ROTTERDAM
THE HAGUE
INNOVATION
AIRPORT

UNLOCKING INNOVATION IN FUTURE PROOF AVIATION

Why joining the RHIA community is a smart move

WHAT IS RHIA?

A COMMUNITY PLATFORM THAT WORKS COLLABORATIVELY TOWARDS A QUIETER, CLEANER AND SMARTER FUTURE FOR AVIATION WITH ROTTERDAM THE HAGUE AIRPORT AS A UNIQUE TESTING GROUND.

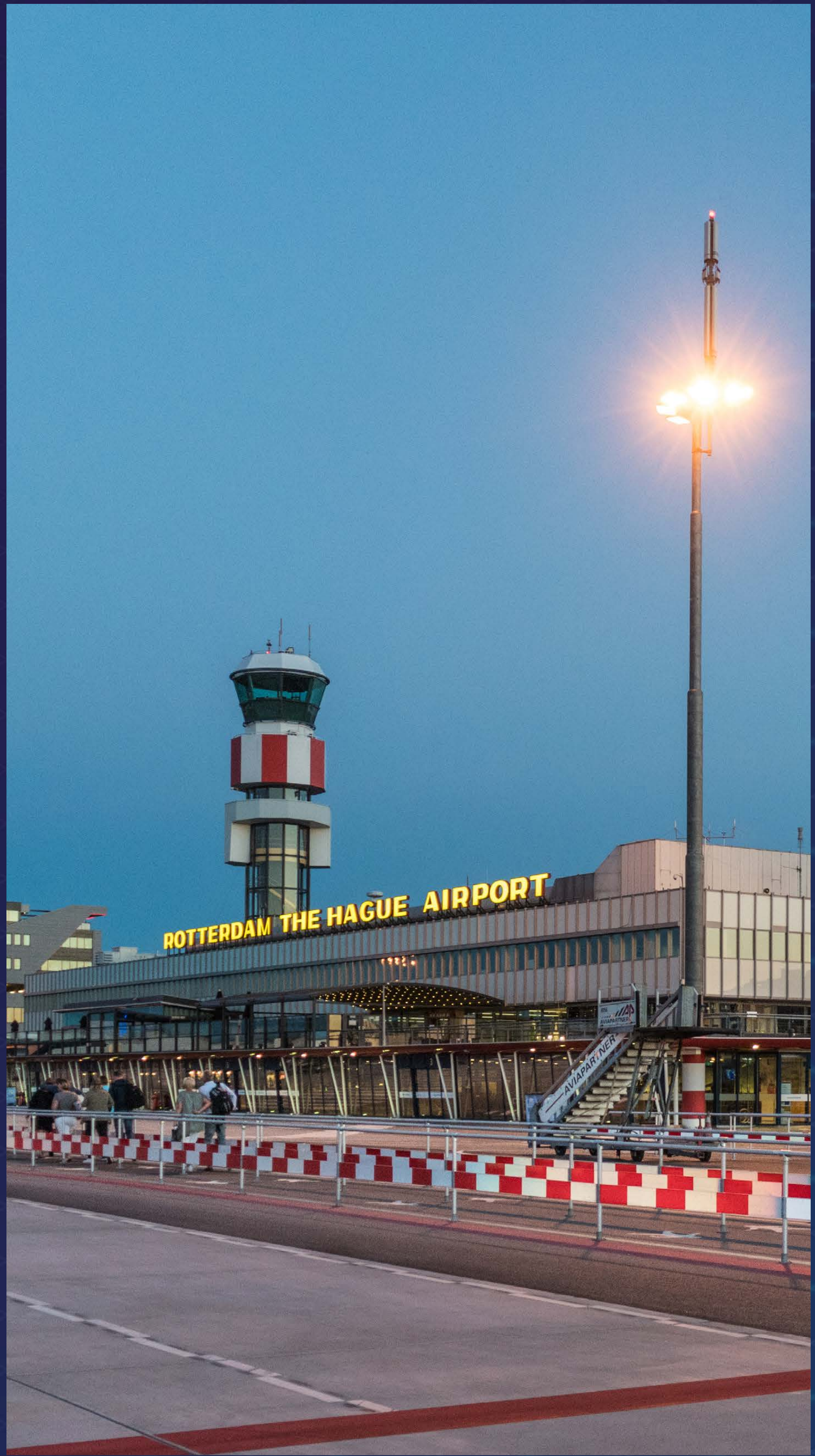
Shaping the future of aviation
RHIA (Rotterdam The Hague Innovation Airport) connects companies, research & educational institutions and authorities & governments to develop a quieter, cleaner and smarter future for aviation.

Focus areas
We focus on sustainable practices and gaining valuable insights on implementing infrastructure and operations, such as:

- New energy solutions for electric and hydrogen-powered aviation and flying on SAF.
- Environmental and societal impact.
- Comprehensive energy management systems.

Working together on real solutions
At RHIA, collaboration takes place at an operational airport. Together with partners, RTHA (Rotterdam The Hague Airport) provides a real-life testing ground where innovations can be validated and demonstrated in practice. This setting turns ideas into applied solutions that move the aviation sector forward while enabling airports to prepare their infrastructure and operations for the future.

RHIA is open for your ideas to make impact
The power of RHIA lies in the collaborative projects that enable innovations to materialize. By joining RHIA, you become part of a community committed to contributing to positive change in the aviation industry.



WE’RE ON A MISSION

RHIA SETS COURSE TOWARDS ACHIEVING A QUIETER, CLEANER AND SMARTER FUTURE FOR AVIATION STARTING FROM RTHA – KEY ENABLER & FULLY OPERATIONAL TESTING GROUND – THROUGH KNOWLEDGE DISSEMINATION, DRIVEN BY A COMMUNITY OF INNOVATORS.

From ideas to action

To accelerate the shift towards future proof aviation, we emphasize the principle of ‘learning by doing’ and create meaningful impact. This means taking concrete actions that lead to innovative solutions.

By actively engaging and connecting the right stakeholders, we facilitate knowledge sharing, align common goals and organise collaboration through practical innovation projects. This approach creates a dynamic environment for real-world learning and delivers tangible progress in sustainable aviation.

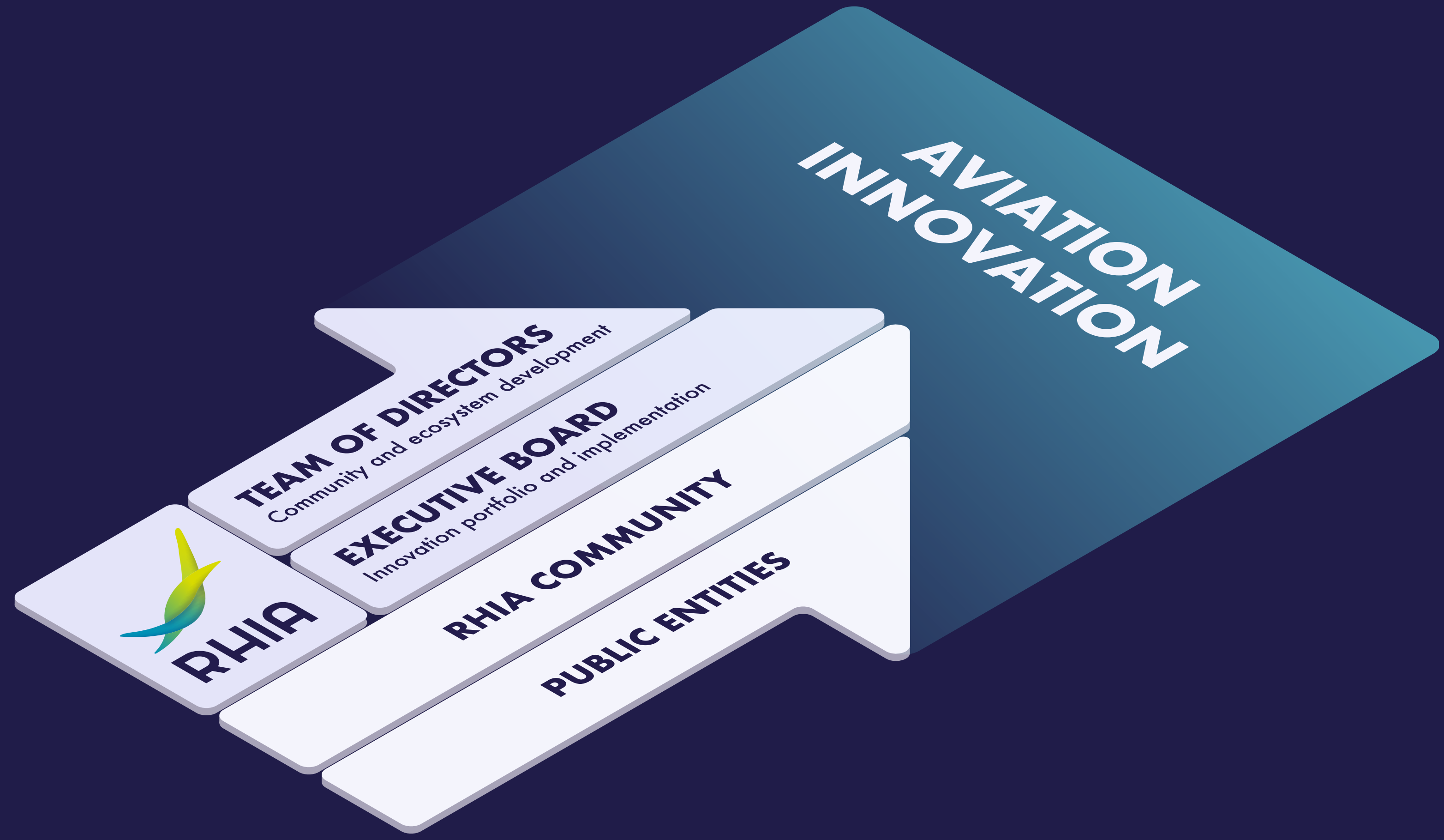
Thinking global and starting local

At RHIA, the community guides every decision and action towards our shared goal. We believe in thinking big and acting small, acknowledging that local efforts can impact globally. Testing on a small scale first helps us identify challenges and refine strategies for greater success when expanding.

Through projects and events, we build an active community and strengthen collaboration. Working together in practice creates opportunities for innovation and drives sustainable aviation forward.

RHIA explained

THE ECOSYSTEM



RHIA principal partners

The RHIA **team of directors** are responsible for setting the strategic development of the organization towards a lively community, ensuring that all efforts align with the long-term vision and goals of RHIA. RHIA is guided by the highly motivated and knowledgeable executive board that includes representatives from RTHA, Transavia, Shell, TU Delft and NLR.

The executive board plays a key role in shaping the RHIA innovation portfolio and overseeing the implementation and progress of projects.

Together, they drive community development by engaging in ecosystem-building activities such as creating communication platforms, organizing RHIA events, conducting ideation sessions, and facilitating connections to investment and funding opportunities.

The RHIA Community

The RHIA community is a diverse group of innovators, industry leaders and pioneers. It is a growing network where knowledge, expertise and experience come together to accelerate the transition to sustainable aviation.

By joining RHIA, members become part of an active network committed to shaping the future of sustainable aviation through collaboration and shared ambition.

Supported by public entities

RHIA maintains close ties with local municipalities, the province and the government. Together, they create a collaborative environment that is essential for addressing current challenges in aviation and innovation. By actively sharing knowledge, organizing concrete demonstrations and researching scalability, partners help bring diverse insights together into a clear understanding of the sector's needs. This cooperation identifies innovation and policy gaps and supports strategic decision-making, ensuring that innovative solutions are effectively integrated into aviation.

RHIA principal partners

EXECUTIVE BOARD

Focus areas

RHIA PATHWAYS

RHIA offers a variety of innovative and action-oriented projects towards a quieter, cleaner and smarter future of aviation through sustainable practices and technological advancements, with an operational airport (RTHA) as a test facility.
Stimulating innovative technologies and infrastructure is a crucial driver of economic growth. As RHIA explores sustainable practices, the potential for economic expansion becomes inevitable.

Pathway
Future energy supply (chain)
Developing the airport infrastructure and operational processes for hydrogen-powered, SAF and battery-electric flights.

Pathway
Smart energy airport
Developing smart energy systems to manage current and future airport energy demand with sustainable solutions.

Pathway
Environmental & societal impact
Optimising flight paths to reduce noise and emissions, improving air quality with cleaner fuels and reducing waste.

Focus areas

RHIA SUPPORTING TRACKS

The supporting tracks provide the conditions to explore new projects, test innovations at an operational airport and build future aviation capabilities.

Check-in for new projects

Future explorations

Exploring new opportunities and emerging technologies to assess whether they fit within the RHIA pathways.

Supporting RHIA aviation fieldlabs

RHIA aviation fieldlabs (digital & physical)

Providing real-life environments where aviation innovations are tested, validated and scaled at an operational airport.

Supporting RHIA collaborations

Human capital in aviation

Strengthening the aviation workforce by developing skills and knowledge for the next generation of professionals.

Focus areas

PATHWAYS EXPLAINED

Pathway

Future energy supply (chain)

Our goal is to stimulate innovation in the airport's infrastructure and operational processes to improve the future energy supply chain and accommodate hydrogen-powered aviation, sustainable aviation fuel (SAF), and battery-electric flights.

A selection of current topics:

DutchH2 Aviation Hub:
a collaborative ecosystem advancing hydrogen-powered flight through aircraft integration, refuelling infrastructure, supportive policy development and large-scale testing at RTHA.

Battery-Electric Aviation:
operationalizing and testing advanced charging infrastructure and high-density battery storage solutions and integrate battery electric operation on the airport.

Aviation on (E-)SAF:
strengthening the SAF value chain by testing production, logistics and usage at airport level to reduce aviation emissions.

Pathway

Smart energy airport

Our focus is developing a comprehensive energy management system that addresses both current and future energy demands by exploring and implementing sustainable energy solutions with RTHA as an operational testing ground.

A selection of current topics:

Electrification infrastructure:
developing charging and grid systems to support electric and hybrid aircraft operations.

Energy Management Systems:
exploring smart systems that balance energy supply and demand for reliable, sustainable airport operations.

Infrastructure interdependencies in the region:
studying how regional energy networks and airport systems interact in the transition to sustainable aviation.

Pathway

Environmental & societal impact

Our aim is to inspire and support projects that create meaningful impacts on the environment. We focus on initiatives that bring positive changes not only environmentally but also societally and economically, ensuring a sustainable future for all.

A selection of current topics:

The Innovation Route:
a series of test flights between RTHA and Faro to trial practical innovations that reduce emissions, waste and improve airport operations.

We also work on:
noise reduction, CO_2 - reduction, reduction of other Greenhous Gas Emissions, self-driving (automated) systems and air quality improvement.

SUPPORTING TRACKS EXPLAINED

Check-in for new projects

Future explorations

RHIA is a fertile ground to explore new initiatives that can stimulate a quieter, cleaner and smarter future of aviation. Although we cannot predict the future, let's explore the options, the challenges and the benefits.

Supporting RHIA collaborations

Human capital in aviation

Talent is essential for both current and future aviation operations. As the introduction of new technologies, processes and regulations take time, it is vital to inspire, attract and retain skilled professionals for the sector. Our goal is to build a strong and future-ready workforce by collaborating with research and educational institutes and supporting initiatives that shape the next generation of aviation experts.

Supporting RHIA aviation fieldlabs

RHIA aviation fieldlabs
(digital & physical)

Fieldlab Next Aviation

Combines the expertise and facilities of RTHA and research partners such as the TU Delft/NLR Flight Test Organization. This fieldlab harnesses a wide array of expertise and facilities to create a comprehensive environment for testing and demonstrating innovations in flight and ground operations. The fieldlab is not limited to a single facility but consists of a broader set of testing environments, including the Liquid Hydrogen Storage Facility on airside and dedicated operational test areas. These facilities are conditionally accessible to third parties and support collaboration on advanced aviation technologies. Using research aircraft such as the Cessna Citation II, Pipistrel Velis Electro and Skymaster, new technologies and flight procedures are tested and validated. Research includes emission reduction, noise studies and lifecycle assessments, enabling projects such as SAF flight testing, hydrogen aircraft demonstrations and steep-approach trials.

Airport Technology Lab

A digital innovation environment at RTHA designed to test and develop data-driven products and services.

Its first phase focused on building an 'open airport data platform' that provides conditional access to airport data for innovation testing without disrupting operations.

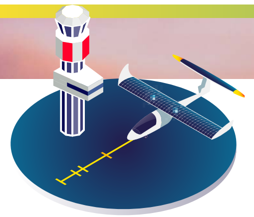
This platform has already supported various innovation & education projects, including radar technology for weather forecasting, simulation models for terminal and baggage processes, and tools for enhancing airside planning.

ENTERING THE RHIA COMMUNITY

As a member of the RHIA community, you can expect to participate in a variety of engaging activities and events to test and improve your ideas, such as:

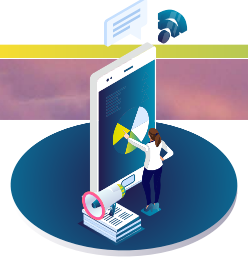
RHIA events

Informal gatherings for networking and deep dive sessions where knowledge exchange is key.



Site visits and test/demonstration

Hands-on experiences to explore cutting-edge projects.



RHIA community-partner toolkit

A communication toolkit that allows you to carry out your role within the community of aviation innovators (development phase).

Active program and project participation

As a partner, you have a front-row seat to shared knowledge, allowing you to join or create new projects within the community, connect with funding opportunities, test viability, and execute plans effectively (with RTHA as a testing ground). This will enable accelerated and deepened development of your portfolio on knowledge, talent products or services. Partners can be actively approached for project participation.

Newsletters and updates

Stay informed about the latest developments and opportunities within the community.

Challenges and workshops

Opportunities to tackle industry challenges with peers. Experience and benefit from open discussions with "those who know" on relevant topics.

RHIA online knowledge sharing platform

A comprehensive resource that aggregates information and research on innovative projects and developments. It serves as a collaborative platform for sharing insights, fostering innovation, and facilitating connections among researchers, businesses, and policymakers (development phase).

Project opportunities

RHIA PARTNERSHIP

Transform your solution into reality

Airports are complex ecosystems with numerous moving parts. From security to logistics, each component must work seamlessly to ensure smooth operations. Understanding this complexity is crucial before implementing any solutions.

Within RHIA we work closely with airport authorities to ensure these solutions align with protocols and standards. Being part of this community gives you the unique and exciting opportunity to test solutions by:

- **Access to airside and demonstration opportunities***
  Test your solution at an operational airport, get feedback and improve your market prospects!
- **The possibility to start or join collaborative research**
- **Potential collaboration with research institutions** to conduct joint research and their extended network.

*When in line with RHIA initiatives and necessary for jointly further developing innovation and in coordination with Rotterdam The Hague Airport.

Start your sustainable aviation journey today. No more delays.

BECOME A RHIA PARTNER

Join us as a RHIA partner in our mission to create a quieter, cleaner, and smarter future for aviation starting locally, acting globally. Together, we can make a positive impact on our industry and region. Please read how to become a partner of the RHIA community at **www.stichtingrhia.nl/joinus**

Collaborative innovation

Work with experts to develop projects for innovation goals. This also contributes to RHIA community goals.

Knowledge sharing

Gain access to insights and best practices from other members within the community.

Sector influence

Help shape the policies and practices defining aviation's future direction.

Networking opportunities

Establish strong, lasting connections with important figures in the aviation sector.

Solution testing

Get exclusive opportunities for testing and demonstrating solutions at an airport.