



WeavAir

CASE STUDY

WeaveAir



Name of Company

WeaveAir

Category

Enterprise Intelligence Software

Location

Poland

Website

<https://weavair.com/>

WeavAir is a cleantech startup (headquartered in Barcelona with global collaborations) that develops IoT-enabled sensors and AI-powered analytics to improve air quality and energy efficiency in buildings and urban mobility systems. It provides predictive maintenance and carbon tracking for HVAC systems, helping companies cut emissions, reduce costs, and improve health outcomes. It uses Satellite and Drone Imaging Networks and IoT Sensor Networks.

WeaveAir's 3 Main Benefits

1. Regulation Compliance and Climate Risk Mitigation
2. Maximised Returns on Energy Transition, Carbon Capture & Offsets
3. Reduced Data Collection & Maintenance Costs

www.start-dsp.eu

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Enterprise intelligence software to help you reach your sustainability & net zero goals


The Digital Solution

Our system acts like a brain for infrastructure. It doesn't just measure Environmental, Social, and Governance (ESG) metrics; it helps improve them.

The Idea

Cities are on the frontlines of two major global challenges: climate change and rapid urbanisation. They need accurate, timely data, decision-makers struggle to reduce emissions, secure sustainable funding, and build resilient urban environments.

For example, we enable investors to validate the environmental integrity of green bonds, loans tied to environmentally friendly projects, and assess risks that assets might lose value due to climate changes, known as stranded asset risks, using real-time, location-specific data



The Digital Green Entrepreneur
Natalia Mykhaylova, Co-founder & CEO, WeavAir, has received over 20 innovation awards and has been named Corporate Knights Top 30 Under 30 in Sustainability, Clean Top 50 Emerging Leaders and MIT Technology Review Top Innovators Under 35.





Environmental Success

AI and IoT for Climate Action Optimising Energy Use for Green Finance

The Idea

'I saw a deep disconnect between our technical ability to measure environmental risks and how that capability is actually applied. Decision makers in infrastructure and finance don't have the high-quality, real-time data they need to take effective climate action. That not only limits environmental outcomes but also blocks access to sustainable financing'

Natalia Mykhaylova, Founder and CEO of WeavAir

Example success story:

A real estate investment group managing over €1 billion in assets implemented WeavAir's real-time digital twin platform across their buildings, they achieved a **28% emissions reduction** within **18 months**. This transparency enabled them to **secure a €25 million green bond** to fund eco-friendly projects meeting the EU's official sustainability standards

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Intersection of the 3 Frameworks: EntreComp, DigiComp & GreenComp

Intersection of the 3 Frameworks: Founded in 2016, WeavAir was born from the recognition that poor air quality and energy inefficiency are major contributors to climate change and public health crises. Traditional HVAC (heating, ventilation, and air conditioning) systems waste energy and spread pollutants.

Powerful Idea: WeavAir developed IoT sensor networks + AI-powered predictive analytics to monitor air quality and optimise energy systems in real time.

Outcome: Their solutions are deployed in airports, hospitals, office buildings, and smart cities, aligning with EU climate policies and the European Green Deal.

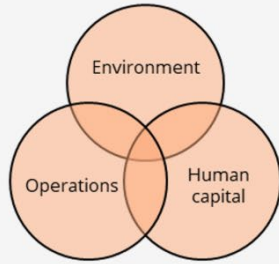
The Entrepreneurial Skills

- ❖ **Spotting Opportunities:** Saw regulatory pressure on carbon emissions + rising demand for healthy, sustainable buildings.
- ❖ **Creativity & Vision:** Turned the “hidden” problem of dirty air systems into a value proposition: *air quality = health + cost savings + climate action*.
- ❖ **Mobilising Resources:** Secured EU Horizon 2020 and cleantech grants, built cross-border partnerships with smart city initiatives.
- ❖ **Resilience & Coping with Uncertainty:** Navigated technical challenges (scaling IoT), long B2B sales cycles, and investor skepticism about climate tech.
- ❖ **Learning from Experience:** Iterated solutions from air quality monitoring → full predictive maintenance platform.

The Green Skills

- ❖ **Systems Thinking:** Tackled interconnected issues — energy waste, CO₂ emissions, public health.
- ❖ **Critical Thinking:** Challenged “business-as-usual” in HVAC: instead of reactive maintenance, pushed predictive sustainability models.
- ❖ **Future Literacy & Adaptability:** Anticipated stricter EU emission targets and health-conscious consumers, positioning ahead of regulation.
- ❖ **Acting for Sustainability:** Reduced emissions by up to 30% for clients, improving compliance with **EU Energy Efficiency Directive**.

Reduce
Risks



Maximize
Returns



Improve
Productivity



The Intersection of Digital Green Innovation

**Digital + Green =
Opportunity:**
Environmental
inefficiencies can be
turned into
profitable ventures
when combined
with digital tools.

**Resilience is
Critical:** Climate
entrepreneurs face
long cycles &
scepticism –
persistence + EU
ecosystem support
are key.

Predictive Decision Support Software

WeavAir predictive software is based on algorithms that detect, diagnose & predict issues before they become serious to enable fast & accurate decisions and autonomous systems.

Proprietary Data Sources & Models

WeavAir offers modular & continuous data acquisition systems combining networks of satellites, drones and IoT devices to track greenhouse gas emissions, energy efficiency, maintenance, operations & climate risk parameters

WeavAir's innovation sits exactly at the **EntreComp–GreenComp–DigComp intersection:**

- ❖ **Entrepreneurial Competence:** Transformed an invisible problem into a *scalable business*.
- ❖ **Green Competence:** Ensured every action aligned with climate and sustainability impact.
- ❖ **Digital Competence:** Used IoT + AI not as gimmicks but as **core enablers** of measurable impact.

This triple-competence approach allowed WeavAir to:

- ✓ Win contracts with EU airports, hospitals, and smart city networks.
- ✓ Position itself as both a **green startup** and a **digital data company**.
- ✓ Build resilience: leveraging EU policy trends (Green Deal, Horizon Europe) to ensure long-term relevance.