eVTOL company to announce an aircraft deal in China
- China could represent up to 25% of global eVTOL market

## Pioneer Edition Lilium Jet

- Limited run of Lilium Jets expected to be sold via direct sales & partners
- Customization options
- >50% of purchase price expected to be paid as pre-delivery payments
- Delivery slots reserved for 31 aircraft

## Order pipeline of 745 aircraft

First pre-delivery payments received

#### **evolare**

- Right to order up to 20 Lilium Pioneer Edition Jets
- Premium sustainable demand in UK market

### **GL<b>③BE**AIR

- Right to order up to 12 Lilium Jets
- Premium demand in French Riviera and Italy

- Right to order up to 5 Lilium Jets
  Premium demand in Southern Spain
  - m demand in Southern Spain

Azul 🂝

- Right to order up to 220 Lilium Jets

ifly

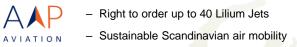
- VIP helicopter and

private jet operator

- Sustainable high-speed travel

between Greek islands

 One of the world's leading helicopter and Business aviation market



- Right to order up to 6 Lilium Jets

Right to order up to 5 Lilium Jets
 Premium demand in Switzerland and Italy

### السعودية SAUDIA

- Right to order up to 100 Lilium Jets
- Network across Saudi Arabia



- Right to order up to 100 Lilium Jets
- Able to serve >85m people in the Greater Bay Area
- MoU with Bao'an District of Shenzen municipality to launch eVTOL service in China

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## NETJETS

- Right to order up to 150 Lilium Jets for fractional program
- Support for Lilium Jet sales to private individuals

## **Bristow**

- Right to order up to 50 Lilium Jets
- $-\,$  One of the largest helicopter operators in the world
- Potential Part 145 partner in the United States

Source: Company information and public press releases. Final commercial terms are still being negotiated and remain subject to definitive documentation.

## Pre-delivery payments and deposit considerations

## **Deposits**

- **Private individuals assumed to pay a deposit** when signing binding purchase agreement

receive additional deposits in 2023

Lilium plans to

#### PRE-DELIVERY PAYMENTS

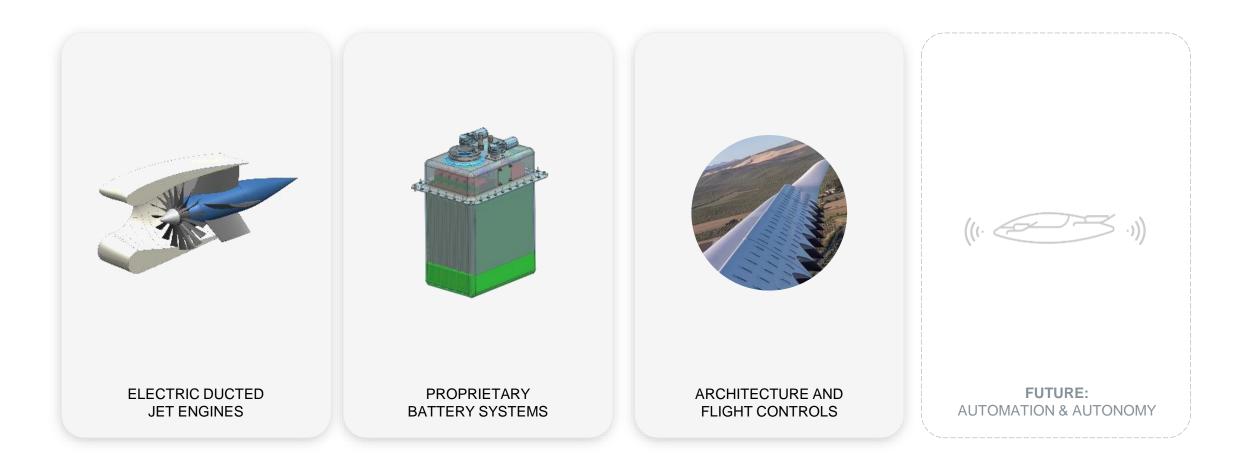
**PDPs** 

are a key component in commercial aerospace deals "(...), commercial airlines would pay OEMs ~40% of the total purchase price in PDPs spread over 2 years ahead of delivery."<sup>1</sup> Ramp-up of PDPs anticipated in 2023 through volume sales to commercial operators



Source: Company Information; <sup>1</sup>Source: Raymond James and Associates, August 2022. Statements with respect to future value drivers are forwardlooking, subject to significant business, economic, regulatory & competitive uncertainties & contingencies, many of which are beyond the control of the Company & based upon assumptions with respect to future decisions and events, which are subject to change. Actual results will vary & those variations may be material. Nothing in this presentation should be regarded as a representation by any person that the value drivers will occur as described herein.

## Highly differentiated core technologies – protected by patent filings



Source: Lilium management estimates. Note: Core technologies such as electric ducted jet engines, proprietary battery systems, and architecture and flight controls are currently in development. Data as of end of June 2023. Further patent filing details on slide 21.

## Ducted Electric Vectored Thrust (DEVT) differentiates Lilium jet from all open-rotor competitors

- 95% of all global airplanes use jet engines, which are preferred by customers for their high safety, low vibrations, and low noise
- We have developed our own electric version, with an electric motor replacing the gas turbine allowing for a much simpler, smaller, and lighter engine design
- The small engines provide redundancy and are integrated into the wings





TIER 1 SUPPLIERS FOR E-MOTOR AND JET FLAP

Honeywell

DENSO



# Progress towards validation of battery packs

## Confirmation of battery cell technology

- Our cell technology has been shown to offer exceptional capacity, power and cycle life
- Third-party independent laboratory testing has confirmed 88% energy retention in Lilium's full-size prototype cells after 800 charging cycles with 100% depth of discharge

## Battery cell industrialization started at CUSTOMCELLS®

- Progressing in cell industrialization with our primary battery cell production partner Customcells
- Customcells is aligning its quality management systems to rigorous aerospace standards
- Following best practice in EV industry, we have also selected a second source of battery cell production

## Successful battery pack component testing

- Multiple successful testing campaigns on battery pack components assembled in-house, with a focus on safety, performance and redundancy
- Tests represent important step towards validating that the Lilium Jet battery will meet EASA's requirements for propulsion batteries



## Circular battery economy and renewable electric infrastructure



# Building the next generation of fast charging infrastructure

ABB & Lilium plan to revolutionize charging infrastructure for regional air travel

ABB intends to develop **fast charging infrastructure** that is tailored to our customer needs

Charging infrastructure will be a **key part** of Lilium's commercial offering



## **Re-use batteries**

Used cells still have ~80% of storage capacity<sup>1</sup>

Lilium's high-performance batteries ideally suited for **micro-grid applications** 

Currently building up first partnerships



## **Recycle batteries**

Possible to recover >95% of valuable raw materials<sup>2</sup>

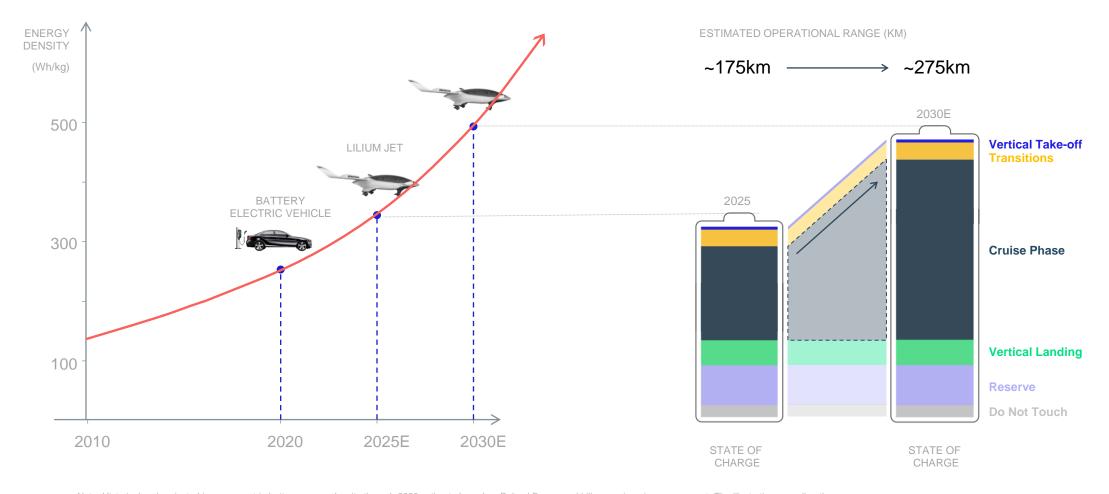
Feed back into circular value chain

Initiating first partnerships

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Source: Company information. <sup>1</sup>Lilium engineering assessment, management estimates & third-party independent laboratory testing. <sup>2</sup>Internal Lilium market study; statements with respect to the Company's future plans with ABB are forward-looking, subject to significant business, economic, regulatory & competitive uncertainties and contingencies, many of which are beyond the control of the Company & are based upon assumptions with respect to future decisions and events, which are subject to change. Actual results will vary & those variations may be material. Nothing in this presentation should be regarded as a representation by any person that the developments the Company is planning with ABB will occur as described herein.

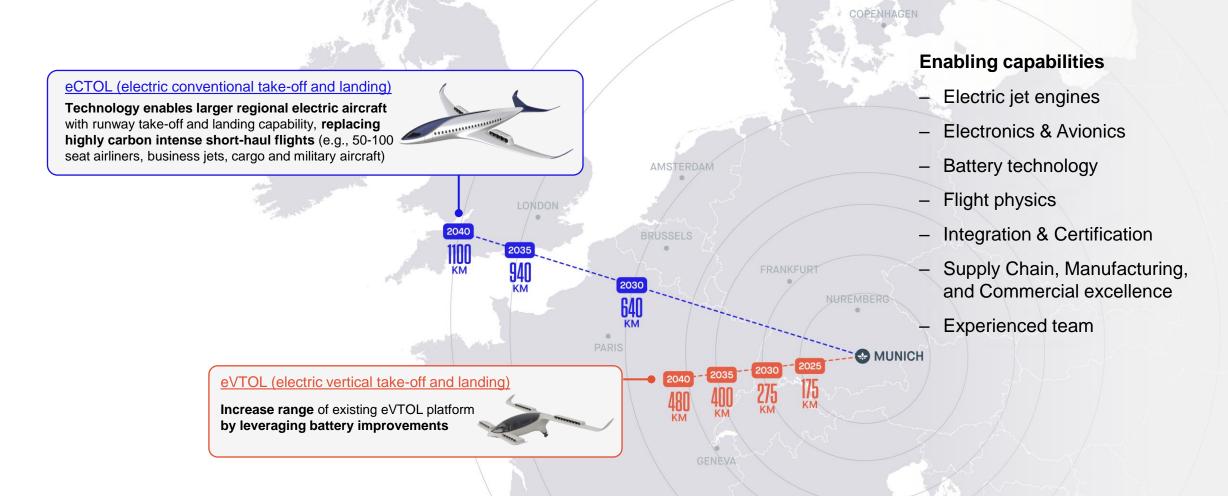
# Lilium's high cruise efficiency is positioned to yield significant range improvements as batteries improve



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Note: Historical and projected improvement in battery energy density through 2030 estimate based on Roland Berger and Lilium engineering assessment. The illustration regarding the improvement in battery energy density is based on estimates, is forward-looking, subject to significant business, economic, regulatory and competitive uncertainties and contingencies, many of which are beyond the control of the Company & are based upon assumptions with respect to future decisions and events, which are subject to change. Actual results will vary & those variations may be material. Nothing in this presentation should be regarded as a representation by any person that the estimated improvement in battery energy density will occur as described herein.

## Lilium technology and capabilities uniquely enable a portfolio of electric aircraft



KRISTIANSAND

Note: Targeted aircraft development vision through 2040 estimates based on Company analysis; The illustration of future aircraft capabilities is forward-looking, subject to significant business, economic, regulatory and competitive uncertainties and contingencies, many of which are beyond the control of the Company and its management and are based upon assumptions with respect to future decisions and events, which are subject to change. Actual results will vary & those variations may be material. Nothing in this presentation should be regarded as a representation by any person that future aircraft capabilities will be achieved as described herein.

# Secured intellectual property value in key eVTOL technologies

Lilium Patent Applications by Systems

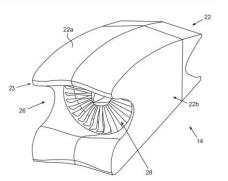
Structure **Avionics & Flight** & Interior Control ~18% ~11% Custom **Electronics** ~3% Energy **Power** ~29% **System** ~39% Propulsion

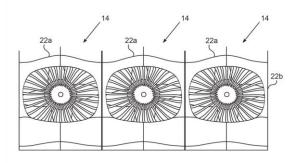
93 patents filed

62 patents published

Core patents protected in EU, US, China

Seven patents granted further confirming innovative character of Lilium Jet's architecture





# Robust supply chain with leading aerospace suppliers

Starting the assembly of the Lilium Jet by end of 2023



## First Lilium Jet primary structures and composite skin built





FORWARD FRAME





#### AFT FRAME

- Aciturri completed several primary structures, as well as completing the first skin section in composite material
- Tooling work is progressing on additional fuselage parts \_ as well as wings

Source: Company information.

## Flight tests validate architecture & support certification

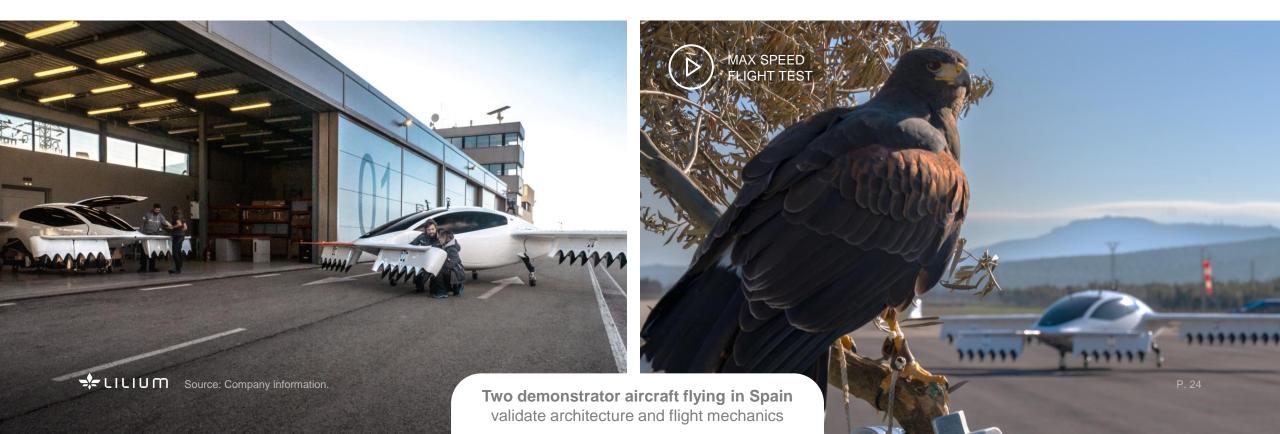
### Full transition in straight and level flight conditions

- consistent with engineering estimates

### Max speed 136 kt / 250 km/h achieved

Test data **validates** robustness of computer models – **supporting certification** 

Demonstrator flight campaign increases readiness for Lilium Jet certification flight campaign

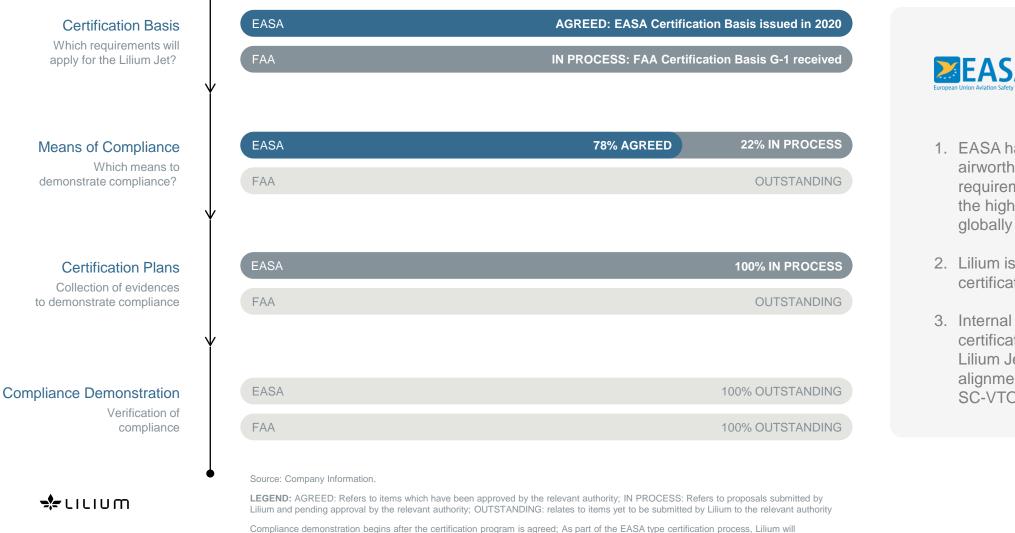




## Wind tunnel testing demonstrates Lilium Jet's aerodynamics

- Wind tunnel testing conducted of complete Lilium Jet model through multiple speed ranges including hover and cruise
- Significant insights gained on flight performance in hover and high-speed flight

# Lilium first (and so far only) eVTOL manufacturer with both an EASA and FAA certification basis for powered lift eVTOL aircraft



additionally submit for approval its operational suitability data covering pilot training, maintenance staff and simulator qualification.

Administration

**Federal Aviation** 

- 1. EASA have published airworthiness certification requirements representing the highest safety objectives globally for eVTOL aircraft
- 2. Lilium is pursuing concurrent typecertificate validation with the FAA
- Internal analysis of the G-1 certification basis issued for the Lilium Jet indicates significant alignment by the FAA to EASA SC-VTOL regulations.

## Why Lilium is the best value proposition to customers and investors



## CUSTOMER TRACTION & CREDIBLE EXPECTED CERTIFICATION PATH

**Start with high-margin Premium**, followed by high volume OEM & network sales

Premium with highly attractive potential unit economics and high deposits

Being certified in multiple jurisdictions (EASA & FAA)



#### SEASONED AVIATION EXECUTIVE TEAM

**Highly experienced team** that has designed, certified, manufactured and delivered major aviation programs

**CEO Klaus Roewe** led one of the most successful aircraft program in aviation industry



# TOP INVESTORS & SOLID FUNDING PLAN

Total of **~\$1b+ capital invested in company to date** 

Recent round to nearly close funding to First Flight of type conforming aircraft

**Prioritize non-dilutive funding** (public loans, PDPs, grants) for remaining funding<sup>1</sup>



#### PROPRIETARY TECHNOLOGY & COMPELLING PLATFORM

We believe we are developing the most performant eVTOL jet: range, speed, payload

Large spacious cabin will allow for Premium & other use cases

Proprietary, proven technology with 93 filed patents

Highest safety standard (10-9)



Statements with respect to anticipated value increases are forward-looking, subject to significant business, economic, regulatory and competitive uncertainties and contingencies, many of which are beyond the control of the Company & are based upon assumptions with respect to future decisions and events, which are subject to change. Actual results will vary & those variations may be material. Nothing in this presentation should be regarded as a representation by any person that the anticipated value increases will be achieved as described herein. <sup>1</sup>Lilium's business strategy involves continued evaluation of capital raising and strategic opportunities, including joint ventures and strategic partnerships. Any such transactions, if consummated, could be material to our business, financial condition and operating results and may involve the issuance of dilutive securities.

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Forward-looking statements are predictions, projections and other statements about future events that are based on management's current expectations with respect to future events and are based on assumptions subject to risks and uncertainties, and as aresult are subject to change at any time. The Lilium Group operates and will continue to operate in a rapidly changing emerging industry. New risks emerge every day. Given these risks and uncertainties, you should not rely on or place undue reliance on these forward-looking statements, including any statements regarding when or whether any strategic collaboration between Lilium and the respective collaborator will be effected, the number, price or timing of any Lilium jets to be acquired (or if any such Lilium jets will be acquired at all), the price to be paid therefor and the timing of launch or manner in which any proposed eVTOL network or anticipated commercial activities will operate, or statements regarding the Lilium Group's business and product development strategies or certification program. Actual events or results may differ materially from those contained in the projections or forward-looking statements. Many factors could cause actual future events to differ materially from the forward looking statements in this presentation, including, but not limited to, the following risks: (i) the eVTOL market may not continue to develop, or eVTOL aircraft may not be adopted by the transportation market; (ii) Lilium's eVTOL aircraft may not be certified by transportation and aviation authorities, including the European Union Aviation Safety Agency ("EASA") or the U.S. Federal Aviation Administration ("FAA"); (iii) the Lilium Jet may not deliver the expected reduction in operating costs or time savings that Lilium anticipates; (iv) adverse developments regarding the perceived safety and positive perception of the Lilium Jets, the convenience of Lilium's expected future Vertiports, and Lilium's ability to effectively market and sell regional air mobility ("RAM") services and aircraft; (v) challenges in developing, certifying, manufacturing and aunching Lilium's services in a new industry (urban and regional air transportation services); (vi) a delay in or failure to launch commercial services as anticipated; (vii) the RAM market for eVTOL passenger and goods transport services does not exist. and whether and how it develops is based on assumptions, and the RAM market may not achieve the growth potential Lilium's management expects or may grow more slowly than expected; (viii) if Lilium is unable to adequately control the costs associated with pre-launch operations and/or its costs when operations are commenced (if ever); (ix) difficulties in managing growth and commercializing operations; (x) failure to commercialize Lilium's strategic plans; (xi) any delay in completing testing and certification, and any design changes that may be required to be implemented in order to receive certification; (xii) any delays in the development, certification, manufacture and commercialization of the Lilium Jets and related technology, such as battery technology or electric motors; (xiii) any failure of the Lilium Jets to perform as expected or an inability to market and sell the Lilium Jets; (xiv) any failure to manage coordination with vendors and suppliers to achieve serial production of complex software, battery technology and other technology systems still in development; (xv) reliance on third-party suppliers for the provision and development of key emerging technologies, components and materials used in the Lilium Jet, such as the lithium-ion batteries that will power the jets, a significant number of which may be single or limited source suppliers; (xvi) if any of Lilium's suppliers become financially distressed or go bankrupt, Lilium may be required to provide substantial financial support or take other measures to ensure supplies of components or materials, which could increase costs, adversely affect liquidity and/or cause production disruptions; (xvii) third-party air carriers are expected to operate Lilium Network services in the U.S., Europe and Brazil using the Lilium Jets, and these third-parties, as well as Lilium, are subject to substantial regulation and complex laws, and unfavorable changes to, or the third-party air carriers' or Lilium's failure to comply with, these regulations and/or laws could substantially harm Lilium's business and operating results; (xviii) any inability to operate the Lilium Network services after commercial launch at the anticipated flight rate, on the anticipated routes or with the anticipated Vertiports could adversely impact Lilium's business, financial condition and results operations; (xix) potential customers may not generally accept the RAM industry or Lilium's passenger or goods transport services; (xx) any adverse publicity stemming from any incident involving Lilium or its competitors, or an incident involving any air travel service or unmanned flight based on autonomous technology; (xxi) if competitors obtain certification and commercialize their eVTOL vehicles more quickly than Lilium; (xxii) Lilium's future funding requirements and any inability to raise necessary capital on favorable terms (if at all); (xxiii) business disruptions and other risks arising from the COVID-19 pandemic and geopolitical events, including related inflationary pressures, may impact Lilium's ability to successfully contract with its supply chain and have adverse impacts on anticipated costs and commercialization timeline; and/or (xiv) Lilium's inability to deliver Lilium Jets with the specifications and on the timelines anticipated in any non-binding memorandums of understanding ("MOUs") or term sheets we have entered into or any binding contractual agreements with customers or suppliers we may enter into in the future. The foregoing list of factors is not exhaustive. Forward-looking statements speak only as of the date they are made. You are cautioned not to put undue reliance on forward-looking statements, and the Lilium Group assumes no obligation to, and does not intend to, update or revise these forward-looking statements, whether as a result of new information, future events, or otherwise. The Lilium Group is not giving you any assurance that it will achieve its expectations. A further list and description of risks, uncertainties and other matters can be found in sections titled "Risk Factors," similarly titled sections and elsewhere in our filings with the U.S. Securities and Exchange Commission ("SEC"), all of which are available at www.sec.gov. All forward-looking statements attributable to the Lilium Group or any person acting on its behalf are expressly gualified in their entirety by this cautionary statement.

#### **Description of Key Partnerships**

This presentation contains descriptions of some of Lilium's key business partnerships with whom Lilium has entered into feasibility studies, indications of interest, term sheets, memoranda of understanding or other preliminary arrangements. These descriptions are based on the Lilium management team's discussions and the latest available information and estimates as of the date of this presentation. In each case, these descriptions are subject to negotilation and execution of definitive agreements that may not have been completed as of the date of this presentation and, as a result, the nature, scope and content of these key business partnerships remain subject to change.

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