

Gateway Factory

MOONITOR

YOUR STARTUP REPORT FROM RHINELAND TO THE MOON



**FINANCE
FOCUS**
ALL ABOUT
THE MONEY

Infrastructure for the next generation

Our Shared Lab for Life Sciences

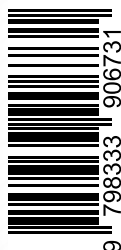
"Scaling is crucial for us"

An interview with Thomas Jarzombek

Sunshine & Startups

Looking back at a special summer

Gateway
Factory



Editorial

Dear readers,

A year ago, Gateway Factory was preparing for launch, and many people were hearing about us for the first time. Today, we work closely with more than 100 startups, support 40 teams through our programmes and will welcome another 35 in the weeks ahead.



Dr. Tim Hiddemann and Tanja Zirnstien,
Managing Directors of Gateway Factory

Over the past year, we have celebrated our first anniversary, opened our Shared Lab for Life Sciences and continued to strengthen the infrastructure DeepTech founders really need. Gateway Factory has grown with every new partnership, every new colleague and every founder who joined our community.

In just a few weeks, we will welcome the first 20 startup teams to the new *Gateway Factory Accelerator*, a programme built around one clear idea: *Where DeepTech Becomes Mission Ready*. Together with the third *Ready to Scale* cohort, it marks another important step in expanding our support for founders at different stages of their growth.

As you turn the pages of this edition, you will notice something has changed: we spend less time talking about what Gateway Factory could become and more time showing what is already happening.

✧ *New infrastructure.*
New programmes.
New founders. ✧

And a growing community that is building the next DeepTech champions made in Europe.

Thank you for joining us on this mission.
We hope you enjoy reading the third edition of Moonitor.

Handwritten signatures of Tanja Zirnstien and Tim Hiddemann in a light red color.

Tanja Zirnstien and Tim Hiddemann
Managing Directors, Gateway Factory

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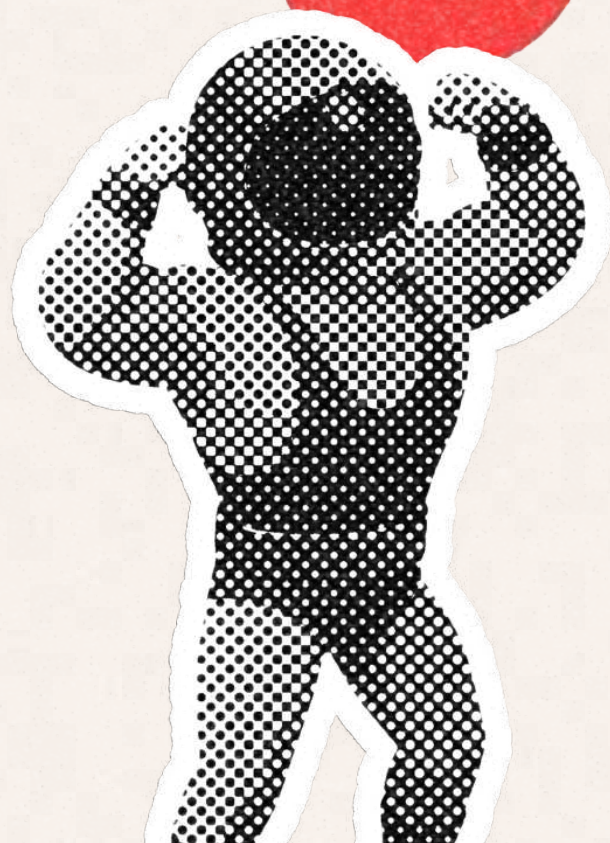
Upcoming events & Join the mission

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Sunshine & Startups

Looking back at a summer
of community, collaboration
and DeepTech



NRW Sommerfest in Brüssel



DeepTech Meets Europe

The NRW Summer Reception brought together representatives from politics, business and science to celebrate 40 years of North Rhine-Westphalia in Europe. For Gateway Factory, it was an opportunity to strengthen international connections, showcase the innovation potential of our region, and highlight why Europe's industrial future depends on DeepTech.



Bringing DeepTech to Brussels

Together with MANUGY and BioThrust, two startups from our ecosystem joined us in Brussels to showcase how DeepTech innovations from the Rhineland are addressing real industrial challenges and helping shape Europe's future.



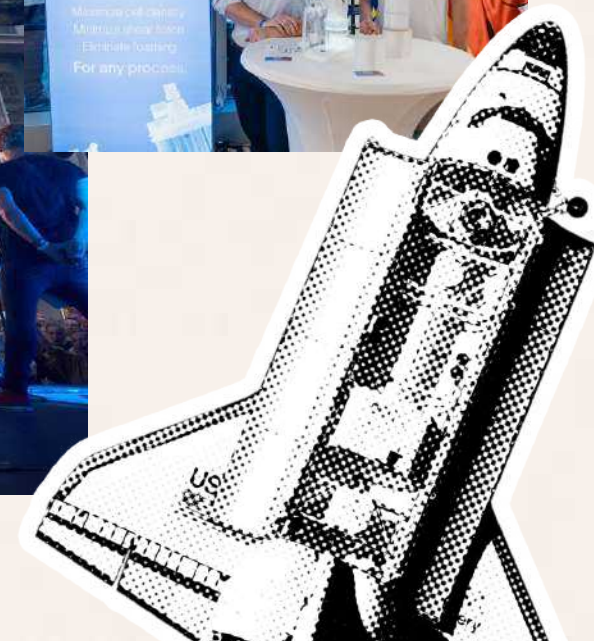
DeepTech is a team sport. Some of the best conversations happen offstage. The NRW Summer Reception in Brussels gave us the opportunity to meet Hendrik Wüst, Minister-President of North Rhine-Westphalia, and catch up with founders, partners and members of our ecosystem. Also pictured are Patrick Bongartz and Konstantin Kurz (BioThrust), Frederik Bennemann (MANUGY), Stephanie Walter (Wolters Kluwer), Philipp M. Kühn (RSM Ebner Stolz), Petra Schadeberg-Herrmann (Stifterin Schadeberg-Herrmann Foundation), and our colleagues Franziska Röhr and Andreas Klein.



“

DeepTech innovation doesn't stop at national borders. Events like the NRW Summer Reception create valuable opportunities to connect our startups with decision-makers from politics, industry and research across Europe.”

Franziska Röhr
Director Future Regulatory Demands





Cologne Startup Summer Night



Cologne's Startup Ecosystem 2026 in Numbers

76 new startups founded in the first half of 2026

894 active startups across Cologne

A strong signal for one of Germany's fastest-growing startup ecosystems.

One Year on the Market. Time for a Fairground.

One year after Gateway Factory officially launched, it was time for a Jahrmarkt. Instead of a traditional anniversary celebration, we brought the fairground to Cologne Startup Summer Night. From Popcorn Pitch and Madame Moonitor to cornhole and countless conversations, our booth became a place to meet for founders, investors, partners and everyone helping to shape Cologne's startup ecosystem.



A Special Visit

We were delighted to welcome NRW Minister for Economic Affairs Mona Neubaur to our fairground and greatly appreciated the encouraging words from both her and Cologne's Lord Mayor Torsten Burmester, who highlighted Gateway Factory in their speeches. Both recognised the growing impact of Gateway Factory and the strength of Cologne's startup ecosystem.



Summer Breeze



Summer Evenings at our headquarters

We welcomed our partners and enablers to our headquarters for an evening of BBQ, rooftop conversations, networking bingo and a sunset over Cologne. It was an opportunity to bring everyone together, share the latest developments at Gateway Factory and simply enjoy spending time with the people who help make our ecosystem stronger every day.



“

Gateway Factory would not exist without the commitment of our partners and enablers. Their trust and collaboration made it possible to secure federal funding and build the ecosystem we have today. We are grateful to everyone who is part of this journey and look forward to what we will achieve together.”

Dr. Tim Hiddemann
Managing Director



Gateway Factory by the Numbers

40+ startup teams currently participating in our programmes

100+ teams supported across the Gateway Factory ecosystem

5 → 20+ team members within our first year





Infrastructure for the next generation

Why our Shared Lab for Life Sciences is more than just a new laboratory

While digital startups can often launch with minimal resources, life science ventures require specialized infrastructure from day one: laboratories, advanced equipment, and professional working environments. This is precisely where many projects encounter their first major hurdle.

With the new Shared Lab for Life Sciences at BioCampus Cologne, we are creating a place where science-driven startups can accelerate research, development, and growth. What makes this initiative particularly remarkable is that a project that would typically take years to realize was completed in just six months through close collaboration with strong partners.

Text: Andreas Klein





“And with that, the Shared Lab for Life Sciences is officially open.”

With these words, our colleague Tanja Bloser, Director Future Health and Life Sciences, joined our management team, Tim and Tanja, as well as representatives from the political sphere to inaugurate the new Shared Lab at BioCampus Cologne at the end of April. For us at Gateway Factory, this moment represented far more than the ceremonial cutting of a ribbon. It marked the starting point for the next generation of science-driven startups in the Rhineland, brought to life with genuine startup spirit: pragmatic, fast, and focused on solutions.

The bottleneck starts well before market entry

For founders in biotechnology, diagnostics, or medtech, the greatest challenge is often not a lack of ideas or promising research, but the harsh reality of the laboratory market. Laboratory space is scarce, specialized equipment is prohibitively expensive, and regulatory requirements are demanding. While a software entrepreneur can start virtually anywhere with a laptop, a biotech team typically needs sterile workstations, analytical systems, and strict safety standards from day one. As a result, many teams lose months or



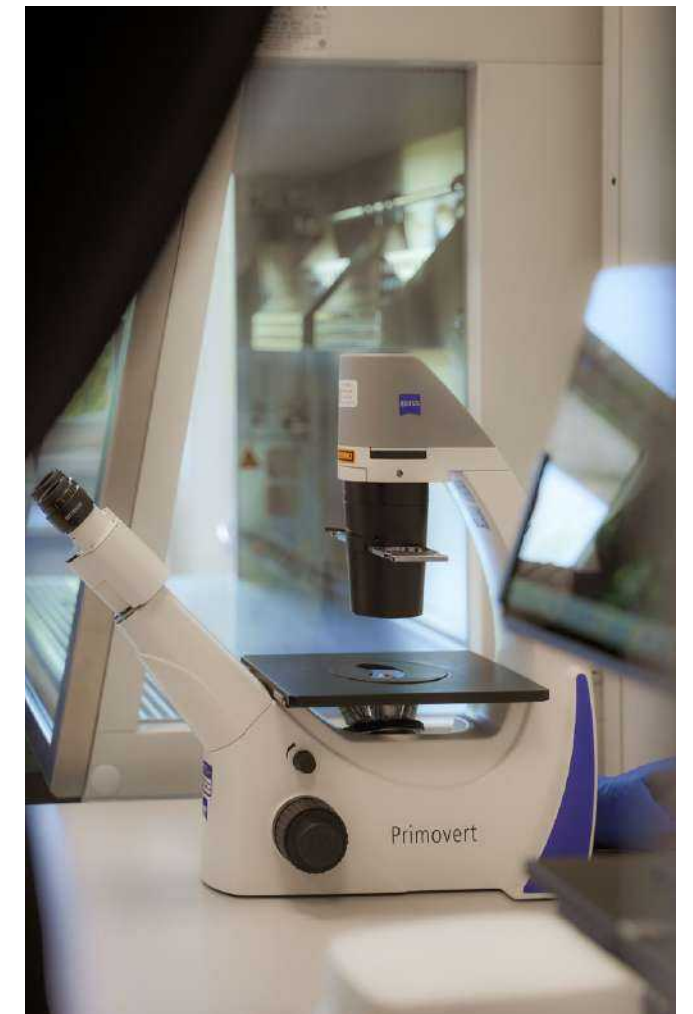
even years. Speaking at the opening of the Shared Lab, Dr. Janina Jänsch, Head of SME Policy at the German Federal Ministry for Economic Affairs and Energy, highlighted this structural challenge for Germany as an innovation hub: “Many entrepreneurs in the life sciences face a fundamental question right at the beginning: where can they actually work? Building and financing a laboratory requires significant investment and takes considerable time. In many cases, access to suitable facilities is simply not available. That creates barriers before companies have even had the chance to get started.”

Our new Shared Lab directly addresses this gap. Covering approximately 450 square meters, the facility offers 19 fully equipped laboratory workstations. Around one million euros have been invested to enable teams to begin working immediately under professional conditions, without having to finance costly laboratory infrastructure themselves. “It was important to us not to spend years discussing ideal structures, but to quickly create a place where teams could get started right away,” explains Tanja Bloser. “In the life sciences, time often determines whether research can ultimately become a viable business.”

Technology beyond the reach of individual startups

A core principle of the shared lab model is providing access to advanced technology that would be financially out of reach for most individual startups. But what equipment is actually available, and how do teams use it? Here are just a few examples from the extensive range of technologies on site:

- Automation to eliminate human error: Pipetting hundreds of samples manually is both time-consuming and prone to error, and mistakes in testing workflows can result in significant costs and delays. To address this challenge, the lab provides the apricot S3 Liquid Handler from SPT Labtech, an automated pipetting robot capable of performing complex tasks such as dilution series and highly reproducible liquid handling procedures with precision and consistency. The system is complemented by automated barcode readers from NBS Scientific, which scan and document sample tubes within seconds without errors.
- Rapid genetic analysis: For DNA and RNA analysis, teams have access not only to conventional thermocyclers (Biometra TRIO 48 and TAdvanced) but also to the qTower³ iris from Analytik Jena. This qPCR system amplifies and analyzes genetic material in real time, making it an essential tool for modern diagnostics. The setup is further complemented by the GloMax Discover Plate Reader from Promega, which measures biological and chemical reactions in dozens of samples simultaneously through luminescence, fluorescence, and absorbance-based detection methods.
- Cell sorting and tissue research: For detailed cellular analysis, teams use equipment from Miltenyi Biotec. The MACSQuant Analyzer 16 is a flow cytometer that scans cells within a liquid stream and determines their physical and fluorescence-based characteristics. Prior to analysis, the automated MACS Octo Dissociator converts solid tissue samples into standardized liquid suspensions suitable for examination. Subsequently, the autoMACS NEO Separator uses magnetic cell labeling to isolate and sort specific cell types.



- Maximum safety for research: Safety is a top priority throughout the facility. The installed biological safety cabinets, including systems such as the Berner claire neo, feature a specialized triple filter system. This allows founders to work safely with so-called CMR substances—compounds that are carcinogenic, mutagenic, or toxic to reproduction and therefore require exceptionally high safety standards.

Why infrastructure has become a matter of regional competitiveness

During the opening ceremony, our CEO Dr. Tim Hiddemann recalled that one of Germany's most successful life science companies, BioNTech, originated in Cologne but later left the region in part due to a lack of suitable infrastructure. "This is precisely the gap we aim to close. We are creating the conditions that will enable the next breakthroughs to happen here and ensure that talented people no longer have to leave the region," he added. The Rhineland has never lacked scientific excellence, thanks to its strong network of universities and hospitals. The challenge has long been the transition from research to application, largely because teams simply did not have access to suitable laboratory facilities.

In practice: Phagestack is already conducting research on site

The strong demand became apparent even before the official opening, with a large proportion of the available space already allocated in advance. Among the first residents is Phagestack GmbH. The startup combines artificial intelligence with phage biology to develop tailored alternatives to conventional antibiotics for combating resistant bacteria. For the team, the combination of laboratory work and data analysis is essential. Before biological data can be fed into algorithms, bacteria and phages must be prepared, pipetted, and analyzed with precision in the laboratory. This is exactly where the Shared Lab's automated systems provide value. For the founders, immediate access to infrastructure has been a major advantage.



A laboratory embedded in a larger ecosystem

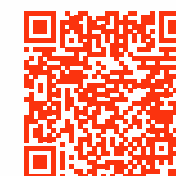
The project was made possible through the collaboration of strong partners, including Cellcolab GmbH as the laboratory operator, as well as leading industry partners such as Lonza, Thermo Fisher, Sartorius, Knauer, Zeiss, OLS Omni Life Sciences, and many others. "The fact that we were able to realize this project so quickly demonstrates what can be achieved when partners work toward a common goal," Tim concluded. "This is exactly the kind of entrepreneurial spirit we need if Germany is to remain internationally competitive in the field of deep tech."

With the launch of the Shared Lab, the Rhineland has gained a crucial new anchor point, one that will help ensure promising ideas no longer fail because of a lack of laboratory space.

"Building our own laboratory infrastructure would have required a tremendous amount of time and capital,"

says Dr. Jonas Fernbach, Co-Founder and Chief Scientific Officer at Phagestack. "The Shared Lab allows us to focus much earlier on developing our platform and advancing our antimicrobial approaches."

Interested
in a workplace?



DO YOU KNOW?

BioThrust

→
Founder:
Dr. Patrick Bongartz,
Moritz Meyer,
Konstantin Kurz

FOUNDED IN

2022

ELEVATOR PITCH

We develop a next generation
bioreactor for stem and immune
cell manufacturing.

BASED IN



FUN FACT

We met each other
through a private
story on Instagram.



More about BioThrust:
biothrust.com

FUTURE HEALTH & LIFE
SCIENCES



READY TO SCALE GOAL

Transform BioThrust
into a true scale-up with
strong commercial and
financial traction.

BIGGEST F*CK UP

“

Choosing an external partner for
product validation services which
turned out to be unskilled and
continuously failed timelines. After
that experience, we decided to
establish our own S1 lab internally,
where we had full control on all
validation experiments.

”

DESCRIBE YOUR TEAM

The bait must
please the
fish, not the
fisherman.

STAGE



PROGRAMME

Ready to Scale Cohort 2

DO YOU KNOW?

Detechgene

Founder:
Dr. Reza Esmailie
Dr. Robin Bayer

FOUNDED IN

2022

ELEVATOR PITCH

*Detechgene builds a portable
“PCR-to-go” molecular
diagnostics platform that
delivers lab-accurate pathogen
detection on-site within 15
minutes.*

STAGE

SEED



FUTURE HEALTH & LIFE
SCIENCES



BASED IN



DESCRIBE YOUR TEAM

**We make
diagnostics
accessible to
everyone.**

BIGGEST F*CK UP

“

*We tried to be everything at
once: every pathogen, every
setting, every add-on —
basically the “Netflix menu” of
diagnostics. It slowed us down
and made our story fuzzy.
Lesson learned.*

”



More about Detechgene:
detechgene.de

PROGRAMME

Ready to Scale Cohort 1

ONE THING THE ECOSYSTEM
SHOULD KNOW ABOUT YOU

**We’re developing a mobile
pathogen detection device
and are actively looking
for clinical pilot partners
and strategic collaborators
to scale mobile molecular
diagnostics.**

DO YOU KNOW?

Vivalyx

Founder:
Dr. Benedict Doorschodt
Prof. Dr. René Tolba
PD Dr. Christian Bleilevens
Dr. Andreas Schumacher

ELEVATOR PITCH

Vivalyx addresses the global organ shortage by introducing a patented, fully synthetic, and cost-effective perfusion technology that outperforms traditional blood-based methods, making organ preservation at body temperature scalable and significantly reducing costs.

PROGRAMME

Ready to Scale Cohort 1

DESCRIBE YOUR TEAM

We're redefining scalable organ preservation by keeping organs alive, not just stored.

FOUNDED IN

2022

BIGGEST F*CK UP

“
Don't stay with a supplier who holds you back. There's always a way out, and choosing better is always worth it.
”

READY TO SCALE GOAL

EU market launch 2026

FUN FACT

Vivalyx was originally focused on solutions used for cooling organs - but it ended up developing for perfusion at body temperatures.

BASED IN



More about Vivalyx:
vivalyx.com

STAGE

SERIES A

ONE THING THE ECOSYSTEM SHOULD KNOW ABOUT YOU

We're a true Aachen-Cologne company, with our research based in Aachen and our headquarters in Cologne.

FUTURE HEALTH & LIFE SCIENCES





JWP earned this interview and a feature in Moonitor by winning Gateway Factory's Virtual Pitch Night.

When Regulation Determines

JWP, a bootstrapped, self-financed startup, is developing a platform designed to deliver drugs directly to their site of action in bones, aiming to fundamentally transform orthopedic care. However, the true challenge only begins when research needs to be turned into a commercial product.

In this interview, founder Dr. Wa'el Al Rawashdeh discusses regulation, venture capital, and the question of why excellent research does not automatically translate into successful companies.

Interview & Text: Andreas Klein

Wa'el, you like to compare JWP to Amazon. For a MedTech start-up, that is quite an unusual comparison.

(Laughs) Yes, because outside of MedTech, hardly anyone can grasp what "In Bone Micro-pharmacies" actually means. That is why I always say: We are the Amazon for local drug delivery in bone. We do not develop the medications ourselves. They are clinically approved. We simply ensure that they arrive exactly where they are needed, and that they remain effective for precisely as long as they are required. That is the simplest way to explain our platform. We imagine the future of our technology to deliver novel medications currently under evaluation by Big Pharma, once approved.

Okay. How does that work in practice?

Let's take a bone infection as an example. Today, a patient usually requires two surgeries. First, the surgeon removes the infected tissue and stabilizes the void if it's structurally weak. This is followed by six or more weeks of systemic antibiotics, which affect the entire body even though they are only needed in one specific spot. Only after that is a second invasive operation performed to insert a graft, an implant, which can be the patient's own bone (autograft), donated human bone (allograft),

or synthetic-based materials. Our platform combines these two steps. We transform the allograft into a local regenerative drug delivery vehicle. The carrier matrix that already contains the antibiotic, releases it locally over the necessary period, and simultaneously supports bone regeneration. Two surgeries become one. We intend to apply the exact same principle to forms of bone cancer later on. Therapeutic agents could be delivered directly to remaining tumor cells instead of placing a burden on the entire body. However, a bone infection is the least complex example to explain the underlying principle.

That sounds like a fairly obvious solution. Why does it not exist yet?

Because our biggest challenge in Europe isn't just the technology. Orthopedic surgeons understand the medical concept immediately. The challenge begins with regulation. In the US, industrially processed human tissue is classified as a medical device. In Germany, a comparable procedure is highly likely to be evaluated as a tissue preparation, thereby falling under the Medicinal Products Act (Arzneimittelgesetz). This classification alone determines which development pathway we must pursue. If the focus is placed on the drug aspect, we are suddenly talking about five to ten years of clinical trials and investments of up to 20 million euros. Yet, we are not developing a new antibiotic. The antibiotic has been used successfully for decades. Our innovation is the localized release of the active substance.



AWARD SPOTLIGHT

Dr. Wa'el Al Rawashdeh also won the Road to BIO-Europe Pitch Competition, jointly organised by us together with BioCampus Cologne and KölnBusiness. His compelling partnering story convinced the expert jury, securing JWP a presentation slot on the official BIO-Europe stage in Cologne this November.



So the real challenge only begins once the research is completed?

Exactly. From that moment on, the regulatory classification changes practically everything. Our initial product strategy is therefore targeting the US. Not because the system there is simpler, but because it is clearer. You know exactly which regulatory pathway a product has to take, 50 states all fall under one regulatory body and the requirements are set at a federal level. For a start-up, this clarity makes an enormous difference in terms of strategic planning, capital deployment, clinical evidence required and manufacturing options. Nevertheless, payment is a separate challenge because in the US there are numerous partners and organizations and insurance companies that a MedTech company has to make individual agreements with, it's not all simple also in the US.

So it doesn't fail at the research stage?

No. We deliberately keep our research in Germany. I am deeply convinced of the quality of our universities, our research infrastructure and our human capital. The real challenge begins only

afterward, when research needs to be turned into a product. We in Germany still have serious catching up to do in terms of real innovation funding, translation and reducing barriers. We are over-focused on risk minimization.

Does the problem ultimately also come down to money?

Yes. Capital is a crucial part of the challenge. We have to tailor our first product entirely to the US market. Not because we necessarily want to, but because we have significantly better market opportunities there, clear regulatory pathway, higher tolerance for risk and appetite for innovations. At the same time, we cannot live on investments alone; we have to generate revenue at some point. Especially in the current market, we see that investors have become very cautious. In Germany in particular, you notice how conservatively investments are made. We often hear: "Come back when you are in the clinical phase." But that is exactly the point up to which a DeepTech company needs the funding.

What does venture capital mean to you then?

Germany talks a lot about start-ups, but our system is optimized for spin-offs. These two terms are used interchangeably and they should not be. Not all startups are spinoffs, but all spinoffs are start-ups. Many investors want to take as little risk as possible. That is understandable, but risk ventures are exactly what venture capital is for. Anyone who only invests once the greatest risk has already been overcome is no longer financing innovation, they are financing growth. In my humble opinion, the biggest venture capital investor in Germany is our federal government because academic spinoffs are financed through federal grants at state universities for years, which means tax money pays for driving innovation and this model is not sustainable nor competitive against the models in the US, China, Korea and all the countries that are ahead of us already. You need to notice the subtle semantic difference to realize the innovation culture gap. Venture capital in Germany is officially called Risikokapital (risk capital).

Nevertheless, you want to build the company in Germany. Why?

It would be valuable if our first financing round is with German investors because I know the value of local/national strong core as a launchpad, and I am immersed in the regional ecosystem and strongly believe in its potential and quality. International investors can come on board now and later. However, if the lead investor comes from abroad too early, there is always the danger that the research and the company will relocate. I want to deliberately keep research and development in Germany, as long and as viable as possible. It isn't always easy; you really have to fight. But we have already achieved an incredible amount. At the end of the day, progress and development occur where there is a supporting environment and pathways to capital, and I am driven to achieve this in Germany, yet it is not all in my hand.

If you could change one thing about the German start-up ecosystem tomorrow, what would it be?

I will speak as a founder of a bootstrapped startup. I believe we need to become more creative. Capital does not just mean cash. There are laboratories, infrastructure, and resources that are currently not being fully utilized at large universities. Why not support startups with these earlier on and take small equity stakes in return or future return like VSOPs? 50,000 or 100,000 euros is often an insignificant amount of money for a large state university, but for a start-up, it can mean the difference between life and death. My call is: Don't charge me now but bet on my success and I will repay you in folds.



DO YOU KNOW?

SUMM AI

Founder:
Flora Geske
Vanessa Theel
Nicholas Wolf

READY TO SCALE GOAL

Scaling our company to the next stage with the help of an amazing network of mentors, fellow founders and very well connected individuals



More about SUMM AI:
summ-ai.com

FUN FACT

We are a tech startup with two female and one male founder and we have joked about buying a wig for him since we've been promoted as a female-led start-up so many times.

FOUNDED IN

2022

DESCRIBE YOUR TEAM

Let's f*** go!**
(inspired by one of our founders once meeting Gordon Ramsay while on vacation)

BIGGEST F*CK UP

A classic: Hiring! Finding people that are aligned with your mission, driven by purpose, and are able to deal with the ambiguity of working for a startup is one of the hardest things to do. Keep trusting your gut!

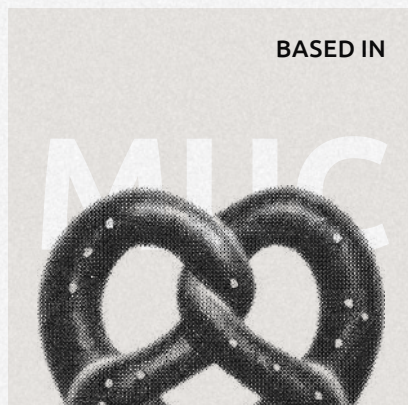
FUTURE REGULATORY DEMANDS



ONE THING THE ECOSYSTEM SHOULD KNOW ABOUT YOU

B2G is a very interesting market and - despite many challenges - a much larger opportunity than lots of people think.

BASED IN



PROGRAMME

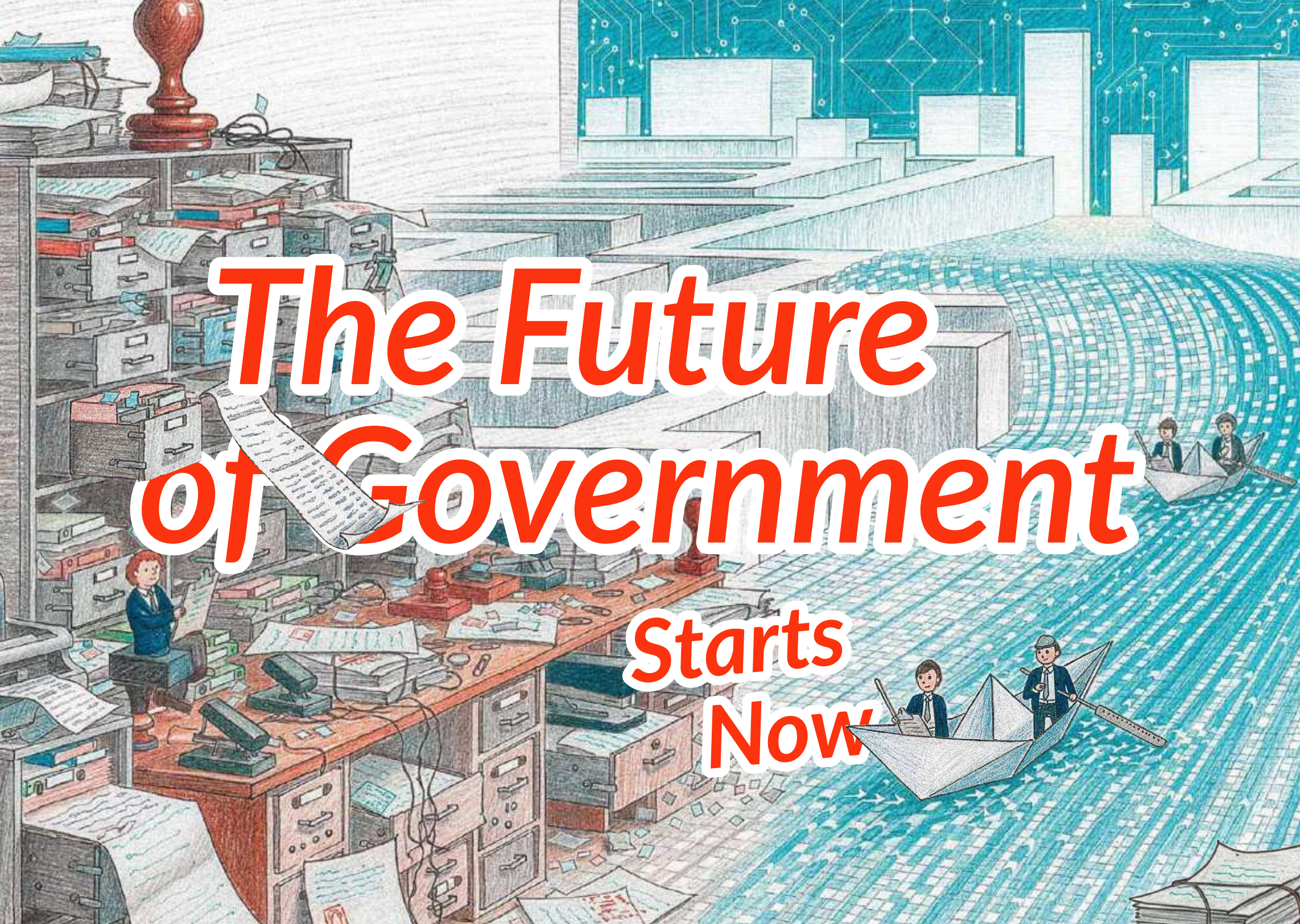
Ready to Scale Cohort 2

ELEVATOR PITCH

The first ever GovTech start-up to successfully bring AI to the public sector on the municipal level, to 250+ institutions - with AI-based process documentation and optimization!

STAGE

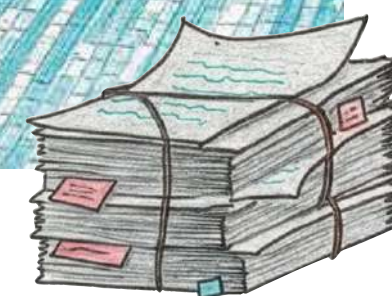




Dust drifts through the dim glow of a 1970s desk lamp. Yellowing folders pile up on a solid wood desk, a dried-up flower sits in the corner, and somewhere in the background a fax machine hums away. For many people, this is still the image of German public administration: slow, bureaucratic, analog. But that is exactly what the German government is now trying to change at speed. The Agentic AI Hub aims to systematically connect AI startups with the public sector for the first time — tackling one of the biggest challenges in Germany's digital transformation.

The initiative is a joint project of the German Federal Ministry for Digital Affairs and State Modernization and the federal government's DigitalService. Its goal is to bring AI solutions into municipalities and public administrations faster. To achieve this, startups were identified, pilot projects launched, and real-world applications tested in cities and municipalities. The broader ambition is to turn isolated innovations into scalable solutions for the public sector.

This is precisely where we at Gateway Factory come in. Drawing on our experience in scaling technology-driven startups, we support several of the teams now participating in the Agentic AI Hub — through coaching, strategic connections to corporates and municipalities, and our Ready to Scale program. At the same time, Tanja Zirnstein, our Managing Director, Franzi Röhr, Director Future Regulatory Demands, and Prof. Malte Brettel, member of our Academic Advisory Board, have been appointed by the ministry to the Hub's advisory board.



TEXT: ANDREAS KLEIN
INTERVIEW: ANDREAS KLEIN
ILLUSTRATION: WITH THE HELP OF AI

The *Agentic AI Hub* is designed to accelerate the adoption of AI solutions across German municipalities. As a partner, Gateway Factory supported the initiative from the very beginning and now contributes its expertise in scaling, ecosystem building, and GovTech directly to the Hub's advisory board.

From Isolated Innovation to Standardized Processes

In this role, they are closely involved in shaping the program and contributing expertise on scaling, startup–municipality collaboration, and the development of meaningful selection criteria. Because the real challenge often only begins after a successful pilot.

“A solution working in one municipality does not automatically mean it can scale nationwide,” says Franzi. Different data protection requirements, procurement procedures, and Germany’s federal structures have so far meant that many digital solutions remain limited to isolated deployments. For startups in particular, this creates a major barrier: every municipality operates with its own processes, requirements, and review procedures.

This is exactly the challenge the Agentic AI Hub is designed to address. The goal is to establish standardized processes, make it easier for municipalities to access innovative solutions, and help startups bring their technologies into practical use more quickly. The first pilot projects have already demonstrated that this exchange can work.

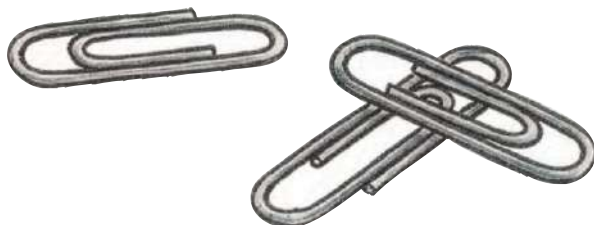
Several municipalities in North Rhine-Westphalia are among the program’s active partners. One of the startups involved — and also part of the second batch of our Ready to Scale program — is SUMM AI.

Best known for its AI-powered translation of official administrative texts into easy language, the



SUMM AI presented the results of the initiative’s largest pilot project at the Agentic AI Hub closing event. Inspired by The Magnificent Seven, the team highlighted its collaboration with seven partner municipalities and its ambition to scale AI solutions across Germany.

company demonstrated within the Hub just how deeply AI can transform public administration processes. In the initiative’s largest project, the team deployed its solution with 28 users across seven partner municipalities of different sizes. But the initiative went far beyond a simple pilot test. In a co-creation process, participants jointly developed a new dashboard capable of simulating municipal workflows using AI, generating digitization recommendations, and calculating potential cost savings.



Great Tech Needs Smart Delivery: Making Procurement Work at Scale

The response shows the solution is addressing a real need: all seven municipalities intend to continue using the software after the project ends. At the same time, the collaboration highlights the central challenge in modernizing the German state. “The solution exists, the demand exists. Now procurement also needs to work at scale,” says founder Flora Geske. To scale from seven municipalities to all 11,000 across Germany, standardized contracts, unified documentation, and centralized data protection assessments will now be essential.

For us at Gateway Factory, the Agentic AI Hub represents one thing above all: an important step toward creating stronger connections between innovation and public administration. Together, we are working on the structures, networks, and trust needed between all stakeholders involved.

Because if Germany wants to catch up in the global race for AI and digital government, it will take more than strong technologies alone. The decisive factor will be whether innovations can move beyond pilot projects into broad real-world adoption. Scalable approaches, in particular, need to be prioritized and actively advanced. The Agentic AI Hub is already proving to be an important building block in making that happen.



Batch 1 at a Glance

20 pilot projects
Implemented across 19 German municipalities with 9 AI startups.

90% faster processes
Complex administrative procedures were completed in a fraction of the previous time, saving up to 28 hours per case.

95% satisfaction
95% of participating municipalities reported a high level of satisfaction with the AI solutions.

Built for broader adoption
Half of the tested AI solutions can already be transferred to other municipalities without major adjustments.

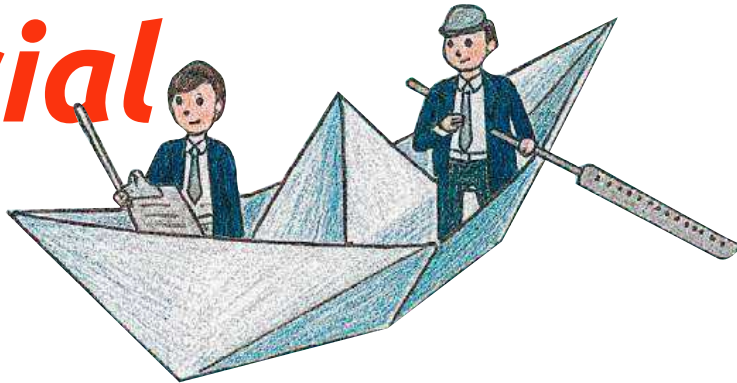
Building the framework
The German government is developing new procurement and data protection mechanisms to help successful AI solutions reach more municipalities.

source: <https://bmds.bund.de/aktuelles/pressemitteilungen/detail/agentic-ai-hub-start-der-2-bewerbungsrunde>

“Scaling is crucial for us



Find out more about the Agentic AI Hub!



How can AI make the transition from pilot projects to widespread administrative practice?

Thomas Jarzombek talks about this in an interview.

He explains what lessons have been learned so far from the Agentic AI Hub, why local governments and start-ups need to work more closely together, and where Germany could be by 2030.

What has been the response from startups and local authorities to the Agentic AI Hub?

“What we are particularly pleased about is that the direct exchange between startups, local authorities, and our ministry is seen as genuine added value. The ambitious timetable is not seen as a deterrent, but as a motivator. And the political backing gives the projects on the ground a noticeable boost.”



Thomas Jarzombek is Parliamentary State Secretary at Germany's Federal Ministry for Digital Affairs and State Modernization and is regarded as one of the leading voices in Germany's digital policy landscape.

What lessons have been learned so far?

“Three specific lessons stand out for me:

Firstly: threat modeling works. Analyzing risks based on concrete attack scenarios rather than discussing them in abstract terms – this delivers constructive results and is well received by the pilot projects. This approach is particularly effective in the context of AI.

Secondly: data protection is case-specific. The pilot projects are pursuing very different approaches – depending on the risk assessments of the respective departments and data protection officers. Targeted support is needed rather than one-size-fits-all solutions.

Thirdly: a good start pays off. Data delivery and the initial workshops went smoothly. The local authorities are highly committed, and the exchange between experts is helping to overcome reservations about AI – and is driving the process forward.”

Why is scaling so crucial in the GovTech sector?

“Scaling is crucial for us – because no one benefits from further pilot projects alone: not the local authorities, not the start-ups and, above all, not the citizens and businesses who simply expect better administrative services.”

What are the biggest challenges at the moment?

“There are many hurdles: IT security, data protection, but also the development of flexible procurement tools. To be honest, we don't have all the answers yet – but that is precisely the point of the Agentic AI Hub: over the coming weeks and months, we will work together to figure out how to achieve genuine scaling.”



Where could Germany be by 2030?

“AI agents are already changing our present. By 2030, all this will be standard practice: citizens and businesses will be able to handle their administrative affairs quickly, with minimal bureaucracy and at low cost. Start-ups have made a significant contribution to this – and have grown themselves: into stable companies that have become an integral part of Germany's digitalization. As an anchor customer, we want to make exactly that possible – and thereby strengthen Germany's position as an AI hub. Because being at the forefront of AI is crucial for our future. The Agentic AI Hub is now laying the foundations for this.”



DO YOU KNOW?

The Oater

Founder:
Lisa Nesti
Henrik Bruger
Benjamin Auer

DESCRIBE YOUR TEAM

**Life is oat and
oat is life.**

BASED IN



FUN FACT

**Our first
prototype is now
a refrigerator.**

BIGGEST F*CK UP

“

We decided to separate the production team from the rest of the team because we didn't have a production space in Cologne. Everyone had to commute to Jülich, and we quickly realized that this created more problems than it solved. We learned that a strong, close-knit team is incredibly important, and that long distances and constant commuting can seriously hinder that cohesion.

”

FOUNDED IN

2021

SUSTAINABLE
INFRASTRUCTURE



ELEVATOR PITCH

***We build a machine that
produces sustainable,
barista-quality oat
drink on-site.***

PROGRAMME

Ready to Scale Cohort 1

STAGE



More about The Oater:
oater.de

DO YOU KNOW?

Solid Air Dynamics

Founder:
Sascha Schriever, Maximilian Mohr, Christian Schwotzer,
Jens Hofer

ELEVATOR PITCH

**Building the next-
generation of
sustainable high-
performance insulation**

PROGRAMME

Ready to Scale Cohort 2

BASED IN



STAGE



BIGGEST F*CK UP

“

*Our original source
material became
commercially unavailable,
forcing a technological
pivot — the hard lesson
that single dependencies
are never truly locked in.*

”

FOUNDED IN

2024



More about Solid Air Dynamics:
sa-dynamics.com

FUN FACT

**One gram of our fiber has
a surface area the size of
a tennis court.**

SUSTAINABLE INFRASTRUCTURE



DESCRIBE YOUR TEAM

*We think in
solutions.*

DO YOU KNOW?

vGreens

Founder:
Dr. Maximilian Hartmann
Claas Ahrens
Dr. Stefan Hey
Assist. Prof. Dr. Caspar Krampe

FOUNDED IN

2022

READY TO SCALE GOAL

*We aim to significantly
raise the bar in both of our
fundraising and sales activities
- securing strong investor
relationships and closing key
commercial deals.*



More about vGreens:
v-greens.com

FUN FACT

Three of our four founders
- Max, Claas, and Stefan -
have the same middle name
"Alexander". Maybe Caspar
will join them one day.

SUSTAINABLE
INFRASTRUCTURE



BASED IN



PROGRAMME

Ready to Scale Cohort 2

STAGE



ELEVATOR PITCH

**vGreens offers
proprietary sensors
and AI software that
enables scalable
production intelligence
for commercial indoor
farming.**

BIGGEST F*CK UP

“

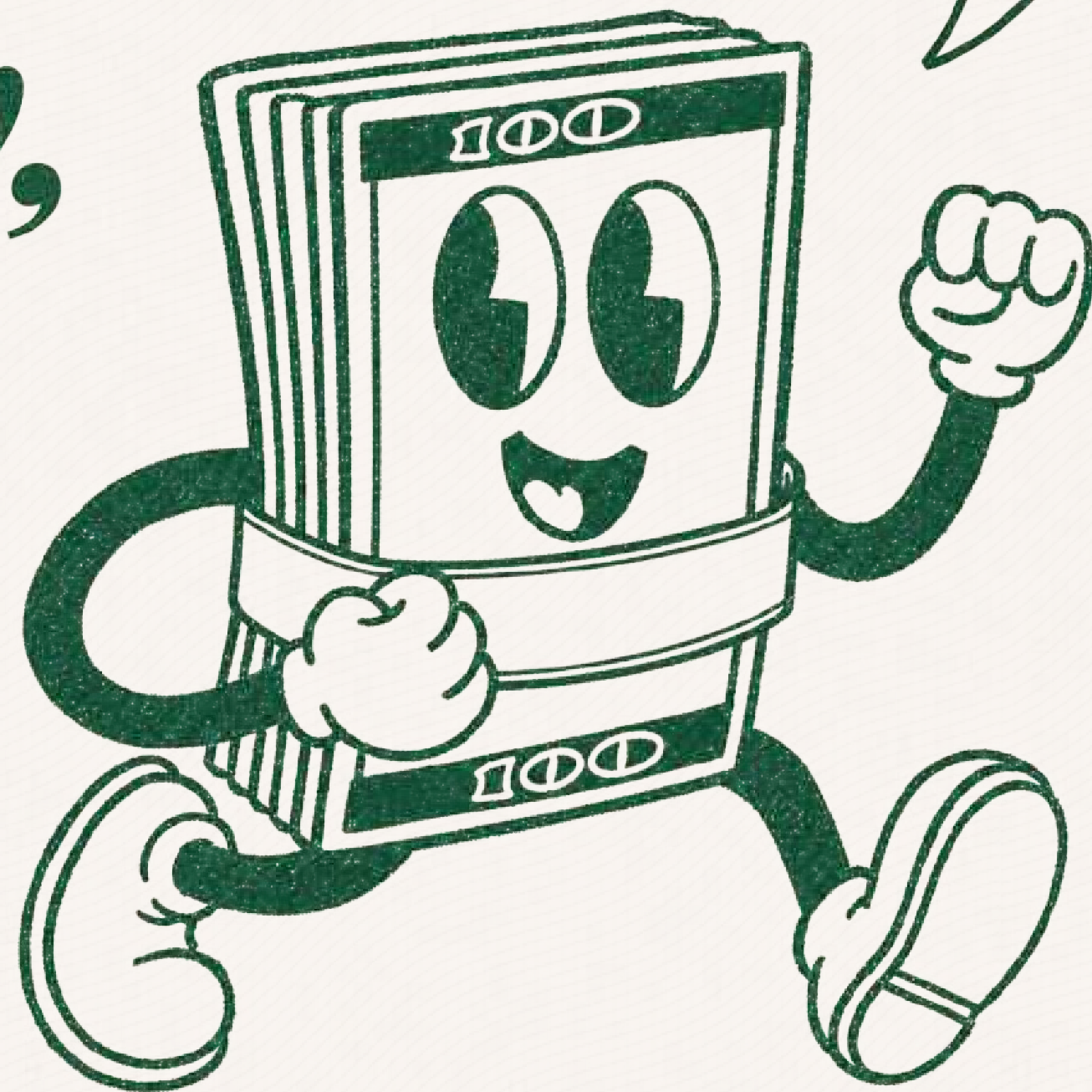
On Christmas Eve 2022, the
pumps of our first high-tech farm
failed, so instead of sitting under
the Christmas tree with a glass
of red wine, we spent the night
trying to save the farm and,
above all, the plants.

”

DESCRIBE YOUR TEAM

**Diversity: the
art of thinking
independently
together.**

***“Money,
Money,
Money
must be
funny...”***



Turns out I'm not the
only one investing
in great ideas:
Three cities. Five
financial partners.
One region investing
in deeptech.

The Bank Meeting: What Founders Often Underestimate

Nearly 400,000 new business startups in Germany are a positive sign, but every single new venture comes with its own challenges. One of the most important milestones is securing financing. Here is what founders need to consider to succeed in a meeting with their bank.

By LOTHAR SCHMITZ, Business Journalist based in Bonn

Germany is seeing an increase in new business startups once again. In 2025, the Institute for SME Research (IfM) Bonn recorded around 395,000 self-employed individuals starting businesses as their primary occupation. This marks the second consecutive increase since 2023 and the highest figure in the past eleven years. At that time, the IfM recorded 388,000 new business startups, while between 2020 and 2023 the annual figure remained below 340,000. The highest number of new business startups per 10,000 inhabitants of working age was recorded in Berlin and Hamburg, followed by Hesse, North Rhine-Westphalia and Schleswig-Holstein.

Two further trends are particularly noteworthy. According to the KfW Start-up Monitor 2025, new business startups are becoming more capital intensive. In previous years, the capital required was generally below €5,000, and over the long term, more than two thirds of founders were able to start their businesses with this amount. Since 2022, however, this pattern has changed

structurally: In 2024, only 56 per cent of new business start-ups required no more than €5,000, which is likely due to the general increase in prices. Thirty-two per cent of new business start-ups required up to €50,000, while twelve per cent required more than €50,000. At the same time, according to the KfW analysis, the proportion of founders who financed their start-up entirely from their own funds continues to increase, reaching 75 per cent in 2024. Conversely, this means that one in four people planning to start a business requires additional financing.

Demand for Start-up Financing Is Increasing

This is where Stadtparkasse Düsseldorf comes in. As the Düsseldorf region has a strong economy and a vibrant startup ecosystem, the bank has a dedicated department consisting of two specialists who focus exclusively on business start-ups and two specialists who focus specifically on business succession.



“Among all banks in Düsseldorf, we receive the highest number of enquiries from founders,” says Natalie Arheiliger, who advises aspiring entrepreneurs at Stadtparkasse Düsseldorf on a daily basis. “And at the moment, enquiries are increasing noticeably.”

While other partners within Stadtparkasse Düsseldorf’s extensive network, such as the Chamber of Industry and Commerce, provide general advice on starting a business, the bank becomes involved when financing is required for a specific start-up project. Anyone seeking funding for a new business and whose project has progressed beyond the initial idea stage has come to the right place at Stadtparkasse Düsseldorf. In most cases, this involves publicly funded loans, for example from KfW or NRW.BANK. Both institutions operate under the house bank principle, meaning that advice and applications are handled through the founder’s own bank; funding cannot be applied for directly.

The Qualified Initial Consultation Is Key

Natalie Arheiliger or Ute Bechmann invite the founder to what is known as a qualified initial consultation, which is essential for any potential funding application. The start-up advisers prefer to receive key information in advance so they can prepare accordingly. This includes, in particular:

- Business plan, including financial projections
- Personal documents, including a CV
- A personal statement of assets, together with an overview of personal income and expenditure

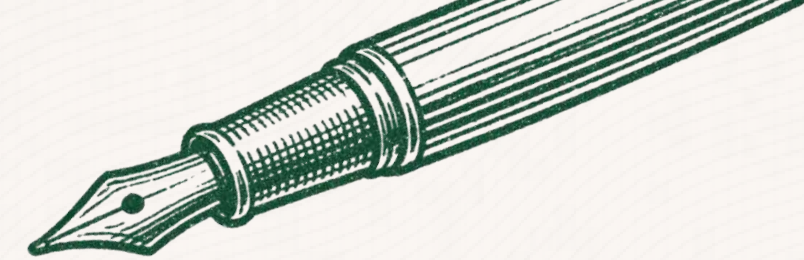
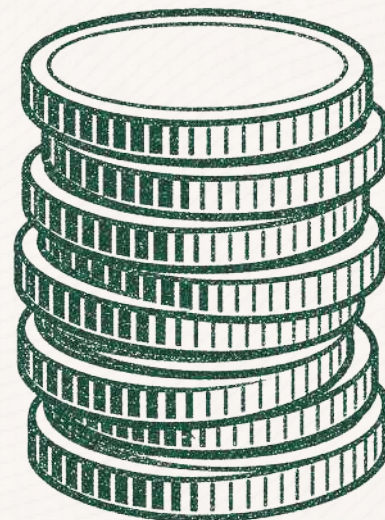
“There needs to be a solid framework in place. We need to gain an understanding of both the planned business and the person behind it,” explains Natalie Arheiliger. During the meeting,

the founder presents their plans in detail, while the adviser asks questions. Naturally, the financial figures play an important role: Has the funding requirement been assessed correctly? Is there sufficient equity available—at least 15–20 per cent? Has provision been made for unforeseen circumstances? Is the business model capable of generating sufficient revenue?

Personality Matters Too

But personality also plays an important role. “Anyone looking to start a business and apply for a publicly funded loan must have an impeccable credit rating, no negative Schufa record, sound commercial knowledge, and be able to demonstrate both their qualifications and relevant industry experience,” says Natalie Arheiliger. The adviser also forms an impression of the founder’s entrepreneurial personality.

“After 18 years of advising founders, I can tell very clearly whether someone has what it takes to be an entrepreneur,” says Natalie Arheiliger. Founders must be passionate about their business idea, have a thorough understanding of their field, be highly motivated, have a clear vision, be prepared for long working hours and short holidays, be willing to take risks, and remain focused. All of this feeds into the assessment on which KfW ultimately bases its decision on whether to approve a publicly funded loan.



Nine Tips for a Successful Meeting with Your Bank

The good news is that founders can do a great deal to improve their chances of securing the funding they need. These are Natalie Arheiliger’s most important recommendations for a successful meeting with the bank:

1. Get in touch with your bank as early as possible. Have the meeting first, then start your project. Once a business venture has already begun, obtaining funding becomes much more difficult, as it would no longer qualify as start-up financing but instead be treated as subsequent financing.
2. Obtain a Schufa report in good time.
3. Ensure your bank account is managed properly and keep a close eye on your creditworthiness.
4. Take the time to prepare your business plan. This can easily take three or four months.
5. If you are starting a business after a period of unemployment, be sure to apply for an Activation and Placement Voucher (AVGS). This entitles you to free coaching, including professional support in preparing your business plan.
6. The Employment Agency also offers a start-up grant if you are still entitled to at least 150 days of Unemployment Benefit I (ALG I).
7. Do not rely solely on external financing. Depending on the amount of funding required, equity is essential. In any case, it is always advisable to have your own liquidity available.
8. Plan your capital requirements realistically. Things almost always turn out to be more expensive than expected. For example, if business premises need to be fitted out, obtain fixed-price quotations from contractors.
9. Be bold! Don't be afraid that your project might be rejected. Be confident and get in touch. We are passionate about supporting new business start-ups, we enjoy advising founders, and we work together to find the best possible solution.

Interested in learning more?

Get in touch with our contact person for further information and tailored advice:

Natalie Arheiliger

Abteilungsleiterin Existenzgründung und Unternehmensnachfolge
natalie.arheiliger@sskdusseldorf.de

Expanding while keeping capital costs under control

How scale-ups find the right mix of financing as they expand their business

Your product is launched, you are seeing initial revenue, and the team is growing: your startup has become a scaleup. Now it is no longer just about testing an idea, but about scaling up a proven business model. New markets, expanded sales, additional infrastructure, or a new production line all signal a new chapter - but they also need to be financed.

Venture capital or traditional financing?

At this stage, many founders primarily think of venture capital. This can certainly be a viable option, especially when significant expenditures on

marketing and personnel are required and there is still considerable uncertainty regarding the company's growth prospects. However, it is important to remember that equity financing is an expensive form of financing - because you are not only giving up voting rights but also a share of the fundamental exit returns. After all, if a company is to grow, investors want a say in the decision-making and a share of the profits due to the high risk involved. Therefore, dilution must be taken into account with every round of financing.

For this reason, it can be attractive for scale-ups to finance part of their growth through traditional financing channels in order to retain more control over the company and achieve a better cost-of-capital mix. Especially when certain revenue thresholds have been reached and institutional venture capital investors are already on board, incorporating debt into the financing mix

can be worthwhile for lowering the cost of capital. "Once they reach a certain size, startups need to consider the optimal capital structure in order to take advantage of both equity and debt financing. For scaleups, it's therefore worth looking into traditional financing options such as bank loans, government-backed loans, or leasing. The choice of lender is also of crucial importance," says Kai André Mischak, Senior Startup Manager at Sparkasse KölnBonn. Traditional financing really comes into its own when a project is clearly defined. This applies, for example, to machinery, IT equipment, vehicles, new premises, or the pre-financing of large orders or grants.

The best solution is often a good mix

Naturally, traditional financing has its limitations. When a project is difficult to collateralize, for example because a significant amount is being invested in software, marketing, or personnel, or when extremely rapid growth is required, alternative models may be more appropriate. Venture capital is often a good fit when both risk and speed are high. Growth equity or private equity are typically considered for larger growth spurts, such as international expansion or acquisitions. But (venture) debt can extend financial flexibility without immediately triggering a new funding round.

"In practice, it often turns out that no single form of financing is ideal; rather, it's the right combination that matters. Traditional financing for predictable investments, combined with venture capital where greater flexibility is needed and productivity can be boosted. The best way to figure this out is to talk to us about how to structure it," Kai recommends.

Another key component is public funding. This includes low-interest loans, guarantees, and grants. A grant is particularly attractive because, under certain conditions, it does not have to be repaid. Such programs can be especially exciting for scale-ups in the areas of innovation, digitalization, sustainability, or internationalization.

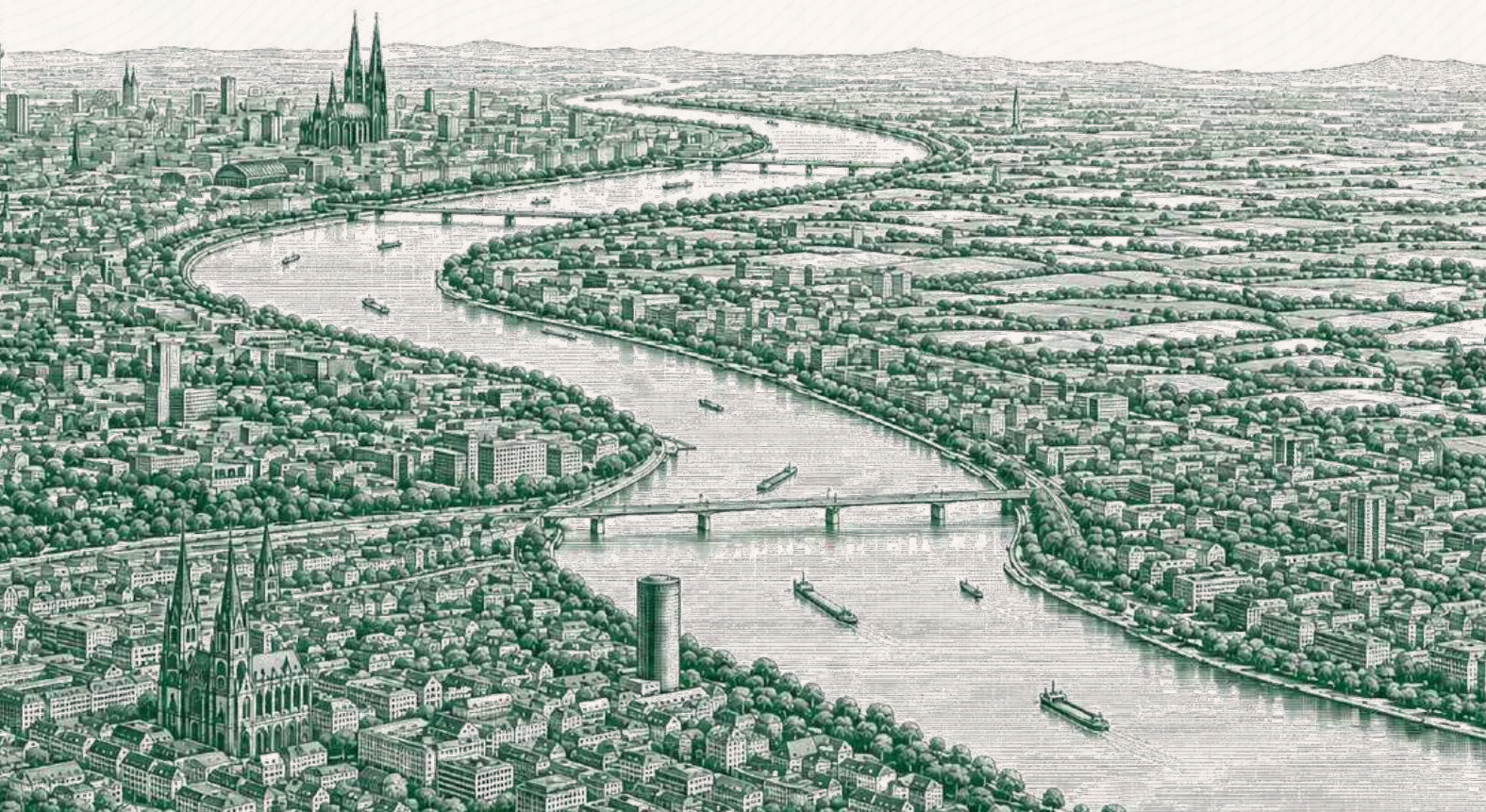
However, it is important that the project is clearly described and the purpose of the funding is clearly identifiable. Since grants often operate on a reimbursement basis, requiring expenses to be incurred upfront, this can also lead to potential pre-financing needs that can be handled through a bank.

Financing is therefore more than just a question of where the next round of funding will come from. It also determines how a company grows, how much control it retains, and how stable its next steps will be. The next round of investment is not always automatically the best solution. Sometimes the smarter approach is one that starts with the basics and is supplemented with smart strategies. To achieve this, it is essential to work with the right bank early on to set the course and diversify financing capabilities.

Interested in learning more?

Get in touch with our contact person for further information and tailored advice:

Kai André Mischak
Senior Startup Manager
kai.andre.mischak@sparkasse-koelnbonn.de



How We Invest in Startups as a Regional Player Through KSK-Wagniskapital GmbH

Who We Are

KSK-Wagniskapital GmbH is a regional venture capital firm based in Cologne. Its shareholders are Kreissparkasse Köln and Sparkasse Gummersbach.

Since its establishment in 1996, the company has invested specifically in innovative startups across the region and has supported them through multiple stages of development. Unlike traditional VC funds, which often operate on a global scale, Kreissparkasse Köln pursues a regionally focused investment approach with a clear emphasis on sustainable economic development, network building and long-term client relationships.

Our Investment Strategy

“For us, regionally rooted venture capital creates sustainable enterprise value and, in turn, resilient business models through proximity, strong networks, regional value creation and long-term partnerships—not primarily through pressure to scale,” says Adriano Calabrese, Managing Director of KSK-Wagniskapital GmbH.

KSK-Wagniskapital GmbH makes equity investments in companies with viable business models and supports them in building sustainable, successful businesses. Investments are focused on the business areas served by the two shareholder savings banks and are not restricted to specific industries.

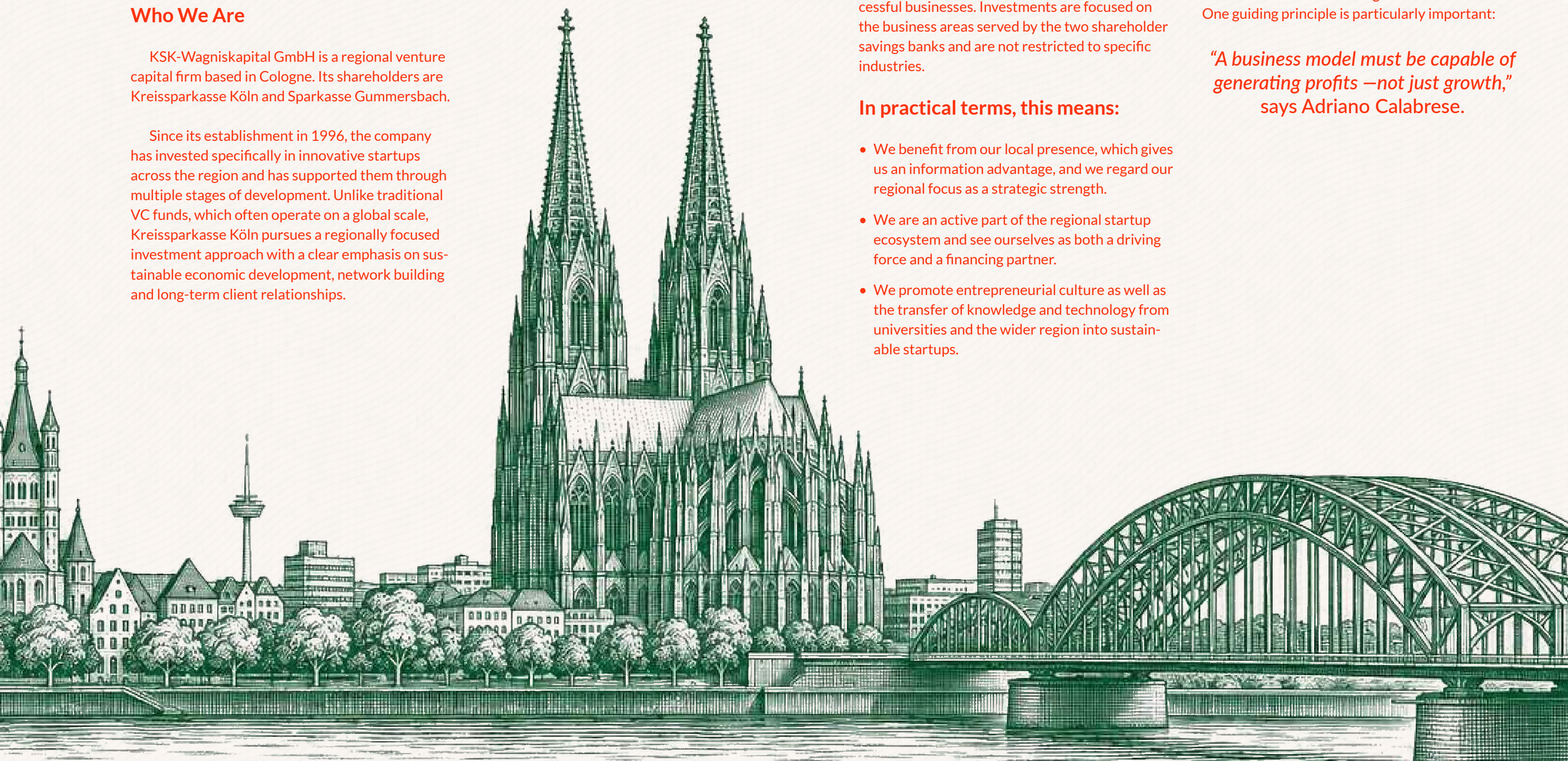
In practical terms, this means:

- We benefit from our local presence, which gives us an information advantage, and we regard our regional focus as a strategic strength.
- We are an active part of the regional startup ecosystem and see ourselves as both a driving force and a financing partner.
- We promote entrepreneurial culture as well as the transfer of knowledge and technology from universities and the wider region into sustainable startups.

- We look beyond the next funding round and focus instead on the next five to eight years of a company’s development.
- Our stage-spanning investment approach enables us to support startups all the way through their growth phase.

When evaluating potential business models, the personality of the founder and their entrepreneurial capabilities play a decisive role. Our focus is on startups, established SMEs with growth potential, succession situations, and sustainably scalable business models with strong market relevance. One guiding principle is particularly important:

“A business model must be capable of generating profits —not just growth,”
says Adriano Calabrese.



Our Investment Approach

Typical investment tickets range from €250,000 to €1.5 million. Investments are made exclusively through minority shareholdings, without assuming any operational management responsibility. KSK-Wagniskapital GmbH sees itself as a partner for a defined period, with a clear exit perspective after five to eight years.

Our investment approach places a strong emphasis on preserving the entrepreneurial independence of startups. At the same time, startups

are encouraged to make use of the wider network of portfolio companies and partners within KSK-Wagniskapital GmbH whenever needed.

In addition to traditional equity investments, KSK-Wagniskapital GmbH also offers financing through mezzanine capital (e.g. silent partnerships and subordinated loans). The financing mix is tailored to the specific requirements of each company. As a result, every financing solution is customised and complemented by continuous coaching and strategic dialogue as an equal partner.

The selection of startups follows clearly defined economic and strategic criteria. *The following checklist serves as a practical guide when preparing an investor pitch:*

01 Problem & Solution (clear and concise)

- Can you explain the problem simply and clearly?
- Is it a genuine, relevant problem or merely a “nice to have”?

02 Product (more than just a concept)

- Do you already have an MVP, prototype or finished product?
- Do you have any initial users or customer feedback?

03 Market & Potential (realistic)

- How large is the market in realistic terms, not just theoretically?
- Who is your specific target audience?
- Why is now the right time?

04 Business Model (how will it generate revenue?)

- Who pays?
- What exactly are they paying for?
- Is the model scalable or at least profitable?

05 Traction (evidence rather than vision)

- Revenue?
- User growth?
- Pilot customers?

06 Team (the decisive factor!)

- Why are you the right team for this?
- What relevant experience do you bring?
- Do you cover the key areas of technology, sales and business?

07 Competition (please be realistic)

- Who are your direct competitors?
- What do you do better?
- Why is your position defensible?

08 Financial Planning (credible, not perfect)

- How are revenue and costs developing?
- How long will the available capital last (runway)?
- What are the main cost drivers?

09 Funding Requirements (clear and specific)

- How much capital is required?
- What exactly will it be used for?
- Which milestones will it enable you to achieve?

10 Exit Perspective (relevant from an early stage)

- Who could potentially acquire your company in the future?
- Or: How will long-term value be created?

“For clients of KSK-Wagniskapital GmbH, the close relationship with Kreissparkasse Köln represents significant added value,” says Oliver Engelbertz, Director of Corporate and Commercial Real Estate Clients at Kreissparkasse Köln.

At the start of a company’s journey, this includes the close collaboration between KSK-Wagniskapital GmbH and the Start-up and Specialised Financing division at Kreissparkasse Köln, through which a wide range of public funding programmes can be structured and integrated where appropriate. At a later stage, mature portfolio companies can access traditional debt financing provided directly by Kreissparkasse Köln. This creates a seamless financing solution from a single source throughout the entire lifecycle of a business. It is a successful model that has been offered sustainably for more than 30 years and continues to be in strong demand.

Demand for regional financing solutions remains strong, driven not least by the structural transformation taking place across the region (AI Village, Blockchain Real-World Laboratory, KI-Schmiede, etc.) as well as developments within the higher education landscape (Gateway Factory).

“Kreissparkasse Köln, both directly and through KSK-Wagniskapital GmbH, sees itself in this context as a strategic financing partner and a catalyst for cooperation within one of Germany’s key regional economic areas,” says Oliver Engelbertz.

In Summary

KSK-Wagniskapital GmbH represents a regional, sustainable venture capital approach that deliberately sets itself apart from traditional VC models. Its investment strategy is built on three pillars:

- Thesis: Regional proximity leads to better investment outcomes.
- Criteria: Robust, growth-oriented business models with a clear exit perspective.
- Added Value: Networks, support and long-term partnerships.

This makes KSK-Wagniskapital GmbH less of a “traditional VC” in the Anglo-American sense and more of a hybrid investment partner operating at the intersection of venture capital, SME financing and regional economic development. Together with its principal shareholder, Kreissparkasse Köln, it delivers an integrated financing offering that supports companies throughout their entire lifecycle while creating a lasting positive impact across the wider regional economy.

Interested in learning more?

Get in touch with our contact person for further information and tailored advice:



Adriano Calabrese
Geschäftsführer KSK-Wagniskapital



Oliver Engelbertz
Direktor Zentrale
Firmen- und Immobilienkunden

How We Support DeepTech Startups Such as Membion

Thanks to RWTH Aachen University, Aachen is one of Germany's leading locations for startup spin-offs and startup support. Yet between a good idea and a successful business often lies one decisive challenge: financing. DeepTech and Cleantech startups in particular require substantial initial investment, long development cycles and financing partners who are willing to share technological risks.

How such financing can succeed is demonstrated by the example of startup Membion from the Aachen city region. The company develops innovative membrane filtration technologies for industrial wastewater treatment and has been supported by Sparkasse Aachen throughout its growth journey.

Confidence in the Future

Membion is headquartered in Roetgen, while its production facilities and offices are located in Monschau. The startup develops hollow fibre membranes that clean industrial and municipal wastewater more efficiently while significantly reducing the energy consumption of existing treatment plants. The technology addresses key challenges of the future, including water scarcity, resource efficiency and industrial sustainability.

For Sparkasse Aachen, it was precisely this combination that proved decisive.

"An innovative, sustainable product that is market-ready and has already demonstrated its value in real-world applications. Equally important was the entrepreneurial personality. The founders are passionate about their company, work in a highly cooperative manner and are always completely transparent," summarises Jürgen Frank, Corporate Client Adviser at Sparkasse Aachen.

Financing technology-driven startups differs significantly from financing established SMEs. While banks can often rely on annual financial statements and many years of business performance when assessing established companies, they must place much greater emphasis on future potential when evaluating startups.

"With startups, it is essential to develop a deep understanding of the business model and assess whether it is needed and will be accepted by the market," says Frank Mäutner, Director of Corporate Clients at Sparkasse Aachen. "That requires a great deal of confidence in the future and in the entrepreneurial personality."



When Traditional Bank Financing Is Not Enough

DeepTech and Cleantech startups in particular often face a structural challenge: in their early stages, they are not yet bankable. This means they do not initially meet the requirements for traditional bank financing because they have not yet generated positive cash flows and are therefore often unable to cover interest payments and loan repayments from their own resources during the initial phase.

This is where complementary financing instruments such as the S-UBG Group and the TechVision Fund come into play. S-UBG is a regional investment company of the Sparkassen Finance Group in the western Rhineland and manages the TechVision Fund, which supports technology-driven startups through equity financing, thereby enabling them to build market-ready businesses in the first place. The current TechVision Fund provides around €55 million in initial capital for the startup ecosystem as well as for subsequent financing rounds (Series A/B) of its existing portfolio companies.

“Equity, promotional loans and additional risk-bearing partners provide the financial foundation that founders need,” explains Frank Mäutner.

Sparkasse Aachen works closely with funding institutions such as KfW, NRW.BANK, Bürgschaftsbank, as well as regional innovation networks. This was also the case for Membion, as explained by Dr. Klaus Vossenkaul, founder of Membion:

“Together with Sparkasse Aachen, we structured our growth financing to match our specific needs. Funding programmes and grants were combined in the best possible way. Sparkasse Aachen was able to draw on its network, including its strong connections with NRW.BANK. Our principal bank also found effective ways to bring additional guarantors on board, enabling us to take the next major step,” says Vossenkaul.

“Not only in Membion’s case, this creates a financing mix consisting of equity, promotional loans, public grants, equity investment and traditional bank financing,” explains Corporate Client Adviser Jürgen Frank.

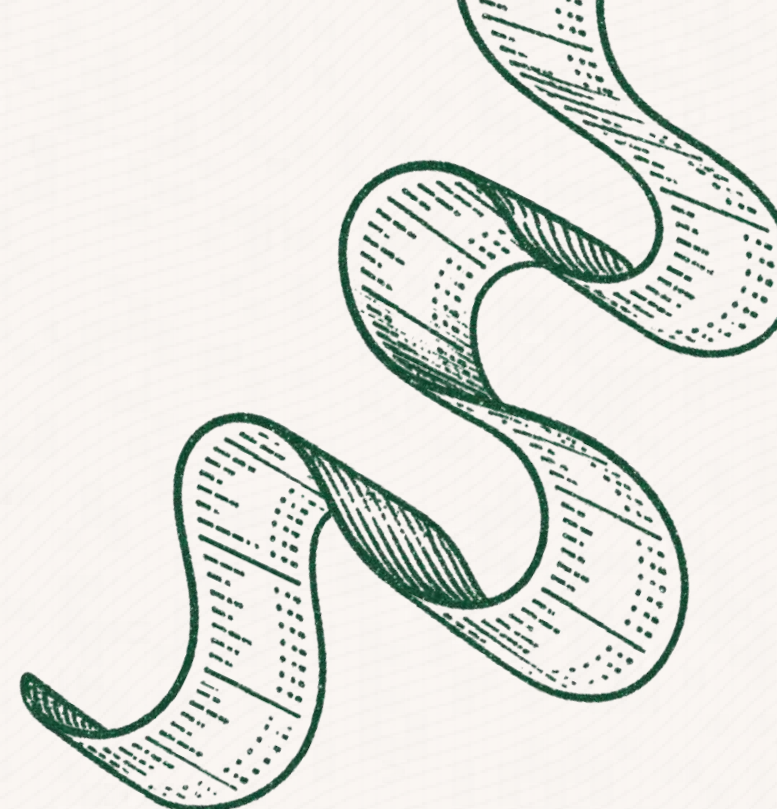
Financing Requirements for Startups

When making financing decisions, Sparkasse Aachen looks beyond financial figures and business plans alone.

“A viable business model, realistic capital requirements, market and competitive analyses, technological relevance, and a convincing founding team all play a role in our financing decisions,” explains Irmgard Breidenich, Credit Advisory Specialist at Sparkasse Aachen.

“The right entrepreneurial personality is another key prerequisite for a successful business,” emphasises Frank Mäutner. “This is why personal conversations play a central role from an early stage. We can therefore recommend that all founders get in touch with Sparkasse Aachen as early as possible—ideally while they are still developing their business concept. Many startups underestimate both the length of the startup phase and the actual amount of capital required,” adds Breidenich.

Depending on the industry, the journey from the initial idea to implementation can take between six and twelve months. Early discussions help establish appropriate financing structures and avoid the need for adjustments at a later stage.



Regional Innovation as a Competitive Advantage

For Sparkasse Aachen, financing startups is about more than simply providing capital. The aim is to ensure that innovation and value creation remain in the region over the long term. Membion is a prime example of the impact this approach can have.

“We are creating new jobs in a region that is undergoing profound structural change, while making productive use of existing commercial properties in Monschau,” says Vossenkaul.

Established companies, universities and industrial partners also benefit from the founders’ expertise. Networks such as Gateway Factory and competitions such as AC² play an important role in this process. Membion won the AC² Innovation Award for the Aachen region in 2025, gaining additional visibility as a result. While such an award does not automatically guarantee financing for Sparkasse Aachen, it does signal technological relevance and market potential.

The Aachen Region Offers Ideal Conditions

Today, the Aachen region benefits from a closely connected innovation ecosystem comprising universities, accelerators, investors, funding institutions and banks. It is through the collaboration of these organisations that technology-driven startups are able to grow internationally without having to leave the region.

For Frank Mäutner and Irmgard Breidenich, the conclusion is clear: “With our support, every founder in Aachen can find the right contact for their individual situation.”

They believe that this network is one of the region’s greatest competitive advantages. For technology-driven startups such as Membion, it is essential. Success in Aachen is not built on an isolated bank loan, but on a collaborative ecosystem that combines equity and debt financing, technological expertise, public funding and strong regional cooperation.

Interested in learning more?

Get in touch with our contact person for further information and tailored advice:

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Gründen, Fördern, Leasen
irmgard.breidenich@sparkasse-aachen.de

Kreissparkasse Düsseldorf

Another Strong Partner

Some partners appear on a logo wall. Others help fill the room. Kreissparkasse Düsseldorf belongs to the second group.

Their support gives us more room to do what matters: bringing ambitious founders together with research, industry and the people who can help turn DeepTech ideas into successful companies.

And sometimes, room means exactly that. The partnership includes event locations where our community can meet, mentoring for founders and financial experts who are ready for the questions that inevitably come with building a business.

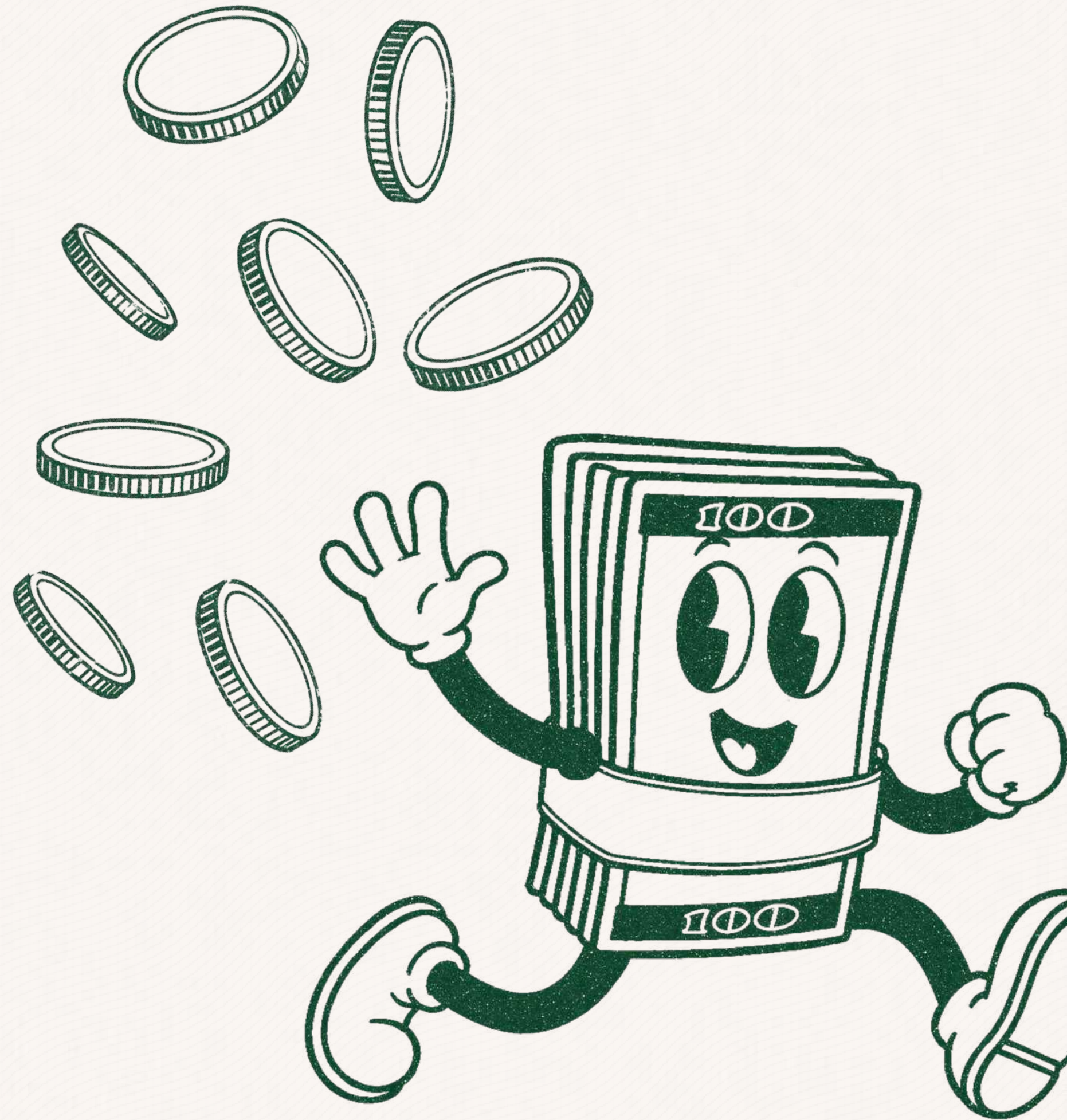
It is a good match. Kreissparkasse Düsseldorf knows the regional economy, its businesses and the people behind them. We connect startups, universities and industry partners across the Rhineland. Together, we can create more opportunities for ideas to leave the lab and find their place in the market.

Turns out, the best partnerships rarely stop at a logo.

Interested in learning more?

Get in touch with our contact person for further information and tailored advice:

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DO YOU KNOW?

alteva

Founder:
Aiko Bernehd & Ida Milow

BIGGEST F*CK UP

“

*Aiko ran two companies
into the ground. We
learnt from it to build
something people want
and to never compromise
on the team.*

”



More about alteva:
alteva.tech

FOUNDED IN

2023

BASED IN



STAGE



SUSTAINABLE
INFRASTRUCTURE



PROGRAMME

Ready to Scale Cohort 1

ELEVATOR PITCH

**Ultralight batteries
based entirely on
European supply chains**

DESCRIBE YOUR TEAM

**The best way
to predict the
future is to
create it.**

FUN FACT

**Everyone in our team
of ten is a scientist!**

READY TO SCALE GOAL

*We want to build our
first battery factory.*

DO YOU KNOW?

Einklang Energy

Founder:
Lucas Jonas (CEO)
Jonathan Schulte (CTO)
Paul Ziche (CCO)
Jose Neri (CFO)



More about Einklang Energy:
einklang.energy

PROGRAMME

Ready to Scale Cohort 2

READY TO SCALE GOAL

Get Series A ready

BIGGEST F*CK UP

“

Focus, focus, focus. We knew that was the key and still let ourselves get pulled into chasing two huge but very different markets in parallel in 2025: on top of Commercial & Industrial, also Utility. Sure, the Utility market had gained massive momentum and we were one of the few players in it. But that's exactly why we should have made a clear call early all in or all out. Instead, we dragged the decision out over six months out of fear of missing out.

”

FOUNDED IN

2025

STAGE

SERIES
A



ELEVATOR PITCH

*We harmonize the
electricity consumption
of SMEs with
renewable energy.*

SUSTAINABLE INFRASTRUCTURE



DESCRIBE YOUR TEAM

**Strom im
Einklang mit
Sonne und
Wind**

BASED IN



”

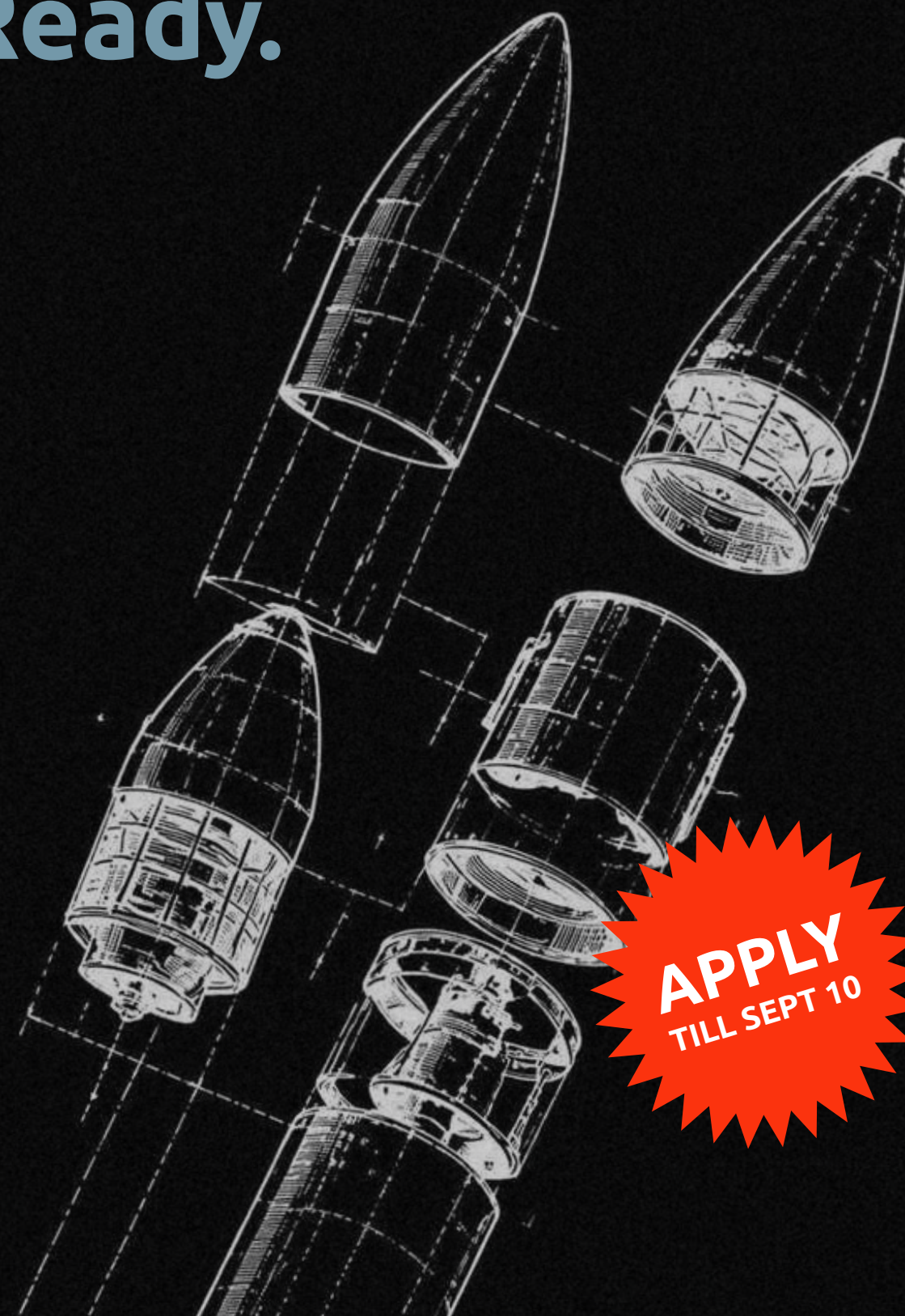
We believe groundbreaking technology deserves equally groundbreaking market validation.

*That's why we created the Gateway **Factory Accelerator** to help **DeepTech** founders become **mission ready**.*

“

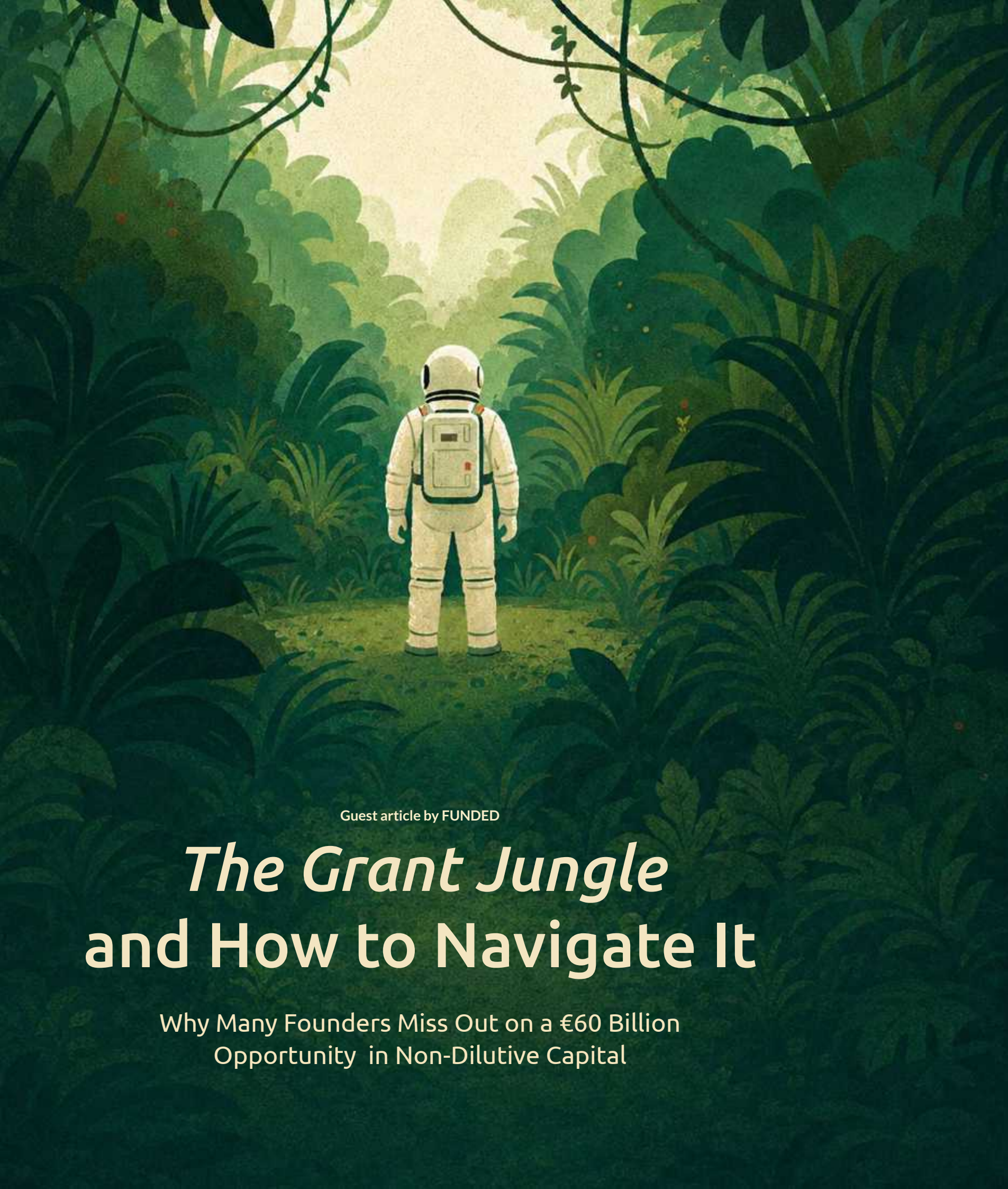
GATEWAY FACTORY ACCELERATOR

Where DeepTech Becomes Mission Ready.



APPLY
TILL SEPT 10





Guest article by FUNDED

The Grant Jungle and How to Navigate It

Why Many Founders Miss Out on a €60 Billion
Opportunity in Non-Dilutive Capital

Germany has €60 billion in available grant funding left untapped¹ which is nine times the €7 billion of venture capital invested into German startups in 2025.² This is non-dilutive capital: no equity given away, no interest paid, 0% cost of capital.

The numbers have grown fast. Available grant volume jumped +88% from €32bn (2023) to €60bn (2025).³ What sounds like an opportunity quickly becomes an obstacle, as the sheer number of programs has left applicants lost in a maze of overlapping options.

Germany's Grant Opportunity

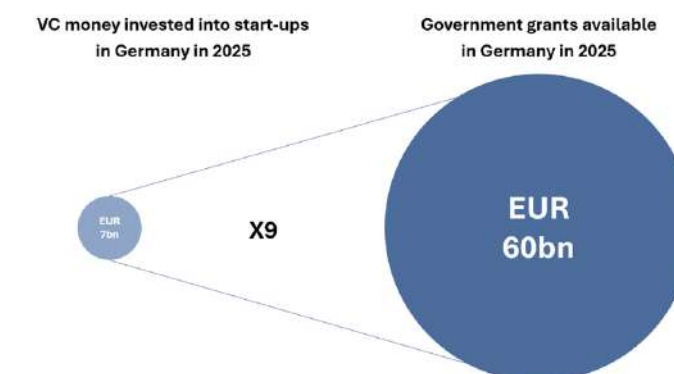


Figure 1: Grants vs. VC: Germany's Hidden Capital Gap

¹ KfW, 2025; Germany Trade & Invest, 2025; Federal Ministry of Finance, 2023

² BVK, 2025; Gilion, 2025; VCGermany, 2025

³ Federal Ministry of Finance, 2023

A landscape so opaque, bureaucratic, and process-heavy that most founders have difficulties successfully accessing it.

This is evident in the growing share of unclaimed funds: in 2023, €7bn of the €32bn available went untouched (22%). By 2025, that figure had nearly tripled to €24bn out of €60bn (40%), money that remains unspent even as the total volume keeps expanding, meaning the lost opportunity grows larger every year.³

NRW's Grant Gap Reality

To quantify grant utilisation among early-stage ventures, we cross-referenced 97 NRW-based ventures at Pre-Seed or Seed stage (founded up to 2023, sourced from Crunchbase) with the EU Funding Database, revealing a striking gap between grants available and grants claimed by these ventures.

Untapped Opportunity

Only 18.6% of the analysed ventures in NRW with Pre-Seed or Seed financing have verifiably received a grant aid element, meaning more than 80% are not tapping their potential. The picture is consistent across stages: 21.4% of the analysed Pre-Seed ventures and 18.1% of the analysed Seed ventures in NRW have received an aid element.

Volume of Grants Received

The 18 ventures, that did receive grants, collected a combined €7.7m in aid elements – an average of approximately €429k per venture. The majority of recipients (15 out of 18) received between €100k and €500k, making grants a highly meaningful capital source at early stages. On average, grants accounted for 16% of total funding raised by these ventures.

Who Is Receiving Grants?

Looking at the composition of aid recipients by venture size, the pattern is clear: 14 out of 18 recipients were “Very Small” ventures, 3 were “Small”, and 1 was “Medium”. This confirms that grants are not just accessible to more established players, they are disproportionately impactful precisely at the earliest, most capital-constrained stages of a startup's life.

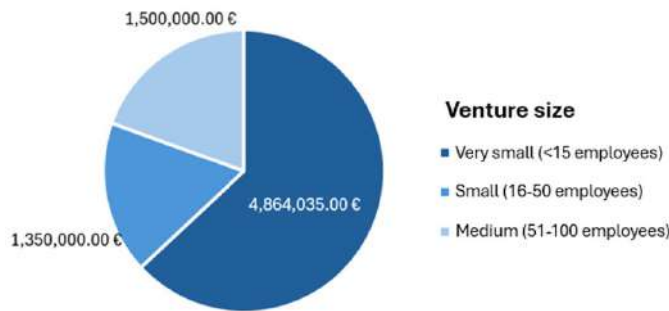


Figure 2: Aid Elements by Venture Size in NRW

Broadening the view to all ventures of NRW, a consistent picture emerges in the EU Funding Database: of 4,031 total aid entries worth €785m, R&D accounts for 959 entries, with Forschungszulage (FZul) dominating at 67% and ZIM (Zentrales Innovationsprogramm Mittelstand) contributing a further 26%. This closely mirrors what we observe in our sample of NRW ventures, where FZul likewise represents the largest share at 88.9% and ZIM follows at 5.6%, reinforcing that these two programs are the most consistently relevant funding instruments for innovative ventures in the region.

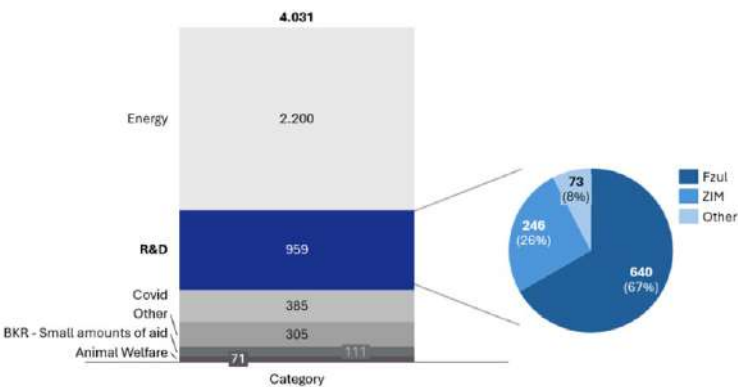


Figure 3: Top Programs in EU Funding Database



Forschungszulage (FZul)

Given FZul's dominance across both datasets, it deserves a closer look. Of all 18 cross-referenced aid recipients, 16 used FZul, accounting for €7.1m of the total €7.7m volume.

How Does FZul Work?

Companies receive a cash reimbursement of up to €4.2m per year, equivalent to 35% of eligible R&D costs. With an approval rate of over 70%, it offers the highest benefit-cost ratio of any program available to early-stage ventures.⁴ Notably, the FZul is paid out via the tax return regardless of company size or profitability and eligible costs can be claimed retroactively for up to four years.

Eligibility follows the Frascati standards for innovation: the work must represent a genuine scientific or technical advancement and be novel, creative, outcome-uncertain, systematic, and reproducible with virtually no thematic restrictions. In practice, many technology-based start- and scale-ups meet these criteria.

How Fast Is the Process?

Based on FUNDED's own application data, the total time from kick-off to final decision is typically 165 days, or roughly 6 months. Broken down, the time from kick-off to submission is 98 days. While the FZul may seem like a straightforward grant program, a successful application requires careful preparation. Once submitted, ventures typically receive a funding decision within 59 days. Follow-up requests from the reviewing body are common yet rarely slow the process down, prolonging the review period by only 4 days to 63 days.

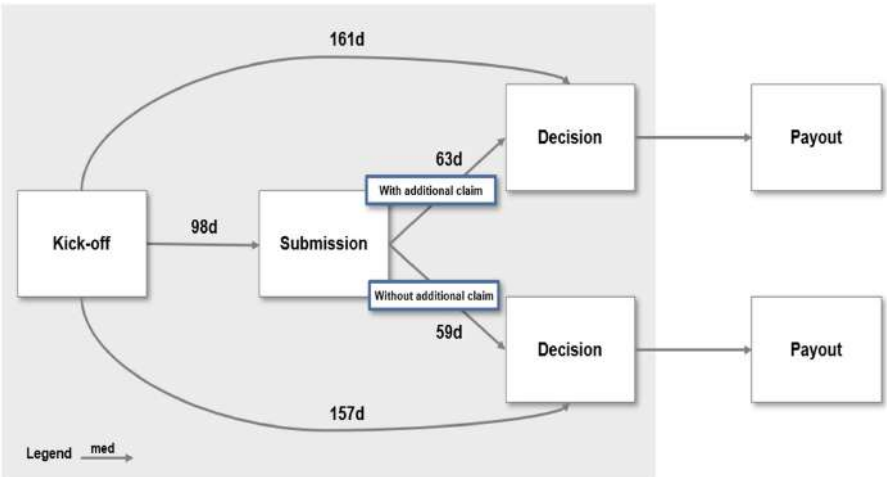
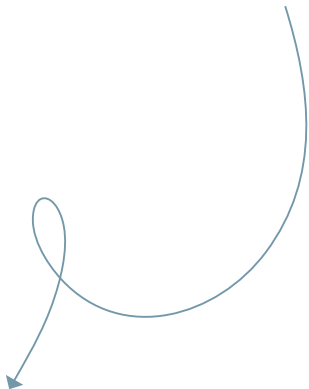


Figure 4: Application Time from Kick-Off to Decision

The Strategic Takeaway

FZul is the logical choice for many ventures: broadly accessible, high approval rates, and very few thematic restrictions. The one aspect to plan around is its retroactive payout structure: FZul is disbursed exclusively via the annual tax return, meaning funds are received once per year rather than on a project or quarterly basis. While eligible costs can be claimed retroactively for up to four years, the actual cash inflow depends on the timing of the tax assessment. This makes cash flow timing worth considering from the outset. For those looking to complement FZul or access project-based funding with quarterly disbursements, ZIM offers a compelling alternative worth exploring.

Zentrales Innovationsprogramm Mittelstand (ZIM)

ZIM is one of Germany's most established funding programs for innovative SMEs, having supported over 50,000 projects since its launch in 2008.⁵ A single ZIM project ("Einzelvorhaben") can cover eligible costs of up to €915k - combining a feasibility study, an R&D project, and market launch services. Up to two projects can run in parallel enabling ventures to cover up to €1.8m per year. ZIM refunds eligible cost of up to €448k or €896k in the case of two parallel project. The grant is paid in quarterly tranches during the project period. Unlike FZul, ventures must submit applications before a project starts. With its quarterly

pay-out logic, an approval rate of 62%⁵ and virtually no thematic restrictions, it complements FZul well and can even run in parallel to FZul or other grant projects. Processing time ranges between 3-5 months.

Eligibility follows the same Frascati-based R&D criteria as FZul, covering novelty, risk, and orderliness, but ZIM adds an economic viability requirement: the venture must retain sufficient personnel capacity and financial means to run day-to-day operations alongside the project, and demonstrate the positive impact of the funding on the project outcome. Documentation is therefore just as critical as with FZul.

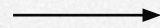
Documentation

Proper documentation, however, is easier said than done. It must begin early, and the process demands consistency that most early-stage teams struggle to maintain. FUNDED also helps founders closing that gap by identifying eligible programs, setting up the right documentation infrastructure, and managing the submission process from start to finish.

⁴ German Bundestag, Parliamentary Paper 19/31365, 2021
⁵ Federal Ministry for Economic Affairs and Energy

DO YOU KNOW?

Maesn



Founder:
Dr. Themo Voswinckel
Marius Pohle
Lennart Svensson

ELEVATOR PITCH

Every SaaS company eventually hits the same wall: customers want accounting and ERP integrations (DATEV, SAP, Sage, Dynamics) — but building and maintaining them is a nightmare. We're the one Unified API that handles all of it, so SaaS teams ship in days instead of quarters.

FUN FACT

We stress-tested Lennart's social fit with a full day of Karneval. He passed.

READY TO SCALE GOAL

Scale our go-to-market — expand GTM traction into continuous growth.

FOUNDED IN

2022



More about Maesn:
maesn.com

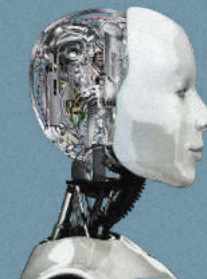
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PROGRAMME

Ready to Scale Cohort 2

FUTURE COMPUTING & ENGINEERING



STAGE



BIGGEST F*CK UP

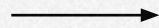
“

We once convinced ourselves we needed our own office — and ended up in a tiny box next to the Autobahn where you couldn't even open the window. A few months later we crawled back to co-working. Lesson: don't solve problems you don't have yet. Build the company, not the headquarters.

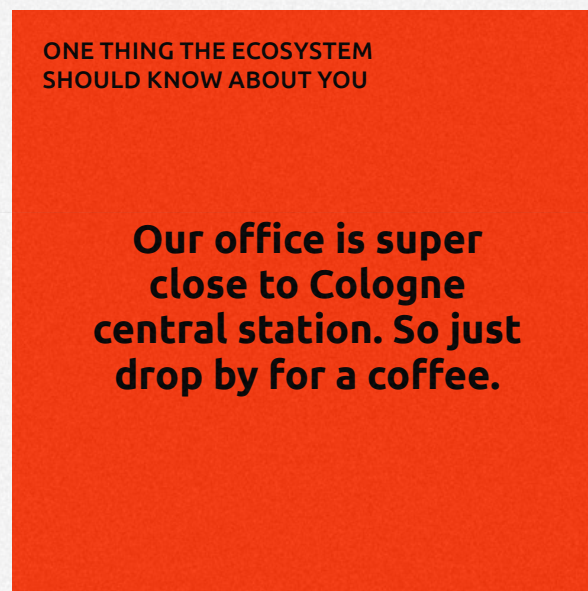
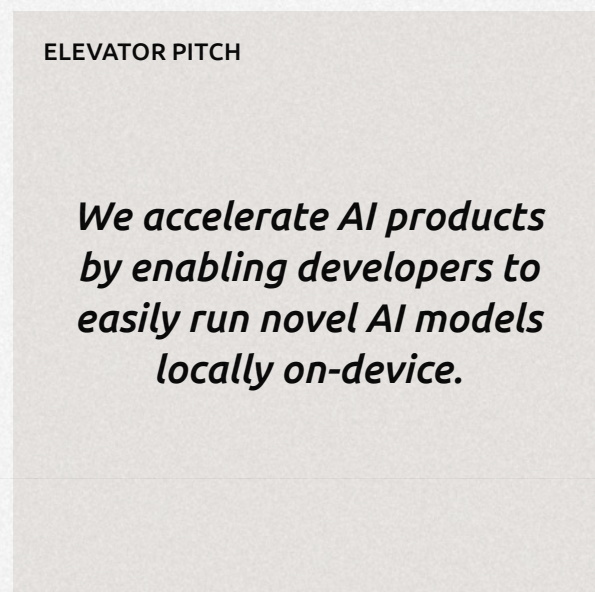
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DO YOU KNOW?

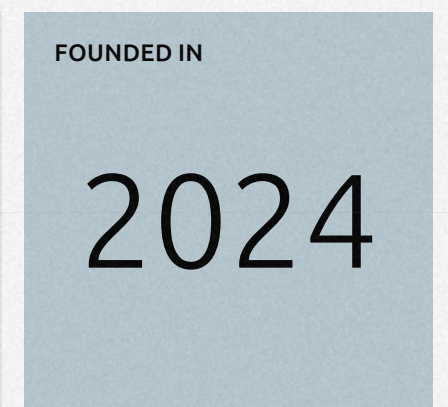
Roofline



Founder:
Moritz Joseph
Max Bartel
Thomas Zimmermann



More about Roofline:
roofline.ai





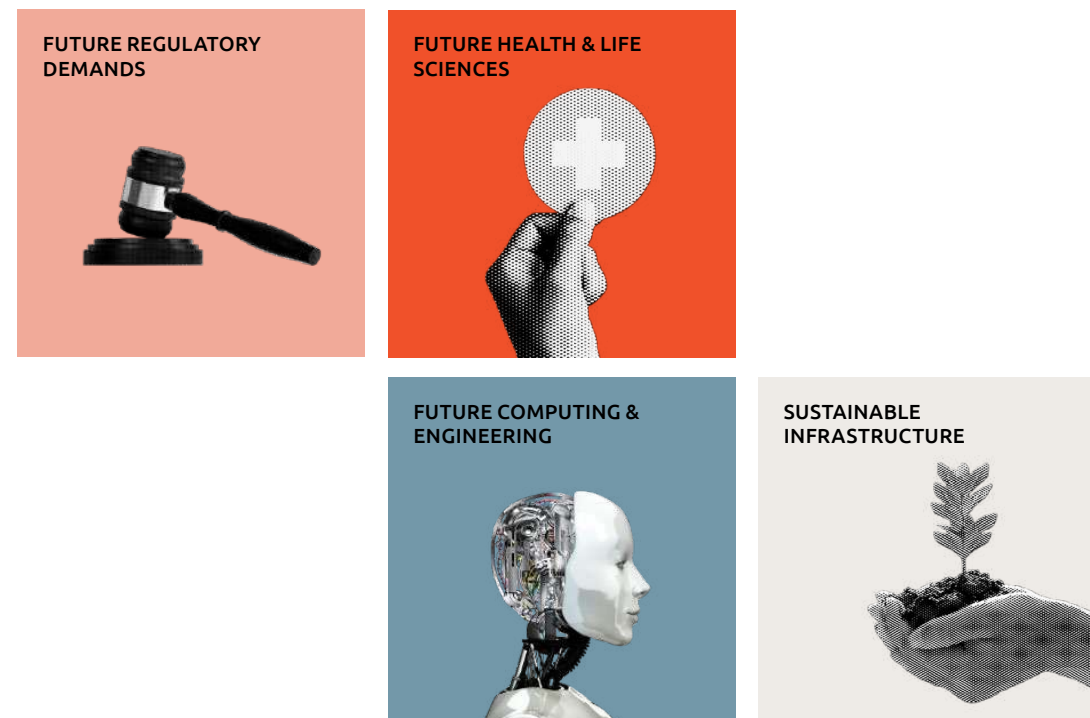
Meet our second cohort!

Building on the success of our first batch, Ready to Scale welcomes 15 new DeepTech startups. For the first time, our cohort brings together startups from all four Gateway Factory verticals, showcasing the full breadth of innovation across our ecosystem. Let's dive in.

Gateway Factory Ready to Scale Batch #02

Turning breakthrough technologies into scalable businesses takes *more than great ideas*.

Ready to Scale supports startup teams as they prepare for their next stage of growth by connecting them with experienced founders, investors and industry experts. This second cohort brings together 15 startups spanning all four Gateway Factory verticals, reflecting the diversity of technologies driving innovation across our ecosystem.



The data used was provided by the deeptech startups themselves in August 2026.

Auxsys SEED

Auxsys develops powered full-body exoskeletons and robotic systems for physically demanding work. The company targets B2G and commercial markets with weight-offloading solutions sold through direct sales and distribution partnerships.

Biothrust SEED

BioThrust develops a next-generation bioreactor platform for biopharma manufacturing based on patented membrane stirrer technology. The platform enables bubble-free aeration and can significantly reduce biopharma production costs.

BIOWEG SERIES A

BIOWEG replaces petroleum-based chemicals with bio-based, biodegradable B2B ingredients made from food industry waste. Its products include alternatives to solid and liquid microplastics as well as biodegradable agricultural coatings.

Complydo SEED / SERIES A

ComplyDo uses AI to understand regulatory requirement files and map them to internal documentation. Its operating system helps enterprises, auditors and consultancies manage complex regulations and standards without hardcoded rules.

ecoro SEED

ecoro provides an automated, driverless pallet transport system for industrial sites, logistics campuses and airports. Its solution combines autonomous shuttles, loading infrastructure and routing software to replace conventional trucks and manual handling.

■ Future Regulatory Demands
 ■ Future Health & Life Sciences
 ■ Future Computing & Engineering
 ■ Sustainable Infrastructure

■ **Einklang** SERIES A

Einklang is an Energy-as-a-Service provider for German SMEs, offering integrated electricity solutions with smart control, battery storage and flexible tariffs. Customers can reduce electricity costs and increase renewable energy autonomy without upfront investment.

■ **Maesn** SEED BZW BOOTSTRAP

Maesn provides a unified API that lets software teams integrate once and connect to multiple ERP and accounting systems. Its volume-based SaaS model reduces engineering effort and accelerates time-to-market.

■ **Mycolever** SEED / SERIES A

Mycolever develops biosolutions for personal and home care using fungal fermentation. Its biocompounds aim to replace petrochemical surfactants and lipids with high-performance, more sustainable alternatives.

■ **Nenna.AI** SEED / SERIES A

NENNA.AI is a privacy-first AI assistant for public sector organizations and regulated enterprises. The platform enables GDPR-compliant generative AI use within existing IT infrastructure with European hosting and enterprise-grade security.

■ **Numaferm** SEED

Numaferm offers proprietary biotech process development services and protease technology for precise protein and peptide production. The company is building an end-to-end platform supported by AI-powered peptide design.

■ **OSPHIM** SERIES A

OSPHIM develops software and AI solutions for the plastics manufacturing industry. The company helps manufacturers improve production processes and decision-making through digital tools.

■ **re.solution** SEED

re.solution develops an electrochemical recycling process for polyester-containing textiles. The process recovers polyester building blocks as substitutes for fossil alternatives while avoiding significant chemical waste.

■ **Solid Air Dynamics** SEED

Solid Air Dynamics develops biobased insulation textiles made from 100% aerogel fibers. The RWTH Aachen University spin-off aims to make recyclable, environmentally friendly high-performance insulation affordable at scale.

■ **SUMM AI** SEED

SUMM AI builds AI solutions for the public sector to make services more empathetic and efficient. Its B2G SaaS process management software helps administrations document, optimize and digitize workflows at scale.

■ **vGreens** SEED

vGreens uses SWIR sensing and proprietary AI to translate plant biology into real-time data. Its SaaS platform with hardware integration predicts yields and optimizes climate and light for higher productivity and resource efficiency.

Upcoming Event Highlights

Join our events to connect with the people driving DeepTech innovation. Meet founders, researchers, investors and industry partners, exchange ideas, share experiences and discover what comes next.



Coming Soon

Name	Date	Location	Website
Startup Week Düsseldorf	07.09. – 11.09.2026	Düsseldorf	https://startupweek-dus.com/de/
 PULSE Workshop #16 + Networking-Dinner	09.09.2026	Düsseldorf, Hybrid	https://startupweek-dus.com/de/event/inside-out-winning-your-next-round/
Future Tech Fest 2026	10.09.2026	Düsseldorf	https://www.futuretechfest.de/
 Bio-Expert Talks #1 - Inside the Mind of VCs	15.09.2026	Bio Campus, Hybrid, Köln	https://www.gateway-factory.de/bio-expert-talks
C3 Wettbewerb	17.09.2026	InnoDom Cologne	https://gateway-unikoeln.de/events/finale-c326
IdeaLab	25.09. – 26.09.2026	Vallendar	https://www.idealab.io/
 Legal Hackathon Cologne	25.09. – 27.09.2026	Hürth	https://legalhackathon.de/
Bits & Pretzels	28.09. – 30.09.2026	München	https://www.bitsandpretzels.com/
 Kick-Off Ready2Scale Batch 3 + Accelerator	06.10.2026	InnoDom	tbd / https://www.gateway-factory.de/events
NRW Innovationskongress 2026	08.10.2026	Düsseldorf	https://innovation.nrw/innovationskongress/programm-2026
Impact Day TH	08.10.2026	Köln	https://www.th-koeln.de/hochschule/gateway-impact-day_137576.php
 Bio-Expert Talks #2 - The Funding & Grants Playbook	13.10.2026	Bio Campus, Hybrid, Köln	https://www.gateway-factory.de/bio-expert-talks

 DTA Manufacturing 2026	13.10. – 14.10.2026	Aachen, RWTH Aachen	https://www.deeptechalliance.org/manufacturing-2026/
 DTA Utility 2026	14.10. – 15.10.2026	Aachen, RWTH Aachen	https://www.deeptechalliance.org/utility-2026/
Female Founders Night	14.10.2026	InnoDom	https://gateway-unikoeln.de/events/female_founders_night
 PULSE Workshop #17	14.10.2026	Virtuell	https://www.gateway-factory.de/events
 Logistik Innovation Workshop	16.10.2026	InnoDom	https://www.gateway-factory.de/events
 Bio-Expert Talks #3 - What It Takes to Turn Scientific Innovation into Medicines	03.11.2026	Bio Campus, Hybrid, Köln	https://www.gateway-factory.de/bio-expert-talks
 Graduation Night 1. Batch Ready to Scale	05.11.2026	Düsseldorf	https://www.gateway-factory.de/events
BIO EUROPE	09.11. – 11.11.2026	Köln	https://informaconnect.com/bioeurope/
 PULSE Workshop #18	11.11.2026	Virtuell	https://www.gateway-factory.de/events
 Bio-Expert Talks #4 - Navigating the Regulatory Jungle	01.12.2026	Bio Campus, Hybrid, Köln	https://www.gateway-factory.de/bio-expert-talks
 PULSE Workshop #19	09.12.2026	Virtuell	https://www.gateway-factory.de/events



Build with us.

Whether you are a founder, investor, corporate partner or talent, we bring together the people, ideas and technologies shaping the future of DeepTech. We'd love to connect.

Thank you to our partners and enablers

Collaboration is at the heart of everything we do. We are deeply grateful to our partners, enablers, investors and advisors whose expertise, trust and commitment strengthen our ecosystem and help DeepTech startups and scale-ups grow.

A special thank you to our banking partners for their valuable guest articles, to Thomas Jarzombek for the insightful interview, and to all the founders and experts featured in this issue. Your ideas, expertise and commitment make this magazine possible.



There's a place for you.

- Founders, Startups and Scale-ups**
 Ready to take your business to the next stage? We connect ambitious DeepTech startups and scale-ups with the networks, industrial partners and capital needed to support sustainable growth.
- Investors**
 Discover promising DeepTech startups and scale-ups and connect with the teams shaping tomorrow's industries.
- Industry partners**
 Partner with us to explore emerging technologies, collaborate with innovative DeepTech companies and create strategic partnerships that drive real innovation.
- Talents**
 Join one of Europe's most dynamic DeepTech ecosystems and help shape the technologies of tomorrow.

Get in touch:

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 Instagram: [@GatewayFactory](https://www.instagram.com/GatewayFactory)

Together, let's build
DeepTech Champions
 — made in Europe.

Thank you so much for your support
 and being a part of the Gateway Factory family!



Gefördert durch:



aufgrund eines Beschlusses
 des Deutschen Bundestages



DEEPTech
CHAMPIONS
MADE IN
EUROPE



IMPRINT

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Leah Smyra & Benjamin Kriener

Fotonachweise

David Jaeger | Gateway Factory | Helmut Hanner | Manor Lux
Oliver Pohl | Paul Caruso | Ralph Sondermann | Tobias Koch

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