





# PROSPECTUS

For the establishment of the stock company

**Kjeller Aviation** 

Subscription period for shares until 7 December 2023

For more information:

### kjelleraviation.com

Kjeller/Gardermoen 2023





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### FIRST FLYING STUDENT:

Roald Amundsen started flying lessons at Kjeller airport in 1913. The instructor was the aviation pioneer Einar Sem-Jacobsen, here sitting in the front.

### OSLO'S LOCAL AIRPORT:

30 years after the Storting decided to move Oslo Airport from Fornebu to Gardermoen, it is still unclear what will be the solution and financing of a local airport for 1.4 million in the Oslo area.

### PURPOSE

Establishment of a stock company for the preservation of national aviation historical cultural heritage as well as the development of green and sustainable aviation in the country's leading innovation districts with infrastructure, cultural tourism, education, research, innovation and industry.

**Kjeller Aviation** shall promote an inclusive and open environment. The goal is to create and further develop Kjeller Airport with an innovation and experience center that accelerates the phasing in of zero- and low-emission aircraft.

Local and regional airports contribute to more efficient travel. A further development of Kjeller can contribute to strengthening the business world, the travel offer and the total defense for over 1.4 million who live in the Oslo area. A strengthening of the local airports at Kjeller, Hamar and Voss will naturally form part of the National Transport Plan 2025-2036 - which is expected spring 2024.

### **Business plan**

The innovation and experience center will preserve aviation historical cultural heritage and create the future with the development of new and innovative solutions in the transition to emission-free and sustainable aviation, and contribute to regional and interregional growth and development.

Establishing Oslo's local airport has great potential as a tourist attraction and arena for education, training, research, innovation, technological development, green regional aviation and urban mobility. An operational local airport in the Oslo area will also strengthen overall defense with preparedness and security.









**CELEBRATION:** F-16 686 in the 100-year celebration of Norwegian aviation, the Air Force and Kjeller in 2012.



### 100TH ANNIVERSARY: The

celebration of Kjeller airport in 2012 with a display of aircraft and aviation enthusiasts on the runway.

### VALUABLE CULTURAL HERITAGE

"It was the Norsk Luftseiladsforening - the forerunner of the Norwegian Air Sport Federation - that laid the foundation for the airport at Kjeller. 17 May 1912, the association launched a fundraising campaign to be able to provide the initial basis for an air fleet in the Armed Forces. "On Saturday 21 September, the first flight was made from Kjeller. A few days later the second flight arrived". "In 1913, the area of the airport was expanded from 40 to 700 acres. Norsk Luftseiladsforening bought it for 30,000 kroner, and later transferred it to the state".

The anniversary book Kjeller Jern & Metall 100 years dept. 87 - 1917-2017

In the autumn of 1913, Roald Amundsen was in the USA on a lecture tour, and at the same time he was busy with preparations for a new North Pole expedition. After a flight in San Francisco, he becomes the first student pilot at Kjeller, and on 11 June 1914 takes international flight certificate (called 'patent') No. 1 for civilians.

In 2012, the 100th anniversary of Norwegian aviation, the Air Force and Kjeller Airport was celebrated with airshows all over the country. Kjeller airport was solemnly celebrated during Flydagen 2-3 June, 100-year commemoration with conference 21–22 Sept. and military open day 23 Sept. 2012.

#### Riksantikvaren with initiation of preservation proceedings

On 4 October 2018, the Riksantikvaren announced the initiation of conservation proceedings for Kjeller, with a subsequent adjusted conservation proposal dated 4 December. 2019. The new conservation proposal includes the entire runway and larger parts of the outer airfield, which is today called Småflyhavna.

Over 2,500 aviation enthusiasts encircle the runway with lined-up aircraft and participate in the celebration of 110 years of appeals during the public action at Kjeller airport on 25 September 2022.









**FIRST ELECTRIC AIRCRAFT:** Kjeller has been a test base for electric aircraft since 2018. Here, the first electric aircraft in Scandinavia and the Baltics, the Pipistrel Alpha Electro.



**TRAIN AND PLANE:** The first electric passenger planes are expected in 2028-2030. The map shows BANE NOR's train lines in the Oslo area together with existing airports.

# **55 PERCENT REDUCTION IN 2030**

In the years leading up to 2050, decarbonisation of aviation will play a decisive role in the success of the green shift.

"Aviation therefore has a key role in our regional, national and international public transport infrastructure. It is clearly in our interest to make air transport as green as possible. [...] We need solid and reliable aviation in the future as well. [...] In addition, we believe that the Nordic countries can work together to promote regional aviation and will encourage future cooperation".

Transport Minister Jon-Ivar Nygård (Ap), ZERA conference 18 Oct.

The COP27 climate summit will be held in Egypt on 6-18 Nov. 2022. Norway has notified the UN of a target of a 55 percent reduction in emissions by 2030, and is following up "Fit for 55" in the EU.

"It is in line with the ambition we have with us from Hurdal, and in line with all European countries and Iceland. Those with whom we will carry out this great job now have common goals. It is a very good goal and a good management tool".

Prime Minister Jonas Gahr Støre (Ap), press conference 3 Nov. 2022

"This requires effort in all sectors of society, to succeed in it. [...] Norway has an open economy. A lot of what we do is exporting to European players in particular. They now set stricter requirements for zero emissions and low emissions in the value chains. It pays off more and more".

Climate and Environment Minister Espen Barth Eide (Ap), press conference 3 Nov. 2022







ASK FOR INVESTIGATION:

The Norwegian Air Sports Federation is asking for an investigation into the future of Kjeller, the country's first and one of the world's oldest airports.



FOTO: AIR24

**NEW AVIATION STRATEGY:** 

Transport Minister Jon-Ivar Nygård (Ap) with the aviation strategy adopted by the Storting in 2023. The government will accelerate the phasing in of zero and low emission aircraft.

### **GREEN AVIATION**

According to forecasts by Clean Aviation JU in the EU, we can expect a tripling of air traffic in the years leading up to 2050.

Green regional aviation "is the start of new, cheaper, cleaner and better ways to fly", according to the ZERO Foundation.

"The Minister for Transport is working on a new strategy related to this, among other things, and there are a lot of exciting projects underway, with biofuel, electric aircraft, new infrastructure and new technology. It is important to seize the opportunities and we believe that Norway has good conditions to really take the lead in this work". Industry Minister Jan Christian Vestre (Ap), press conference 17 Oct. 2022

#### Asking for a report on the future of Kjeller

The Norwegian Air Sports Federation estimates that electrification in the coming years could contribute to the number of flights multiplying and requests a new report on the future of Kjeller Airport.

Chief John Eirik Laupsa believes that more people will "open their eyes to the fact that the airport at Kjeller can represent something more than just a veteran aviation center in the future. Then I think in particular of the opportunities that developments in electric aviation and urban aviation mobility (UAM) will give the municipality".









### **CENTER IN THE NORDICS:**

Kjeller is a popular airport and destination for travelers from home and abroad, with short distances to businesses and attractions in Lillestrøm and central Oslo.



#### **REGIONAL AVIATION:**

Forecasts from Eurocontrol and Clean Aviation JU in the EU indicate a possible tripling or quadrupling of air traffic in the decades leading up to 2050.

# **NEW REGIONAL TRAVELS**

The new local airport will enrich the travel offer for the business community and over 1 million residents living in the Oslo area. It is a "region full of experiences 10-30 minutes' journey from the capital", according to Visit Greater Oslo and Akershus Tourism Board.

In 1992, the Storting came up with the 'Fornebuløftet', a promise for a new local airport for the Oslo area. Alternating governments still have no solution 30 years after the decision to close down Fornebu and move Oslo Airport to Gardermoen. Among the criteria is 30 minutes, later extended to 60 minutes, travel distance by public transport from the center of Oslo to a fully functioning new local airport.

#### Kjeller is the best option

Calculations show that Kjeller is the best alternative for a futureoriented, sustainable and close-to-city airport for Oslo, which will be attractive to businesses and involve new emission-free travel opportunities for over 1 million inhabitants in the Oslo area.

According to Avinor in 2017, there is a need for a reinforced network of public airports around Oslo and the largest cities in Norway ahead of the green shift in aviation. The need is greatest near Oslo, according to Avinor.







**AIRPORT CITY:** The many flight activities at the airport are the origin of one of the country's largest research and innovation environments.



#### LCY OPENED IN 1987:

London City Airport on the banks of the Thames, 10 km east of London City and 5 km from the city's second financial centre, Canary Wharf, was opened in 1987 and has since 2017 been expanded for over NOK 5 billion.

### **INNOVATION DISTRICT**

With the development of new electrified aircraft types in the transition to green aviation, Kjeller is about to set sail as an exciting "city and business airport" for Oslo and Lillestrøm in the future.

Oslo's new local airport can strengthen Romerike as one of the country's first innovation districts. The airport can be further developed to become an arena for testing, innovation and education, and to speed up green aviation.

The development is about to radically change the future of aviation, and increases the potential of central airports such as Bromma in Stockholm and Kjeller near Oslo. At Kjeller, it is proposed to establish a veteran aviation center in addition to an education centre, innovation arena and future centre.

#### One of the country's leading innovation centres

The airport is the origin and neighbor of one of the country's foremost and most profitable technology, research and innovation environments.

A combination of city and plane is entirely possible. That is the conclusion of stakeholders in London who in 1987 opened London City Airport (LCY) on the banks of the Thames.

However, the ground conditions at Kjeller airport entail a great risk. Forsvarsbygg calls for more knowledge about the large and extensive rubbish dumps at the airport in former river courses and ravine valleys that make up the former river course of the Sogna River. Large parts of the airport area are included in NVE's 200-year flood map. According to the head of research at FFI, there are still a dozen or so high explosive bombs from Allied bombing raids in 1943–1944.

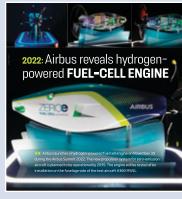








**TEST BASE:** Lillestrøm municipality has an opportunity to 'sign up' in the competition to establish a future-oriented test and innovation center for green aviation.



### **HYDROGEN FUEL-CELL:**

Airbus launches a hydrogenpowered fuel cell engine during the Airbus Summit 2022. The company is developing the new propulsion system for new zero-emission aircraft which are scheduled to be operational by 2035.

### **RESEARCH AND EDUCATION**

Public airports close to the city center such as Bromma, Hamar and Kjeller have for years been threatened by the closure of local interests that want to build housing. Now the rise of green aviation is leading to new opportunities and needs for business and millions of citizens and travelers throughout the Nordic region.

Electrification and the phasing in of new emission-free aircraft systems will change aviation. Eurocontrol announces a strong increase in air traffic. The need for public airports close to the city center will increase, according to NASA. At the same time, the OECD is calling for a faster pace in the green shift. Avinor has a social responsibility for long-term planning and the management announced during Arendalsuka in 2022 radical changes to meet the growing need in the coming years.

#### Green aviation is taking a big leap forward

Developments in the electrification of aviation took a big leap forward in 2021. The number of new zero- and low-emission aircraft increases year by year. In 2021, over 30 percent of new aircraft types will use hydrogen as fuel in various hybrid solutions, showing a growing trend in line with the government's national commitment to hydrogen and battery technology.

In the spring of 2021, Avinor, CAA Norway, Norsk Industri and Sintef were commissioned by the Solberg Government to establish an innovation arena for Norwegian aviation, initially a virtual version.

Lillestrøm can now take advantage of the opportunity and "sign up" in the competition to establish a future-oriented and physical innovation arena for aviation.







**HISTORICAL:** Eviation's Alice, the world's first all-electric passenger plane, took off from Moses Lake east of Seattle and made its first test flight on September 27, 2022.



**INNOVATIVE:** Aura Aero in Toulouse and Embraer in Brazil with new zero and low emission aircraft in 2022-2023. In the development of the Energia fleet, Embraer collaborates with Widerøe and Rolls-Royce.

### **INNOVATION AND TECHNOLOGY**

Clean Aviation in the EU estimates an investment need for 44,000 new passenger aircraft over the next two decades, including 26,000 new emission-free passenger aircraft in the years leading up to 2050. This will include planning, development, testing and production at an investment value that Clean Aviation estimates to be more than NOK 50,000 billion.

On 24 June 2022, the EU launched "The Alliance for Zero Emission Aviation". The alliance invites large-scale cooperation on emissionfree aircraft systems. AURA AERO has been chosen by the EU to serve on the steering committee of AZEA, together with Airbus. The new company is developing the first European 19-seat regional transport aircraft with hybrid-electric propulsion, called Electric Regional Aircraft (ERA).

#### Extensive changes at great pace

"Technological changes lead to great opportunities for growth and innovation," claims Professor Arild Aspelund in international marketing at NTNU.

Private business has always demanded knowledge about how they can "use new technology to create growth and competitiveness".

According to Arild Aspelund, "the public sector is also in greater demand for this knowledge in order to create effective and userfriendly solutions for the population".

"The challenge today is that new technology is forcing changes that are very extensive and they are coming at a great pace", says Professor Arild Aspelund at NTNU.







**HYBRID:** In 2023, SAS has sold 30 tickets for the three first SAS flights in 2028 with the hybrid electric ES-30 from Heart Aerospace. The tickets were snapped up in no time.

O: HEART AEROSPACE AND ELFLY-GRUPPE



#### **ZERO AND LOW EMISSIONS:**

Heart Aerospace at Säve airport and the Elfly group at Jarlsberg are developing aircraft types based on propulsion with hybrid and battery technology.

### **INVESTMENT IN YOUR FUTURE**

The government has drawn up a new aviation strategy which was adopted by the Storting on 2 May 2023. The aim of the strategy is to contribute to a more sustainable Norwegian aviation. "New technology, education, competence and passenger rights" are other themes in the strategy that focus heavily on commercial air traffic and to a small extent mention education and the general aviation environment.

#### The government is committed to sustainable aviation

The aviaton strategy is divided into four main pillars with a focus on sustainable solutions.

**1)** "The government aims to reduce emissions from aviation by stimulating the use of the most environmentally friendly aircraft and fuel types. A more environmentally friendly aviation is also about biofuels, new technology and low-emission aircraft".

**2)** "Aviation is an international industry". It is "a goal to combat social dumping in aviation and to facilitate serious actors in the industry".

**3)** "The aviation strategy will describe how the flight offer on the short-haul network can be strengthened, including ensuring low prices and more departures. The aim is to halve the prices passengers pay for FOT routes".

4) "It is a stated goal that the players in Norwegian aviation must have framework conditions that make it possible to operate profitably over time and without government subsidies. The Avinor model for operating and further developing airports throughout the country is to be continued and strengthened. It is a goal that the air passenger tax should be replaced with a tax that has a real climate effect and a better geographical profile."







**OLDEST IN THE AIR:** Norway's oldest aircraft in the air, DH6OM Moth 125 "Juul", above one of the world's oldest airports.



KJELLER SINCE 1912: One

of the world's oldest airports is also the country's first green airport, which can be important in a strengthened overall defence.

# **OSLO'S LOCAL AIRPORT**

New green regional flight routes and flight offers will have an impact on settlement, business and tourism throughout the country. For business, it will mean new competitive advantages. The possibilities are great in the interaction between unique aviation historical cultural heritage and a forward-looking innovation and education environment within Norwegian aviation.

#### One of the world's first green airports

Kjeller has the potential to become one of the world's first green airports with research and innovation centers and an international educational environment of importance for the whole of Norway.

A local airport for the Oslo area can also become a popular and eventually necessary supplement to Oslo Airport at Gardermoen at the same time as new zero- and low-emission aircraft are phased in.

### Strengthening of the total defence

A commitment to Kjeller as a continuing airport is also of great importance for preparedness and public safety in a time of war in Europe and a tense security political situation.

"The total defense concept must be strengthened. This means that the Armed Forces' resources must be able to be used to the greatest extent possible also in a social security crisis", says the head of the Total Preparedness Commission, Harald Sunde, who on 5 June 2023 handed over the report to Minister of Justice and Emergency Emilie Enger Mehl (Sp).







**NEW VALUES:** A local airport for the Oslo area can become central to a strengthened network of small airports, to strengthen preparedness and security, and to promote a valuable identity and brand.



#### EDUCATION CENTRE: On

11 June 1914, Roald Amundsen took his international pilot's licence No. 1 as the country's first student pilot. Since 1912, Kjeller has been a training center for pilots, aircraft technicians and avionics engineers.

# **GREAT POTENTIAL FOR NORWAY**

New technology and new electrified aircraft types with hydrogen, battery operation and hybrid solutions create great potential for the entire business world and millions of citizens in Norway and the rest of the Nordic region.

According to Avinor, there is a need for a reinforced network of local airports to succeed in the green shift and the transition to clean aviation and smart mobility.

Successive governments have expressed great ambitions to make Norway a leading country in green aviation.

#### Industry players are calling for a strong engine

Kjeller is a valuable airport for business and the citizens of the Oslo region. Green aviation creates opportunities for the establishment of new industries, new companies and new jobs.

Industry players have called for a strong engine in development, which can create progress and ripple effects for aviation and business throughout Norway.

Kjeller airport can be a factor in further developing an identity and strengthening the brand and the opportunities for innovation environments and Norwegian industry.

Green aviation will inspire children and young people, help create value, be a competitive advantage and contribute to an easier everyday travel experience for most people. U R B A N

# FACILITATOR

Urban Sky is an interest organization for the development of emission-free aviation and smart mobility.

The organization is a resource center for the development of new technology, value chains and ecosystems within green aviation. Urban Sky wants to be a forum and a meeting place for all those interested in sustainable aviation and smart mobility.

The government aims for Norway to take "a leading role in aviation's transition to a sustainable future". Urban Sky supports the ambitions of the Government and offers advice in aviation safety, education, research, innovation and technology development for individuals, entrepreneurs, start-ups and established companies.

New technologies and new ecosystems within green aviation are of great importance for sustainable social development. In the years to come, it will open up new travel routes and easier transport throughout Norway, contribute to new and more efficient travel offers in the Nordics and the rest of the world, and create the basis for new industries and businesses with companies and workplaces both domestically and abroad.

Urban Sky works to strengthen the infrastructure and the instrument apparatus for the development, testing and certification of new flight systems. We have a collaboration with research and university environments that, with various test facilities, can be included in new development projects.

As the Nordic region's first interest organization for green aviation, we contribute with meetings, workshops, presentations and the exchange of expertise to interested parties, professional communities, business, politicians and authorities.

Urban Sky also offers our individual members, company members, sponsors and partners access to a dedicated image server and ordering images at reduced prices.

For more info: urbansky.no