

**NARVA-OLGINA  
BUSINESS PARK &  
AERODROME**



# NARVA-OLGINA BUSINESS PARK & AERODROME

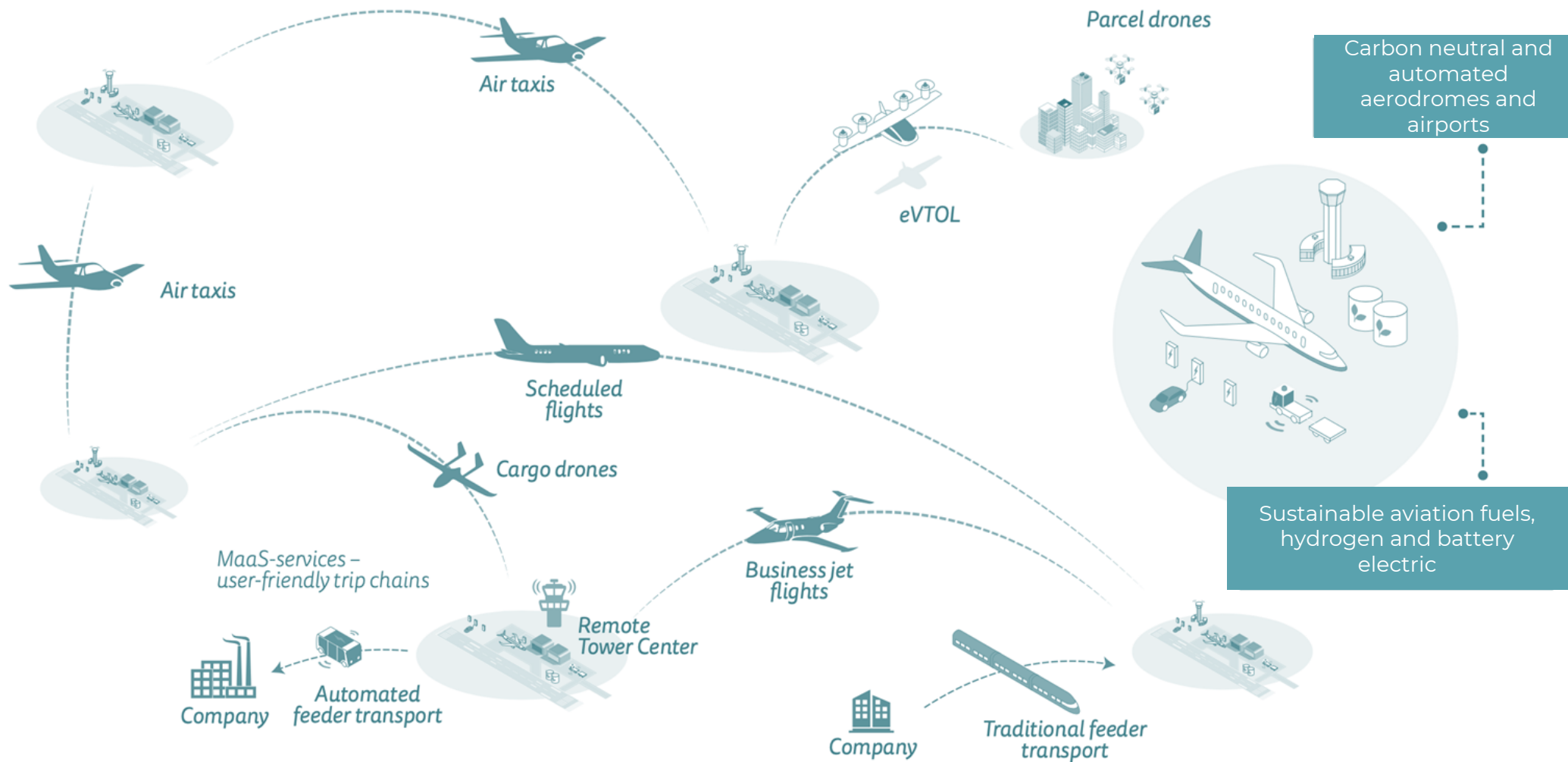
A feasibility study for  
a sustainable and  
competitive business  
ecosystem



Funded by  
the European Union

# VISION FOR ESTONIAN NEW ERA AVIATION

The role of Narva aerodrome is to act as a forerunner for new era aircraft and operations models



- FOCUS**
- Smaller emission free aircraft
  - Sustainable airport and aerodrome network that brings benefits for the whole country
  - New operation and business models



# KEY DRIVERS FOR DEVELOPMENT OF THE NARVA-OLGINA BUSINESS PARK AND AERODROME

6 drivers can be identified that argue for the development

## Industrial transformation

- Need to diversify industry and greening the industry
- Need to attract new business that enable green transition – new business potential

Good connectivity, new logistics facilities and the sources of renewable energy are required

## Narva-Olgina business park and aerodrome development



Development platforms and “beacons” for new solutions are needed

## Estonia as a forerunner in digitalization

- Strong expertise available
- Application in aviation business models and processes should be sought
- Drone business is growing rapidly in logistics and data acquisition
- Physical facilities are required

## Critical raw materials and electrification

- Electrification of societies
- EU Critical raw materials act – reducing dependence on non-European countries
- Narva’s industry is critical, for ex. rare earth magnet manufacturing

Potential for air cargo and air cargo land services

Logistics hubs ideal for energy production

Need for air connections “across the seas”

New tech needs to find business cases and real-world applications

## Technological development

- Advanced tech and new era aircraft are coming
- Small scale aviation will change dramatically in smaller countries such as Estonia and Finland
- A possibility to be forerunners in tech development and usage

## Sustainable energy

- EU emission reduction targets
- Massive development of energy production, storage and distribution is required

## Geopolitical changes

- Pressure to find new markets from western countries
- Need for face-to-face sales work and networking



# NARVA AERODROME CATCHMENT AREA AND ACCESSIBILITY

Accessibility to western countries is vital in the current operational environment




EU population:

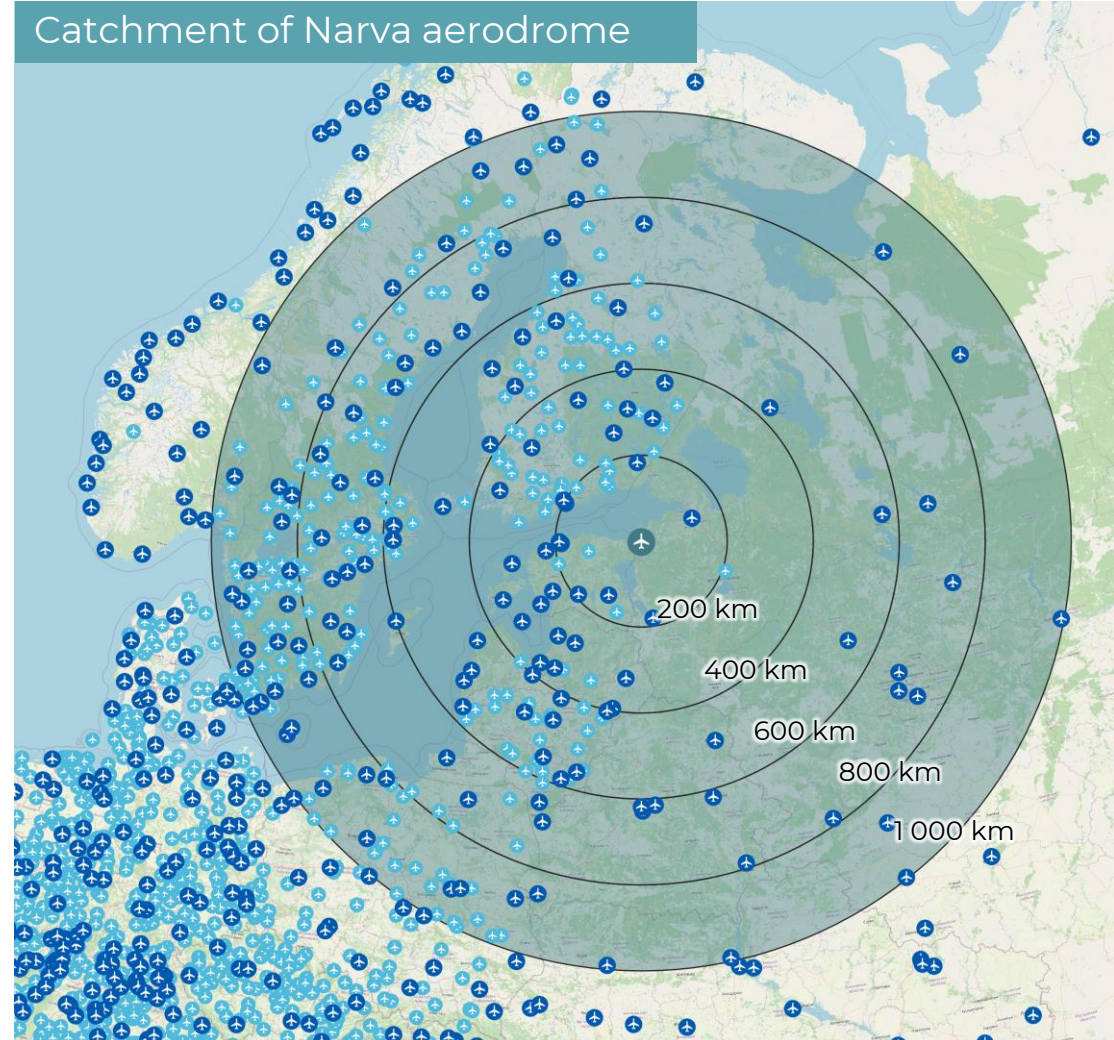
- 1.95 million people within 200 km
- 6,81 million people within 400 km
- 13,5 million people within 600 km
- 19,8 million people within 800 km
- **39,2 million people within 1,000 km**

of Narva aerodrome  
+ population in non-EU countries

**Around 140 major airports and 240 other airfields within 1,000 km of Narva aerodrome.**

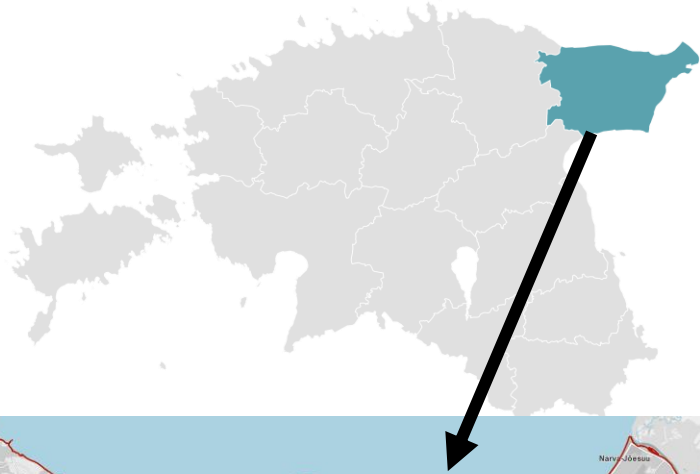
Source: Eurostat  
(2021 population census: preliminary results)

-  Narva aerodrome
-  Major European airports
-  Other airfields



# IDA-VIRUMAA AS BUSINESS REGION

Versatile business spread across the county forms the basic potential for aviation services



Ida-Virumaa  
companies:

TURNOVER IN 2021

**3 200 million €**

EXPORTS IN 2022

**943 million €**

% OF ESTONIAN EXPORTS IN 2022

**4,4 %**

*classification is based on the location of the company's headquarters*

Source: Statistics Estonia



THERE ARE OVER  
**6 600 COMPANIES**  
LOCATED IN THE IDA-  
VIRUMAA COUNTY

**68 COMPANIES**  
WITH 50+ EMPLOYEES

Vast potential  
for ex. for  
hydrogen and  
synthetic fuel  
production



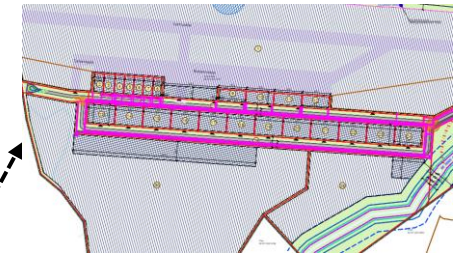
# CURRENT AND PLANNED BUSINESS AND INDUSTRIAL PARKS



Kiviõli business park



Kohtla-Järve industrial park



Narva-Olgina Business park & Aerodrome

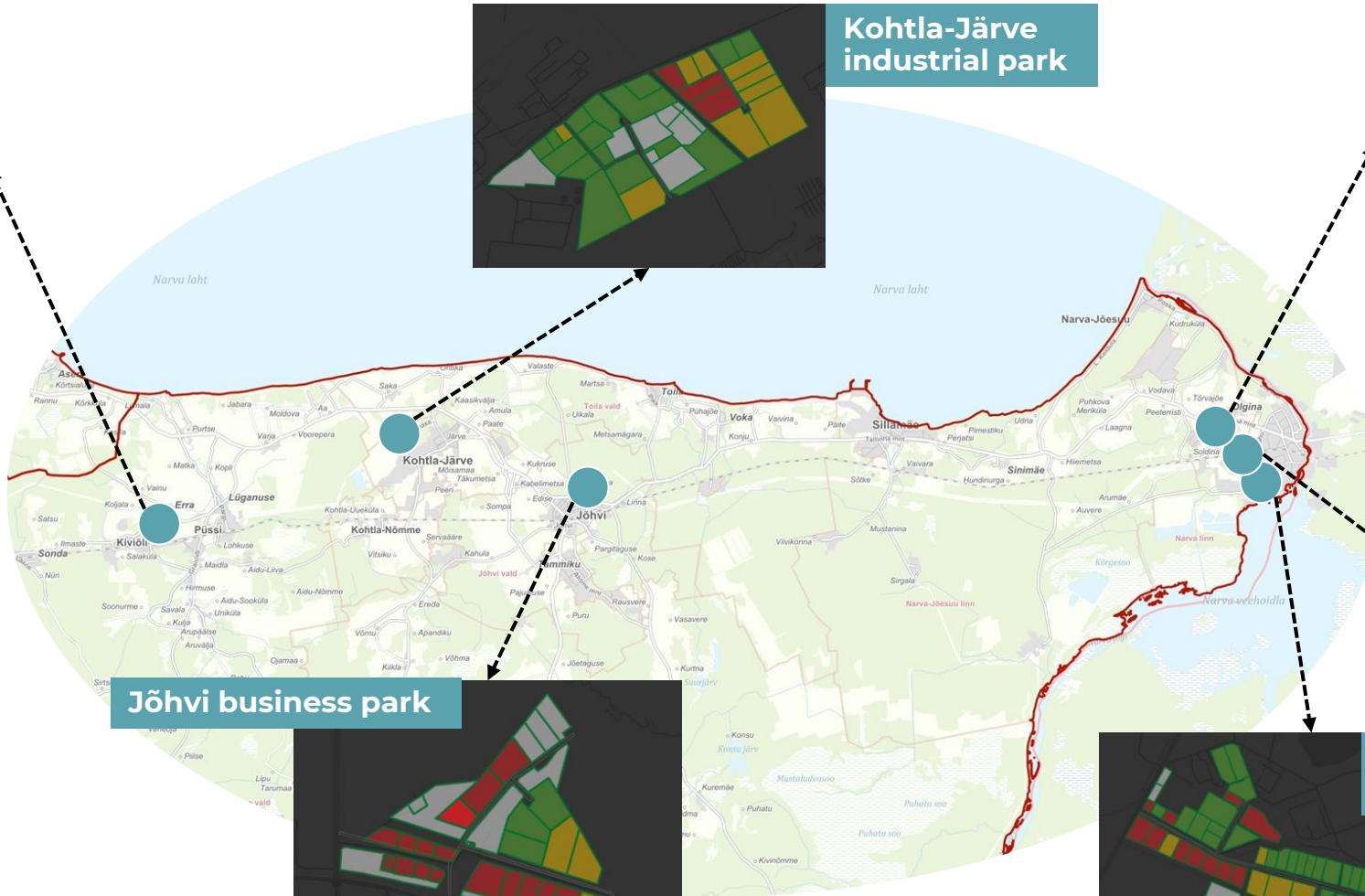
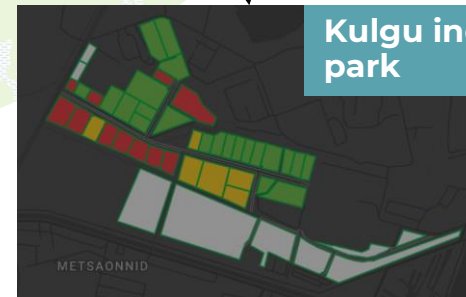
Kadastiku industrial park



Jõhvi business park



Kulgu industrial park



# EXAMPLE OF CUTTING-EDGE TECHNOLOGY COMPANIES INVESTING IN THE REGION

## – Neo Performance Materials

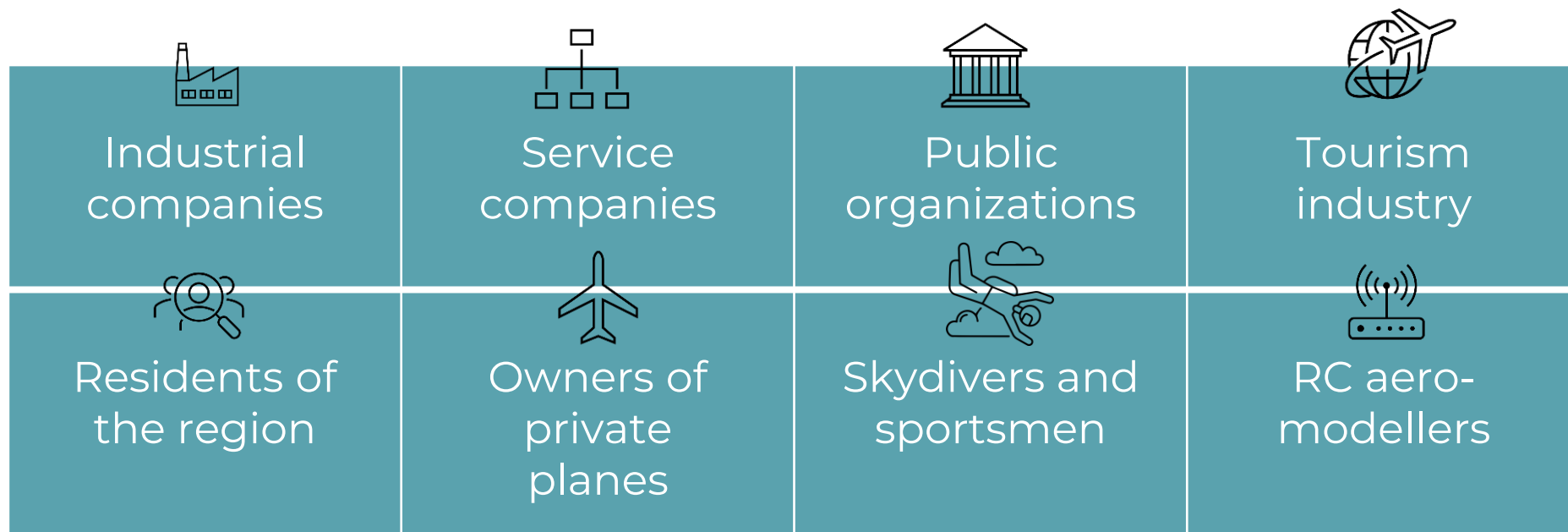
➔ In the first stage, a €100 million magnet factory will be built in Narva (building now)

➔ In the second stage, a €150 million extensions will be built (building starting in 2026)

Neo Performance Materials (NPM) which owns Estonia-based rare earth metals maker Silmet will construct a magnet factory and R&D center in Narva.



# POTENTIAL AERODROME STAKEHOLDERS





# INDUSTRY INSIGHTS

## – EXPORT INDUSTRY IS HIGHLIGHTED

Narva companies aim for international business and increasing export – better connectivity is needed.

### STRONG EXPORT INDUSTRY WITH A GROWTH MINDSET

- The interviewed companies highlight the focus on export which is nearly 100 % for all the companies.
- There are strong plans to increase export, for ex. 20-30 % per year for one the companies.

### NEED FOR TRAVEL IS RELATED TO EXPANDING MARKETS

Mentions of travel needs:

- Customer and auditor visits at factories
- Maintenance crew visits
- Business meetings
- Sales and marketing purposes
- Engineering meetings
- Top manager negotiations

### EUROPE IS THE MAIN MARKET FOR THE COMPANIES

Preferred destinations:

- Germany (Dusseldorf, Hamburg, Frankfurt and Munich)
- Finland (Helsinki)
- Sweden (Stockholm)
- Poland (Warsaw)
- Rumania (Bucharest)
- Israel (Tel Aviv)
- UK (London)
- Holland (Rotterdam):
- Norway, France, Spain, Switzerland generally

### CURRENT USAGE OF HUB AIRPORTS

- Tallinn, Riga, Frankfurt, Helsinki, Warsaw, Oslo, and Stockholm

#### Interviewed companies:

Neo Performance Materials, Fortaco Group, Aquaphor International, MAST Europe, Viru Keemia Grupp (VKG), HANZA Mechanics Narva AS



# INDUSTRY INSIGHTS

## – THOUGHTS ON THE FUTURE

### VIEWS ON AIR CARGO POTENTIAL

Identified use cases:

- Component deliveries
- Urgent deliveries of expensive and lightweight components and spare parts

### COMPANIES RECOGNIZE THE POTENTIAL OF DIRECT FLIGHTS FROM NARVA

- Price and time schedule should be optimized
- Morning and evening flights
- Direct flights to hub airports or directly to the destinations are seen promising

### IMPORTANCE OF A FUNCTIONAL NEARBY AERODROME FOR BUSINESS

- New opportunities for investment and partnership would appear.
- Positive impact on business.

### IMPROVING AIR CONNECTIONS AND NEW BUSINESS INVESTMENTS

- New investments are seen possible
- Improved logistics is seen to always increase business

#### Interviewed companies:

Neo Performance Materials, Fortaco Group, Aquaphor International, MAST Europe, Viru Keemia Grupp (VKG), HANZA Mechanics Narva AS

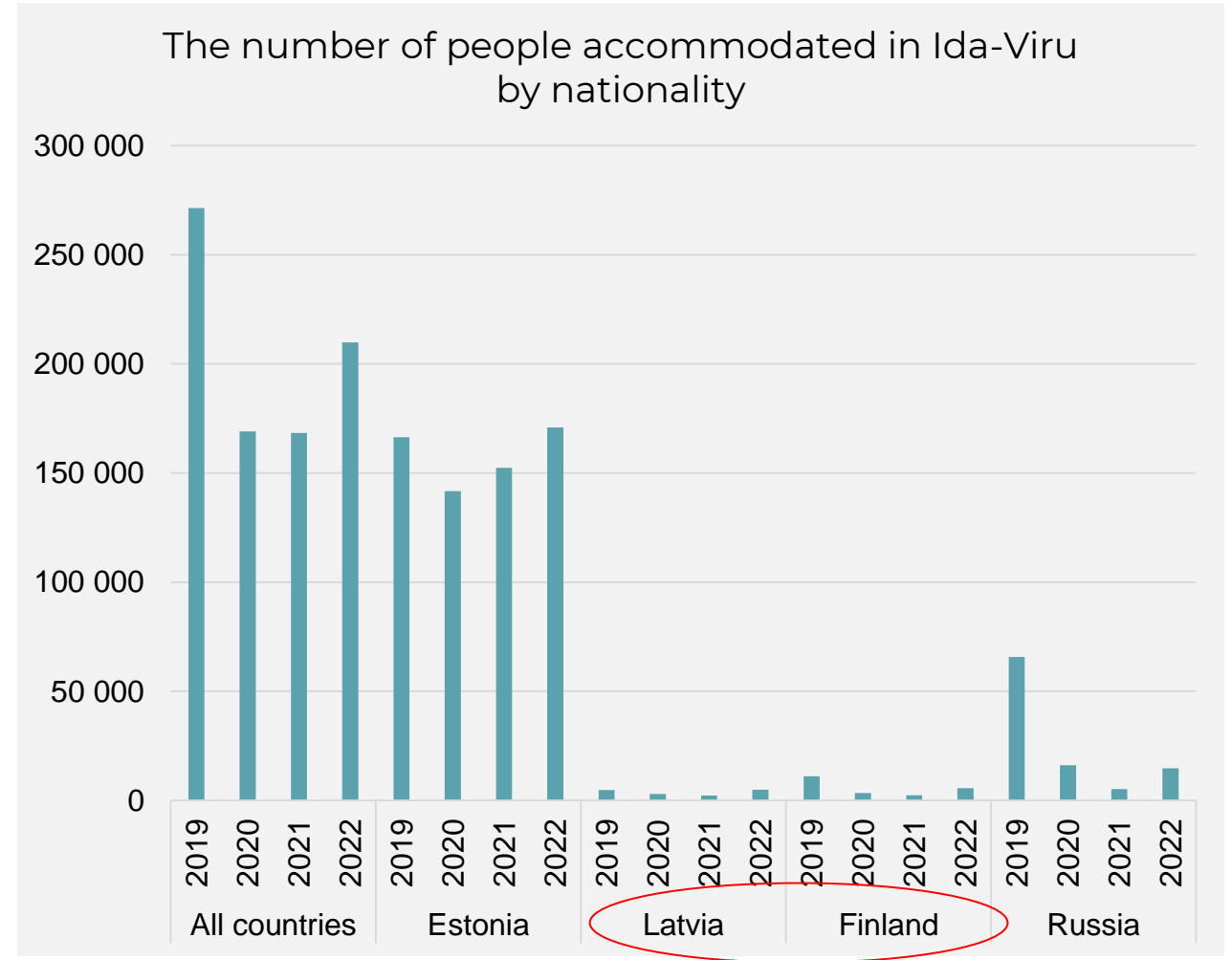


# IDA-VIRU TOURISM CLUSTER 2024-2027

Strong development plans are being implemented to attract new markets and customers

- Cluster's long-term goal: 1 million overnight stays
- Program prepared to attract **Finnish and Latvian tourists to Ida-Viru.**
- Number of overnight stays by Finnish tourists in Ida-Viru is planned to increase up to 34 000 in 2027, compared to 11 058 in 2019 (3 times).

Source: Statistikaamet



Source:  
Statistikaamet



# EXAMPLES OF FUTURE AIRCRAFT

Next gen aircraft are coming – it is up to the stakeholders to start using them to boost the region's economy



Wingcopter



Eviation



Joby Aviation



ZeroAvia



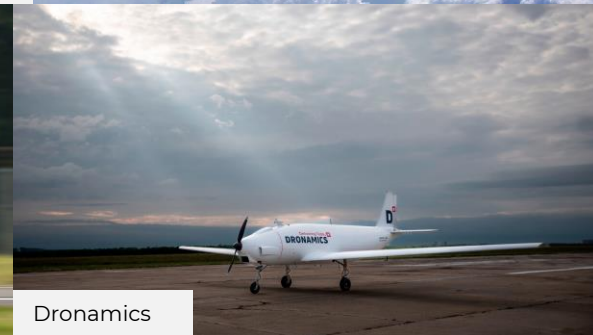
Heart Aerospace ES-30



Evektor EV-55



Rolls-Royce Accel



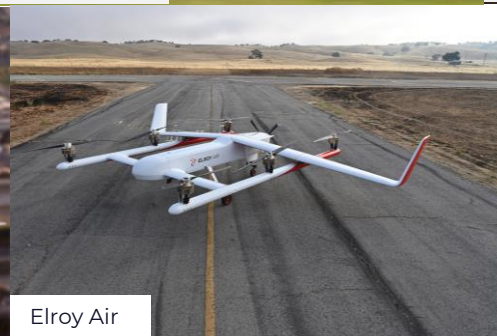
Dronamics



Lilium



Supernal



Elroy Air



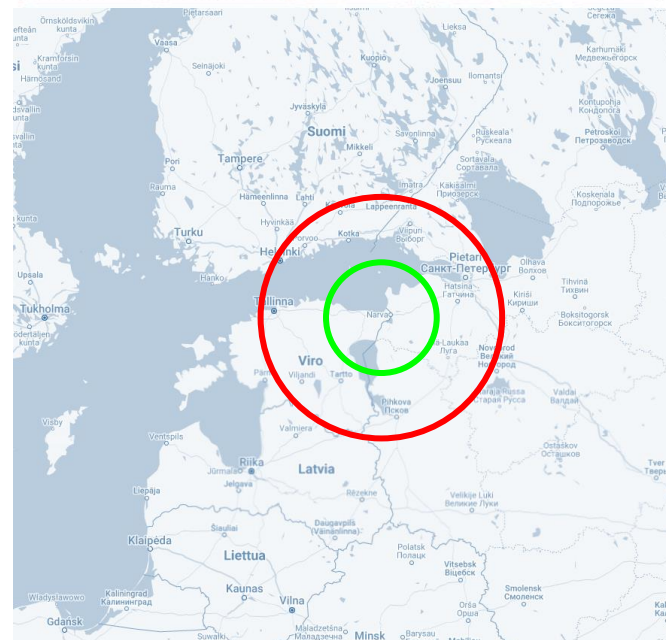
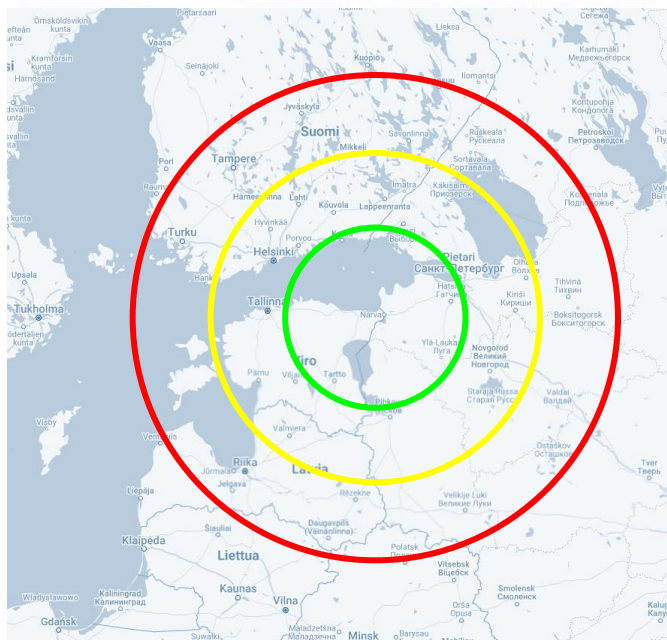
Vertical Aerospace VX4



# AN EXAMPLE OF OPERATIONAL RANGES OF AIRCRAFT

Operational ranges of next gen aircraft are ideal for regional aviation

## Aircraft operational range from Narva-Olgina Aerodrome



- Battery electric Eviation Alice**
- Max operational range of around 400 km
  - 9 passengers
  - Max Cruise Speed 250 kts
- Retrofitted hydrogen fuel cell Britten Norman islander**
- Max operational range of 200 km
  - 9 passengers
  - Uses gaseous hydrogen

■ Max operational range, SPP  
■ Range after 60min charge, SPP  
■ Return range, no service at DEST, SPP

All range regarding 45min IFR reserve

Modified from source: Evia Aero



# FEASIBILITY OF PASSENGER AIR TRAFFIC

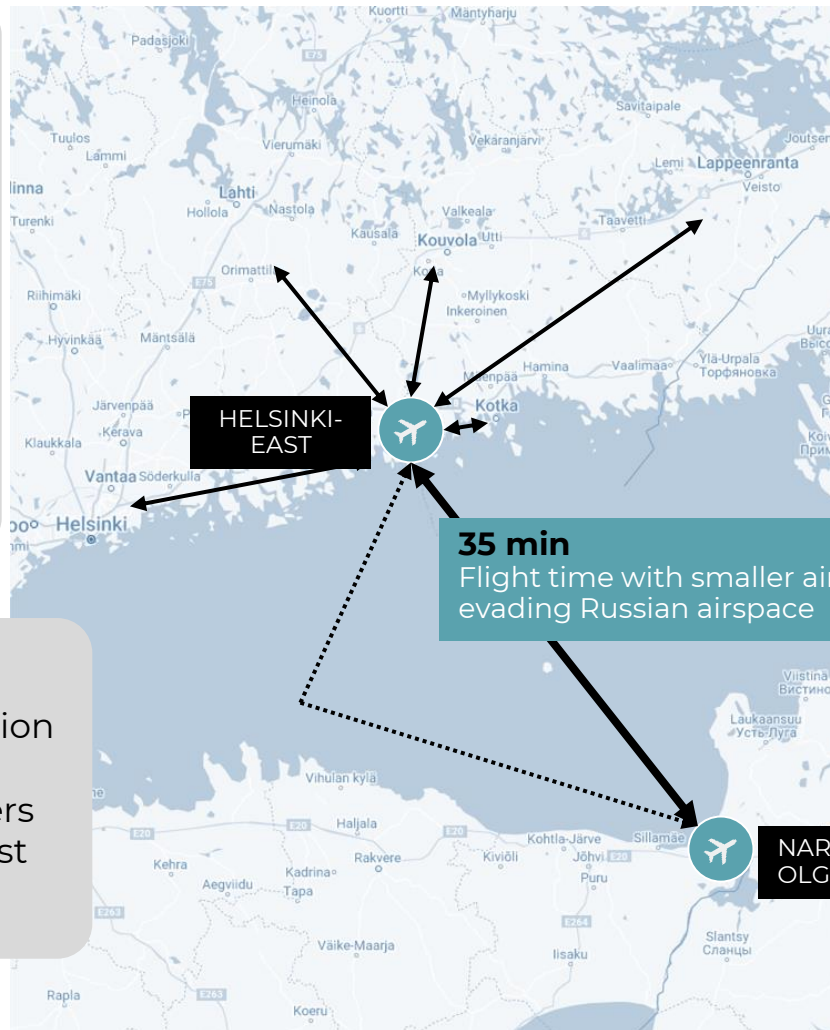
Between Narva-Olgina & Helsinki-East Aerodrome – passenger potential

## Kymenlaakso business potential

- Strong industry: forest, chemical, construction and technology industry companies
- Future: € 3,7 billion investments in battery technologies and many other investments for green tech such as biocarbon, hydrogen, solar etc
- Potential for business relations especially regarding new green tech
- Business relations meetings, sales, customer visits

## Finnish capital region

- Close by Helsinki-East –fast connection via road
- All the largest company headquarters
- Many business opportunities and fast accessibility via Helsinki-East



## Lappeenranta University and XAMK (university of applied sciences in Kouvola and Kotka)

- Strong expertise in energy technology studies and business
- Potential for Estonia in the larger energy transition scheme
- Benchmark visits, research cooperation and also business potential

## Ida-Viru

- Strong chemical and metal industry
- Potential markets and business relations with Finnish stakeholders
- Customer visits, cooperation during sales processes



# AERODROME VISION IN PHASES

FOLLOWER  
1-5 years

**PHASE 1**  
24/7 aerodrome for  
unscheduled aviation



Aerodrome  
facilities

- Paved 1 200 m runway
- Maintenance hangar
- Storage hangars for general and private aircraft
- A small café and a briefing room



Aviation  
services

- On-demand business flights serving local export companies
- Recreational aviation






Business  
park

- Solar energy park and energy storage
- Service and maintenance companies
- Technical infrastructure (electricity, natural gas, internet communication, water and sewerage)
- 23 separate land plots with an area from 1607 m2 up to 5002 m2






# AERODROME VISION IN PHASES

	FOLLOWER 1-5 years	INNOVATOR 5-10 years
	PHASE 1 24/7 aerodrome for unscheduled aviation	PHASE 2 Regional zero carbon aerodrome
 Aerodrome facilities	<ul style="list-style-type: none"> <li>• Paved 1 200 m runway</li> <li>• Maintenance hangar</li> <li>• Storage hangars for general and private aircraft</li> <li>• A small café and a briefing room</li> </ul>	<ul style="list-style-type: none"> <li>+ Remote control infrastructure</li> <li>+ Passenger terminal</li> <li>+ Charging for aircraft and road vehicles</li> <li>+ 100 % sustainable aviation fuel tanks and fuelling system</li> </ul>
 Aviation services	<ul style="list-style-type: none"> <li>• On-demand business flights serving local export companies</li> <li>• Recreational aviation</li> </ul>	<ul style="list-style-type: none"> <li>+ Electric/hydrogen aviation test routes to Tallinn and Helsinki-East</li> <li>+ Extended on-demand flights with digital MaaS-service incl. last mile services</li> </ul>
 Business park	<ul style="list-style-type: none"> <li>• Solar energy park and energy storage</li> <li>• Service and maintenance companies</li> <li>• Technical infrastructure (electricity, natural gas, internet communication, water and sewerage)</li> <li>• 23 separate land plots with an area from 1607 m<sup>2</sup> up to 5002 m<sup>2</sup></li> </ul>	<ul style="list-style-type: none"> <li>+ Sustainable aviation fuel production in regions Industry parks – distribution at the aerodrome</li> <li>+ E-commerce logistics with air cargo</li> <li>+ Office and meeting space</li> </ul>





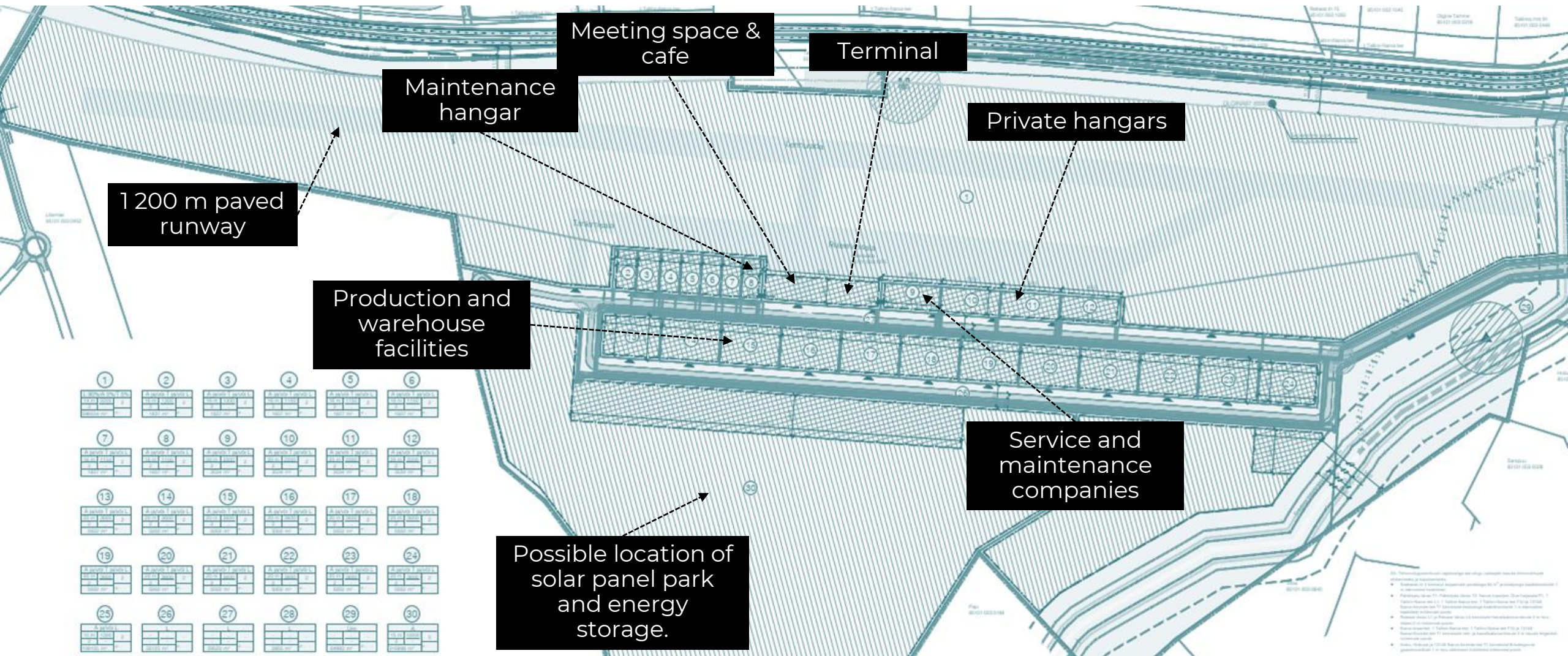
# AERODROME VISION IN PHASES

	FOLLOWER 1-5 years	INNOVATOR 5-10 years	FORERUNNER > 10 years
	PHASE 1 24/7 aerodrome for unscheduled aviation	PHASE 2 Regional zero carbon aerodrome	PHASE 3 State of the art future aerodrome
 Aerodrome facilities	<ul style="list-style-type: none"> <li>• Paved 1 200 m runway</li> <li>• Maintenance hangar</li> <li>• Storage hangars for general and private aircraft</li> <li>• A small café and a briefing room</li> </ul>	<ul style="list-style-type: none"> <li>+ Remote control infrastructure</li> <li>+ Passenger terminal</li> <li>+ Charging for aircraft and road vehicles</li> <li>+ 100 % sustainable aviation fuel tanks and fuelling system</li> </ul>	<ul style="list-style-type: none"> <li>+ Automated maintenance</li> <li>+ Verti- and droneports</li> <li>+ Advanced digital processes in passenger and cargo flow management</li> </ul>
 Aviation services	<ul style="list-style-type: none"> <li>• On-demand business flights serving local export companies</li> <li>• Recreational aviation</li> </ul>	<ul style="list-style-type: none"> <li>+ Electric/hydrogen aviation test routes to Tallinn and Helsinki-East</li> <li>+ Extended on-demand flights with digital MaaS-service incl. last mile services</li> </ul>	<ul style="list-style-type: none"> <li>+ Wide network of regional flights with zero emission aircraft</li> <li>+ Digital on-demand service of aviation services</li> <li>+ Drone logistics network</li> </ul>
 Business park	<ul style="list-style-type: none"> <li>• Solar energy park and energy storage</li> <li>• Service and maintenance companies</li> <li>• Technical infrastructure (electricity, natural gas, internet communication, water and sewerage)</li> <li>• 23 separate land plots with an area from 1607 m<sup>2</sup> up to 5002 m<sup>2</sup></li> </ul>	<ul style="list-style-type: none"> <li>+ Sustainable aviation fuel production in regions Industry parks – distribution at the aerodrome</li> <li>+ E-commerce logistics with air cargo</li> <li>+ Office and meeting space</li> </ul>	<ul style="list-style-type: none"> <li>+ High value component manufacturing</li> <li>+ Automation companies</li> <li>+ Wide road and air cargo facilities</li> <li>+ Small electric plane manufacturing/assembling; + UAV, eVTOL and Drones assembling and testing</li> </ul>

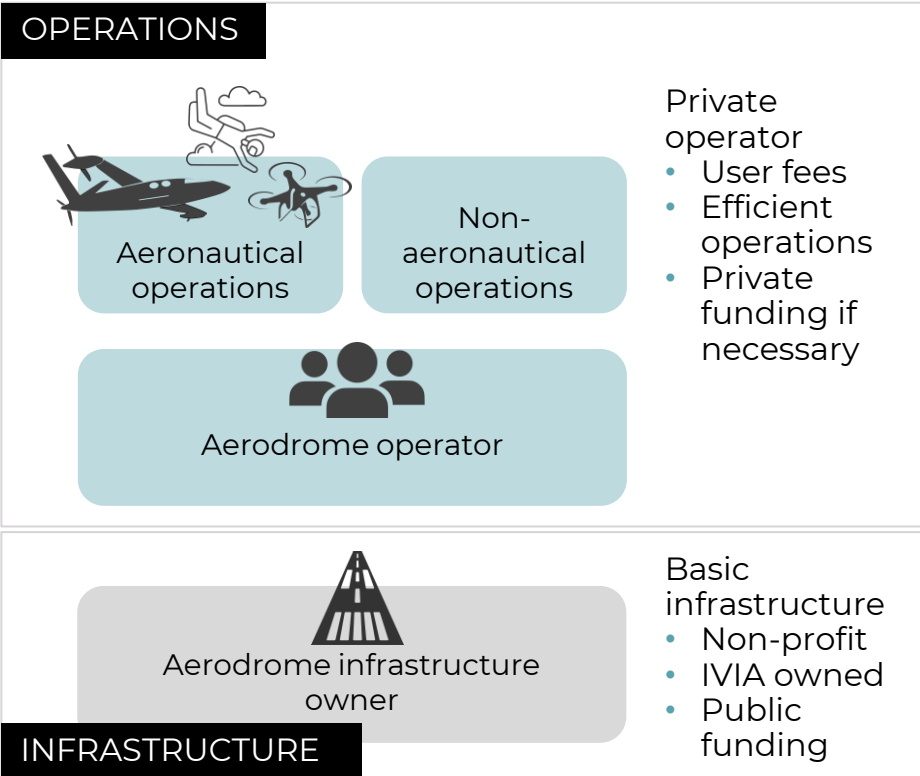


# NARVA-OLGINA BUSINESS PARK AND AERODROME IN PHASE ONE

In five years, the aerodrome will be up and running and will have necessary facilities to serve unscheduled air traffic



# IMPACTS OF THE AERODROME



**Example of wider economic impacts**

- New business relations and better connectivity enabled by the aerodrome and aviation services can lead to a new industrial investments.
- If the new investments employ 500 persons in total:

Regional economy effect:  
Additional **€ 1 million** tax revenue annually

National economy effect:  
Additional **€ 4,8 million** tax revenue annually

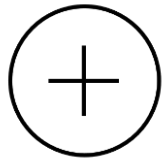
## Direct impacts

- Region's population, industry and tourism
  - Flight connections
  - Air cargo services
- Better connectivity
- New business opportunities
- New jobs
- Improved efficiency
- Direct tax revenues

## Wider economic impacts benefit the region and state

Indirect benefits for national economy	• State tax revenue	<p><b>Business activity:</b></p> <ul style="list-style-type: none"> <li>Trade</li> <li>Labor availability</li> <li>Productivity</li> <li>Innovation</li> <li>Supply chains</li> <li>Investments and business location decisions</li> </ul> <p><b>Attracting new population</b></p> <ul style="list-style-type: none"> <li>More population</li> <li>More consumption</li> <li>More taxes</li> </ul>
Indirect benefits for regional economy	• Local tax revenue	
Vitality of the region: image of the region, international tourism	• Tourism income	
Consumer welfare	More activities	
Health services	Security of supply, ambulance flights	





# MULTIPLE STAKEHOLDERS BENEFIT

<b>Industry</b>	<ul style="list-style-type: none"><li>✓ Better connectivity to form business relations</li><li>✓ Improved logistics supply</li><li>✓ Faster business trips – the region is more attractive for investments</li></ul>
<b>Tourism</b>	<ul style="list-style-type: none"><li>✓ Better accessibility of tourism destinations</li><li>✓ Developing sustainable tourism concurrently with sustainable aviation</li></ul>
<b>Population</b>	<ul style="list-style-type: none"><li>✓ New possibilities for recreational activities</li><li>✓ Possibility for recreational aviation</li><li>✓ Possibilities for travelling close from home</li></ul>
<b>Flight operators</b>	<ul style="list-style-type: none"><li>✓ Enabling profitable flight operations</li><li>✓ Keeping aircraft utilization rate high</li></ul>
<b>Ida-Virumaa county</b>	<ul style="list-style-type: none"><li>✓ Improved attractiveness of the county</li><li>✓ Improved regional economy</li></ul>
<b>Municipalities</b>	<ul style="list-style-type: none"><li>✓ Improved attractiveness of the nearby municipalities</li><li>✓ Potential for more working age population to improve municipal economy</li><li>✓ Public emergency and ambulance flights</li></ul>
<b>IVIA</b>	<ul style="list-style-type: none"><li>✓ Easier to maintain and create new business relations</li><li>✓ Improved chances to find new companies for industry park plots</li></ul>
<b>The government of Estonia</b>	<ul style="list-style-type: none"><li>✓ Improved national accessibility</li><li>✓ Boosting GDP and innovations</li><li>✓ Image as a forerunner country in new era aviation</li></ul>
<b>Research and education</b>	<ul style="list-style-type: none"><li>✓ New possibilities for science studies</li><li>✓ Education possibilities regarding new aviation technology and operations</li></ul>



NARVA-OLGINA BUSINESS PARK & AERODROME

# FAVORABLE WINDS ARE BLOWING FOR NARVA-OLGINA BUSINESS PARK & AERODROME DEVELOPMENT

