

## Innovation Agenda 2030

WORLD CLASS MADE
IN GERMANY



## **Table of Contents**

Preamble	1
Executive Summary	2
Intro	6
Ohapter 1: Talents	7
Chapter 2: Financing	13
Chapter 3: Role of the State	20
Chapter 4: DeepTech	30
Chapter 5: ClimateTech	37
<ul><li>Chapter 6: Diversity</li></ul>	41
Acknowledgements	46





## **Preamble**

Recession, climate catastrophe, wars: These are challenging times – both geopolitically and economically. We all know that. And it will stay that way because the tasks ahead of us are diverse and sometimes overwhelming. While some may shrink in the face of complexity and retreat into the minutiae of daily politics, we at the Startup Association prefer to focus on the big picture. We are eager to enable big solutions for big problems!

This is why we have created a roadmap for innovation and future prosperity: our Innovation Agenda 2030. It outlines what we have, what is still missing, and above all, what actions we need by 2030 so that no one can say, "Things were better in the past!"

While others may doubt Germany's future viability, we forge ahead. On the following pages, we provide answers – and a clear plan that focuses on the essentials. This country has all the necessary ingredients to remain competitive and successful in the future. We have a flourishing startup ecosystem with plenty of untapped growth potential. We have world-class research, outstanding talent, a strong industrial base, and plenty of private capital. With the Innovation Agenda 2030, we aim to bring these ingredients together into a recipe for the future that can be implemented. It deserves political priority.

This paper document contains the distilled knowledge, expertise, and experience from our membership and extensive network. We don't always need to reinvent the wheel but rather build on existing recommendations that have often been neglected. If we prioritize and decisively implement these proposals, nothing will stand in the way of a World Class Made in Germany. The best part is: everything in this document benefits not just startups and scaleups in Germany but makes life better for everyone in this country!

With our Innovation Agenda 2030, we answer questions such as:

- How can we harness private and institutional capital for innovation and growth?
- In which key technologies can we lead globally, and what conditions must we create to strengthen DeepTech startups and help them grow?
- How can we get more out of the cutting-edge research at our universities and bring it to practice?
- What must we do to ensure that foreign professionals, who are crucial for our economy, can immigrate to Germany more quickly and stay longer?
- And: How can we ensure that the state becomes so efficient that it sets the pace for Germany as a hub of innovation?

This paper is not a knowledge collection of what we should do. No, this Innovation Agenda is a practical guide to action. It's a playbook for the coming years with concrete solutions that interlock. Our focus is on federal politics, knowing that many issues must align with Europe, the states, and municipalities.

We need a new awareness in politics and society, a spirit of optimism and action, as already lived in the startup world. Sure, fear of failure can be paralyzing... but honestly: anything is better than doing nothing or just muddling through, right? Our position is simple: we show how it can work. And we advocate for decisive implementation.

In short: the Innovation Agenda is the guide to the new **World Class Made in Germany! Let's get started!** 

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## **Executive Summary**



#### We Spray It on Every Wall: This Country Needs More Talent!

The acute **shortage of skilled workers** is also a **major growth brake** for startups and scaleups. Our innovative growth companies are competing globally for top talent: when they can't find what they need in Germany or the EU, they rely on highly qualified employees from third countries. However, recruitment is currently hampered by the lack of digitization in visa processes. The solutions exist; they just need to be implemented consistently. Our goal for 2030 is for 100 percent of visa applications and processes to be handled digitally via secure online portals.

We also need clear responsibilities, bundled competencies, and explicit political accountability for skilled immigration. Our proposal: a new **Federal Ministry of Migration** that consolidates the currently fragmented responsibilities within the federal government, from recruitment to arrival and integration in Germany. This would underline the urgency of the issue and avoid friction between different departments.

Additionally, the process for issuing residence permits must be made more efficient: currently, we have a patchwork of more than 500 immigration offices across Germany. At the very least, decisions should be standardized and responsibilities centralized at the state level. Ideally, each state would have a central immigration office specifically for international professionals. This would pool expertise and accelerate processes. And if we introduce English as the second official language, we would signal to the world that we are serious about having an active welcoming culture.

Another bottleneck is the **recognition of qualifications**: we advocate for involving employers more in this process to **make it faster and easier**. And who is more qualified to assess the need and the qualification than the employer?

Furthermore, the rules for **employee participation** must be developed further, as they are a key tool for startups and scaleups to attract and retain talent, especially in international competition. **Temporary reductions in income tax** for new foreign professionals provide additional incentives.



#### Money, Money, Money: How Smart Financing Can Strengthen the Startup Ecosystem

The cornerstone of a strong startup ecosystem is the availability of sufficient financing options for all development stages. Currently, we face an annual financing gap of around 30 billion euros. To close this gap, we aim to **triple venture capital investments in Germany by 2030**, bringing them to **1 percent of the GDP**. To achieve this, we must primarily mobilize private capital, especially from institutional investors, based on **market economy principles**. The Federal Government's WIN initiative plays a key role in this effort.

INVEST, HTGF, and SPRIND – there are already many proven instruments for financing the early stages of startups. These need to be further developed in a targeted manner. In the growth phase, state initiatives like the "Zukunftsfonds" (Future Fund) remain central. Additionally, the upcoming Growth Fund II must mobilize fresh capital for the venture capital asset class. Furthermore, the creation of fund-of-funds structures should be facilitated, for instance, by eliminating tax risks. Legal measures should also be taken to establish tax transparency.

To make venture capital more accessible to a broader range of investors, we need **greater transparency**. We can achieve this by publishing and strategically communicating the data from the European Investment Fund (EIF). Transparency fosters understanding and trust, making the venture capital asset class more attractive for private investors as well.

A permanently strong startup ecosystem requires functioning exit channels. Time and again, we see value losses due to IPOs of German companies outside of Europe. We can avoid these by strengthening the demand side and ensuring a deep and liquid capital market. The Capital Markets Union in the EU is critical here and must be advanced. This includes establishing a unified European supervisory authority, as well as easing capital increases for already listed companies. We also need to focus on fewer trading venues within the EU.

In addition to IPOs, trade sales represent a second exit channel. To enable **more sales of startups** and scaleups to corporations, tax incentives for corporates and medium-sized companies should be created. Further tightening of foreign trade law should be avoided. Protecting domestic technology must not become a barrier to exits or an own goal in innovation policy.



#### The State Becomes the Pacemaker for Innovation Made in Germany

To foster innovation, we must rethink the role of the state: by 2030, it should become the largest client and a central pillar of innovation promotion. This is particularly important in its procurement practices: public tenders will then become a driver of innovation and economic progress.

At least 5 percent of public contracts should be awarded to startups. Both sides will benefit from this – as will the citizens. A crucial step in this direction is the nationwide standardization and simplification of procurement law, and above all, its consistent, startup-friendly application.

A **level playing field** ensures fair competition, especially in digital markets. Equally important is the **consistent application of antitrust law**, as well as the **Digital Markets Act (DMA)** and the **Digital Services Act (DSA)**. This is especially critical in dynamic fields like artificial intelligence (AI). In this context, access to and the availability of private and public data must also be significantly facilitated.

For the state to become the pacemaker for our innovation hub, a **cultural shift within the administration** is required. This is a pressing task that we should address through structural reforms, up- and reskilling of existing personnel, and the recruitment of new talent from the private sector. We are convinced: expertise from the private sector will also enrich public authorities and government administration.

All these points can only function with **modern infrastructure and basic IT services**, as they are the building blocks of digital services. This includes widely accepted digital identities and legally binding digital signatures, which are indispensable for digital transactions like M&A deals and contractual matters.

Simpler, digital administrative processes are also a must. For example, a nationwide, unified digital "one-stop shop" for company formations would reduce bureaucratic hurdles and make "Startup in a Day" possible. Notarial certifications should be re-evaluated. With a Chief Digital Officer in the Federal Chancellery, competencies could be consolidated and pursued with a unified top-down approach. Startups could then invest the saved time, patience, and energy into developing innovative products and services instead. It's a win-win.



## The Future Lies in DeepTech

We aim to make our country a global leader in DeepTech by 2030. This sector is capital– and research–intensive, but it will define the future of Germany as an innovation hub. The good news: we are well–positioned for success. However, to unlock our potential, we must update our DeepTech ecosystem in the areas of **financing**, market entry, transfer, and regulation.

The **financing options** for DeepTech startups need to be expanded, and access should be simplified, for example by **increasing the volume of the "Deep Tech & Climate Fund" (DTCF)**. A greater use of performance-based funding programs will also create new incentives for DeepTech startups. Existing programs can also be made more transparent and easier to navigate. **Flexibility at SPRIND should be enhanced** to enable quicker action. Additionally, the **use of tax-based research allowances** should be promoted through better communication – just to name a few important measures...

A startup-friendly state procurement practice is another key factor for DeepTech startups' market entry. It is also crucial to strengthen the collaboration between German SMEs and DeepTech startups. Such fruitful partnerships can be systematically supported through cooperation vouchers and standardization efforts. Speaking of collaboration: the strict separation between military and civilian research should be eliminated.

Focusing on research: a central lever for **tech-nology transfer** is the stronger prioritization of spin-offs from universities and research institutes. We need **better incentive systems**, such as promoting more entrepreneurial thinking at academic chairs. Moreover, IP transfer should be as standardized and accelerated as possible. We advocate that universities commit to allocating at least **1 percent of their total budgets**—including third-party funding—to spin-offs. It is also crucial to push forward the already initiated "Startup Factories" lighthouse competition with determination.

Additionally, we need **agile regulations**: a **new** "Advisory Council" should institutionalize the exchange between the DeepTech ecosystem and the federal government, as well as relevant regulatory authorities. Another measure is to swiftly enable **real-world laboratories** (aka "living labs"). The necessary experimental clauses should be legally anchored for this purpose.



#### A Good Climate for ClimateTech

Smart solutions for global problems: startups are the driving force behind the necessary decarbonization of our economy. Currently, around 30 percent of startups in Germany are already addressing the climate crisis, yet only about one-fifth of available venture capital is invested in German ClimateTech startups.¹ To meet our climate targets, these investments need to increase by at least 590 percent. If we simplify approval processes at a structural level and advance the construction of FOAK ("First of a Kind") facilities with a smart financing mix, we can support the necessary scaling of climate technologies.

By 2030, we aim to double the number of Climate Unicorns in Germany, establish a leading venture capital provider for ClimateTech from Germany, and have one of the world's top three universities in the field of climate innovation.

We measure the "Climate Performance Potential" of innovations using a cross-sector criteria catalog. This also includes a bonus program for the industrial application of climate innovations. Our goal: by 2030, every company supported in this program should be a startup.

To scale climate technologies in our country, we need close cooperation between politics, research, business, and startups. This should be organized through results-oriented task forces. In this way, we systematically pursue the aforementioned goals to achieve the decarbonization of the economy by 2045.

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## Better Performance through More Diversity

Germany's startup ecosystem represents diversity and openness. Talents from all over the world have found their place here. Nevertheless, there is **still significant room for improvement** when it comes to **diversity** in the German startup landscape: in 2024, female founders remain significantly underrepresented. The same applies to migrant founders and founders from non-academic backgrounds. There is enormous potential here that we want to tap into.

By 2030, the proportion of female founders should be increased to 30 percent. The following measures will help: the current regulations regarding workload prediction and working hours for the self-employed during the parental allowance period must be adjusted, as they do not reflect the working realities of the self-employed. There is also a need for higher tax deductions for childcare costs. And let's not even get started on the 430,000 missing daycare places...

Beyond legal measures, we also need to adjust structural levers: **better access to capital** is crucial – both **for female founders and migrant founders**. Streamlined reporting from state VC funds could emphasize the importance of this issue, increase transparency, and highlight both the needs and the progress achieved.

Laws and structures aside, we see a third approach to making the startup ecosystem more diverse and, therefore, more successful: education. **Entrepreneurship** must be established **as a genuine career option** in educational institutions. The earlier students come into contact with it, the better.

Success stories and relatable role models help the next generation get involved with this topic at an early stage. Networks play a crucial role here: they offer not only the exchange of experiences but also a "home" within the startup ecosystem. Therefore, we advocate for **networks to be made more visible** and supported if necessary – recognizing that network-building should primarily come from within the startup ecosystem itself.





## Intro

The German government's first Startup Strategy from 2022 brought together key issues for start-ups and scaleups in a compact format for the first time. Many of the strategy's initiatives have already been implemented. That's good.

But the world keeps turning, and other countries are speeding ahead when it comes to creating favorable conditions for startups and scaleups. So we must not rest on our achievements.

On the contrary: the Startup Strategy must be updated and further developed in the next legislative period. We need a Startup Strategy 2.0! Work on this should begin within the first 100 days of the new government taking office. We call for prioritizing its content – and accelerating its implementation.

Not all the challenges that startups and scaleups face can be comprehensively addressed in a single document. This applies both to our Innovation Agenda and to the proposed Startup Strategy 2.0.

And one thing is clear: beyond concrete measures, we need a fundamental shift in mindset across society. We won't achieve "World Class Made in Germany" just by checking off a list of tasks. We need an innovation-oriented attitude that sees opportunities, not dangers, in new technologies. Entrepreneurial thinking must become part of our DNA. This is both a task and a goal – for us as the Startup Association and for society as a whole.

That said, the Innovation Agenda is not just a future agenda for the next legislative period. There's plenty of work to be done now and in the coming months. After all, the current legislative period still has a year to go. For this time, we have identified Quick Wins – measures that can realistically be implemented before the federal elections, as legislative processes have already begun or are about to start.

In short, there is no time to waste and no excuses: the implementation of this Innovation Agenda can and should begin immediately.

# **On Talents**



## **Talents**

In Germany, there is a shortage of skilled workers – this has been known for years. Equally well known is the fact that this problem will intensify significantly by 2030 as the baby boomer generation retires. Even today, the lack of talent affects almost all economic sectors: many job vacancies remain unfilled, production and services are sometimes severely impacted, and economic growth is stalling. According to a study by the IAB, to maintain the level of prosperity in our aging society, Germany would need a net immigration of 400,000 people per year.<sup>2</sup>

What is often overlooked in this debate is that the shortage of skilled workers plays a particularly crucial role in the startup sector. As innovative growth companies, startups are building something new and need the best minds to do so. On their path to becoming internationally operating scaleups, they compete globally with leading tech companies for talent. This leads to high costs and often results in important positions being unfilled or filled too slowly.

Among German startups and scaleups with at least 25 employees, 70 percent have had to forgo growth due to a lack of skilled workers.<sup>3</sup> In addition to leveraging domestic potential, hiring international talent is a key countermeasure. However, 81 percent of the companies surveyed complain about the high additional effort required when recruiting outside the EU.

To attract the best talent and establish Germany as one of the most attractive work destinations worldwide, a consistent implementation of the skilled immigration reform is needed. Contrary to popular belief, our country has enormous potential: according to the OECD study "Talent Attractiveness," Germany ranks high across different dimensions. In terms of attractiveness for inter-

national students, Germany even ranks second, right behind the USA<sup>4</sup>. In the latest "Decoding Global Talent" study, Germany ranks fifth – directly behind the English–speaking countries of Australia, Canada, the USA, and the UK.<sup>5</sup> While Germany performs particularly well in terms of job opportunities and quality of life, it falls significantly short when it comes to digitization and the recognition of qualifications.

The skilled immigration process is one of the key levers to address the outlined challenges both broadly and in depth. For startups and scaleups to continue creating jobs and contributing to future prosperity, we need to make this process in Germany more uniform, faster, and digital.

## Recruitment and Hiring: Inspiring Talent Together for Germany

Skilled professionals – whether with completed vocational training or a university degree – are in high demand internationally. They can choose to go to Canada, France, the USA, or the UK. Or they can choose to come to us. In this competition for talent, we must present ourselves as an attractive immigration destination: with a high standard of living, outstanding job prospects, and a genuine welcoming culture.

As already mentioned, Germany has a lot to offer in terms of living standards and job prospects and ranks among the top internationally. We need to showcase this more effectively. An (existing) online platform from the Federal Ministry for Economic Affairs and Energy is not enough to convince people of Germany as an immigration destination. Ministries and companies need to be more proactive in recruiting skilled professionals on the international job market. Startups and

scaleups can and want to play a key role in this: with their future-oriented jobs and international outlook, they are particularly well-positioned to attract young talent from all over the world to Germany.

## Digitalizing and Accelerating Visa Processes

The Skilled Immigration Act ("Fachkräfteeinwanderungsgesetz") of 2023 established a modern legal framework for labor migration – even by international standards. A key part of implementing these new legal provisions is the digitization of visa processes. Therefore, we welcome the efforts of the Federal Foreign Office to digitalize and accelerate these processes through its own visa portal.

This path must be consistently pursued in the next legislative period. The focus should be on the complete digitization of all application types and the integration of all nearly 170 foreign missions. Only through digitalization can visa processes for international professionals be accelerated – something that is important or even very important for nearly 90 percent of German companies. Similarly, sought-after professionals share this view: when asked about the areas where they need more support, the visa process ranks first alongside finding accommodation, with 77 percent.

We strongly welcome the Federal Foreign Office's efforts to implement Al-supported visa procedures in the future, as we see great potential for faster processing of applications. Naturally, this digitization project must be taken into account in the budget. The goal should be that by 2030, 100 percent of visa applications and procedures are submitted and processed digitally via the central portal of the Federal Foreign Office.

## Centralizing the Issuance of Residence Permits

The issuance of a visa is only the first step in arriving in Germany. Skilled professionals must then apply for a residence permit at their local immigration office. These offices fall under the responsibility of the federal states. Nationwide, there are more than 500 immigration offices, resulting in over 500 independent administrations that sometimes follow different state-specific guidelines. This leads to regionally varying decisions on identical matters, which is incomprehensible for those going through the process. At the very least, we urgently need standardized decisions and centralized responsibilities at the state level. Even better would be central immigration authorities for international professionals in each federal state. These offices would pool expertise and, through specialization, shorten processing times. They should be located in economically strong regions - where skilled professionals are most likely to settle.

There are already successful examples of such an approach: The Business Immigration Service (BIS) in Berlin has been the central contact point for Berlin-based companies and their international professionals for more than 10 years. Once registered, companies can apply for a residence permit for their international professional through this service. Necessary documents are uploaded online, and the applications are processed by specialized officials. This has significantly accelerated the process. The foundation of the BIS is an administrative agreement by the state of Berlin. The collaboration between the immigration office, the Chamber of Commerce and Industry (IHK), and regional economic development within the BIS also contributes to its success. The division of administrative tasks and the promotion of services practiced here serves as a model for other federal states.



The pooling of resources should also be supported by extensive digitization of administrative processes (see also the chapter "Role of the State"): For example, using the interfaces provided by the visa portal of the Federal Foreign Office would already make many documents digitally available. This eliminates the need to resubmit essential documents, thereby accelerating further processes. The use of the Central Register of Foreign Nationals as a central document platform could also be an option for this purpose. Standardizing forms would also contribute to simplifying processes. Overall, by the end of this decade, it must be possible in Germany to submit and process all necessary applications digitally. As part of this initiative, there is also the opportunity to finally introduce English as a second official language. In addition to simplifying procedures for international professionals, this would be a strong political signal of a genuine welcoming culture.

## Pragmatic Recognition of Qualifications: Involving Employers, Increasing Speed

In addition, the recognition of qualifications, especially in vocational professions, remains very time-consuming. Here, too, we urgently need a new approach. Alongside centralization, as successfully implemented with the IHK Foreign Skills Approval (FOSA)<sup>7</sup>, more pragmatism is also needed. Companies should play a central role in the process: if they certify that an applicant has adequate training or suitability for the position to be filled, this should be sufficient. After all, who is better equipped to assess the required qualifications than the employer themselves? This would enable a quicker and less bureaucratic access to the job market for trained professionals in all sectors, while simultaneously easing the burden on authorities. It must also be ensured that a recognition once issued is valid across all federal states.

## Creating Temporary Tax Incentives for Foreign Professionals

A particularly strong incentive for new foreign professionals would be significant relief in income taxation. These should be temporary and designed in a decreasing manner to ensure that professionals remain in Germany at least in the medium term. We welcome the initiative of the traffic light coalition as part of the launched growth initiative. We consider the proposed tiered tax reliefs of 30, 20, and 10 percent appropriate.

## Integration through Politics, Business, and Society

Successful skilled immigration requires not only recruitment but also the successful integration of professionals and their families. An open and welcoming society, along with an active culture of hospitality, is crucial in helping international professionals feel at home. This also includes granting unmarried couples the same rights as married ones, allowing them to apply for a visa for family reunification.

The reality for international professionals often includes regular, extended stays abroad. Therefore, visas and residence permits should remain valid even if a professional stays abroad for more than six months.

Successfully settling in Germany also means overcoming the obligatory bureaucratic hurdles. The GEZ registration is just one example. Central contact points can help manage everything efficiently, clearly, and with minimal stress. Additionally, there must be sufficient housing as well as places in daycare centers and schools for accompanying family members so that they, too, can participate in social life.



#### Consolidating Responsibilities in a Ministry of Migration

It runs like a common thread through this chapter: We need more dynamism in skilled immigration. The legal frameworks have been established, and now we must transfer them into a modern, digital administrative practice. For this, we need clear responsibilities, consolidated competencies, and political accountability in Germany.

Our proposal: the responsibilities currently spread across the federal government should be consolidated into one ministry – from recruitment to arrival and integration in Germany. Countries with successful skilled migration, such as New Zealand and Canada, demonstrate the impact a Ministry of Migration can have. A Federal Ministry for Migration could reduce friction between departments and emphasize the urgency of the issue both domestically and abroad with greater force.

#### Unlocking Potential: Making Work More Flexible and Facilitating Remote Work

To meet the urgent need for skilled workers, short-term solutions are required. More and more startups and large companies are therefore employing foreign workers in their home countries. Through an "Employer of Record" and various service providers, it is already possible to retain individual professionals and entire departments abroad. These transitional options are urgently needed and should be further facilitated, for example, by extending deadlines for temporary employment.

In addition to searching abroad, there is also untapped potential within Germany: this includes working more and in a more flexible manner. Especially in startups, a lot of remote work is offered. Many employees desire flexible working hours – primarily to better balance work and

family life. The current Working Hours Act stands in the way of this development. Therefore, an urgent reform is needed to make working and rest periods more flexible, shift from a daily to a weekly maximum working time, and reduce record-keeping obligations for trust-based working time models.

## Further Improving Employee Participation

When it comes to attracting and retaining skilled workers, employee participation remains a key instrument for startups and scaleups. The Future Financing Act has significantly improved the tax framework for employee participation. However, there is still a need for action: it is urgently necessary to make the new tax framework accessible to startups with a two-tier or more complex corporate structure (so-called "affiliated companies").

Furthermore, we need simple and binding valuation methods. Startups and scaleups should be able to obtain a payroll tax advance ruling even before granting employee participation. The valuation process would be significantly simplified if it were explicitly permitted to refer back to the startup's valuation in a financing round that took place within one year before the employee participation was granted. In addition, there should be alignment between tax and social security law: at the time of granting employee participation, social security contributions should also be deferred and only be due at a later stage, i.e., at the point of actual liquidity inflow.

Moreover, corporate law should be adjusted: establishing a separate share class for employees within the GmbH (limited liability company) law remains the goal. Austria has shown that such a step is possible with the introduction of employee value shares in the Flexible Limited Company (FlexCo).



## Company Formations Also by People from Non-EU Countries

As a Startup Association, we do not want to focus solely on the employee side. Our country has an urgent need for innovation, and startups are a strong driver in this regard. We need more founders who implement their ideas here (see also the chapter "Diversity". Germany must establish itself not only as an attractive location for skilled professionals but also as a hub for company formations.

To achieve this, we must also make it easier for people from non-EU countries to start a business in Germany. This is the only way to attract innovations from around the world. The USA has been offering this opportunity very successfully for a long time with the "International Entrepreneur Rule," which is based on clear evaluation criteria such as newly created jobs or revenue growth. Germany should take inspiration from this. Particularly, visa criteria that rely on external expertise regarding the business idea, such as existing funding commitments, are a guarantee for attracting especially high-potential ideas to the country.

## Quick Wins for the Current Legislative Period:

- Launch of Fully Digital Visa Submission and Processing in Relevant Countries
- Create Temporary Income Tax Reductions for New Foreign Professionals
- Employee Participation: Ensure Inclusion of Affiliated Companies under the New Regulations of the Future Financing Act (§ 19 EStG)



# Financing



## **Financing**

Large companies and a broad-based medium-sized sector have generated steady growth in Germany over the past decades. This success story is primarily based on strong growth financing, which reached up to 4 percent of GDP in the 1950s and 60s. In recent years, however, we have failed to keep pace with the rapid technological change. Particularly in the areas of hardware, software, and connectivity, American companies have overtaken us. Measured by market capitalization, 60 of the 100 largest companies worldwide now come from the USA (mainly from the tech sector), while Europe is represented by only 19, and Germany by just two companies at the top – SAP and Siemens.

To drive innovation and secure the prosperity we've built, we need a strong startup ecosystem. And much like in the 1950s and 60s, growth capital for the early and late development phases of startups, including suitable exit channels, is a fundamental requirement.

While there have already been many positive developments in the early-stage financing of German startups, we continue to observe a significant funding gap, especially in the later development phases. For comparison: in the USA, roughly three times as much growth capital is invested relative to GDP as in Germany. We face a similar situation compared to other European countries: in the UK, about twice as much is invested relative to GDP as in Germany.9 We are lagging behind. Compared to the USA (with VC financing amounting to around 1 percent of GDP), Germany would require at least 30 billion euros per year; looking at the historical rates of 3-4 percent of GDP, this figure could even rise to up to 100 billion annually. But where will this necessary funding come from?

## The Role of Institutional Investor Capital

The good news is that Germany has a sufficiently large capital base among institutional investors. German insurance companies alone manage around 2 trillion euros in assets. To For pension funds, it's around 700 billion euros. A portion of this capital should be mobilized for the German startup ecosystem. Even a slight increase would have a significant impact on startup financing, as institutional investors currently invest well below 1 percent in this asset class – far below the international level. In contrast, American pension funds invest around 1 percent, while Swedish pension funds sometimes invest more than 10 percent in growth capital.

Other European countries provide us with a model through their initiatives: France, for example, has mobilized a total of 6 billion euros in funding commitments from institutional investors under the so-called "Tibi Initiative" to specifically invest in innovative companies ("La French Tech").<sup>12</sup> Sweden has increased the permitted share of "alternative investments" from 5 percent to 40 percent by changing the regulations for pension funds.<sup>13</sup> The UK is pursuing similar approaches.<sup>14</sup>

The "WIN Initiative" (Venture Capital and Investment Financing) launched by Federal Finance Minister Christian Lindner aims to mobilize the capital of institutional investors. We explicitly welcome this approach. As early as 2021, the federal government provided 10 billion euros in venture capital from public funds through the establishment of the Future Fund for venture capital financing. In 2023, more than 600 million euros were mobilized from institutional investors at the fund level through the "Growth Fund." Now, with WIN, we must take the next step – and finally

<sup>9)</sup> Dealroom, IMF, Lakestar: The European Financing Gap (2021)

<sup>10)</sup> European Insurance and Occupational Pensions Authority (EIOPA)

<sup>11)</sup> Investment & Pensions Europe (IPE)

<sup>12)</sup> See also.: The Tibi Initiative: Phase-2 and Perspectives (2024)

<sup>13)</sup> AP6.se; Invest Europe/EDC

<sup>14)</sup> See also: British Venture Capital Association (BVCA)

close the identified funding gap. Mere public lip service and half-hearted commitments will have no practical impact and, in the current situation, would be more than just a disastrous signal for startup financing.

#### **Specific Solutions for Specific Requirements**

Our proposed solutions are based on the triad of startup development phases: 1. Early Stage, 2. Growth Stage, and 3. Exit. Only a holistic view of the financing needs at each development stage can meet the complex requirements: without the early stage, there can be no growth stage. And with functioning exit channels, we ensure the attractiveness for business angels and VC investors in the early stage.

## 1. Early Stage: Strengthening Existing Instruments

Important measures have already been introduced in the past for early-stage financing, such as the INVEST Venture Capital Grant and the High-Tech Founder's Fund (HTGF). These federal programs are sometimes supplemented by additional instruments at the state level. Following the SPRIND Freedom Act, the Agency for Disruptive Innovation can now also invest in DeepTech startups that are still in a very early stage (see also the chapter "DeepTech").

However, the INVEST grant has recently been cut several times. The budget for this crucial instrument should be increased to ensure planning security for startups and business angels. This is also a matter of reliability. We need a stronger prioritization of future investments within the budget of the Federal Ministry for Economic Affairs and Energy. Additionally, the processing times for INVEST must be drastically reduced to a maximum of 12 weeks.

## 2. Growth Stage: Mobilizing Capital from Institutional Investors

For financing the growth stage, it is crucial, as mentioned, to mobilize capital from institutional investors. We aim to raise the annual investments of institutional investors in the venture capital asset class to the level seen in the USA and to triple it by 2030 – reaching at least 1 percent of GDP. Insurance companies play a key role in this: currently, they allocate only about 0.3 percent of their managed capital to growth financing. By the end of the decade, at least 1 percent of this investment volume in Germany should be directed toward venture capital.

#### Tapping New Capital Sources in a Market-Oriented Manner

In general, capital investments for relatively high-risk asset classes are available only to a limited extent. Therefore, we need to tap into new financing sources for growth financing that typically prefer investments with a lower risk profile, such as pension-based equities or retirement savings accounts. Startup financing must be market-driven and offer an attractive investment opportunity ("risk-return profile") for different investor classes. Additionally, we need a market-oriented cycle of improved growth financing and strengthened European exit channels that ensure a local return of capital. Within this cycle, the startup ecosystem must and will grow accordingly.

The central instrument for growth financing by the federal government is the "Zukunftsfonds" ("Future Fund"), established in 2021. Thanks to its modular design, it is set up for complementary measures. Additionally, existing modules within the framework can be further developed with a future-oriented approach. The following measures are necessary:

#### **Strengthening Fund-of-Funds Structures**

Compared to other asset classes, venture capital is fragmented, making it less accessible for large-volume fund investments. Fund-of-funds help to reduce this fragmentation. By providing larger ticket sizes, they also lower the administrative burden for fund investors. Additionally, fund-of-funds offer a higher level of diversification. Therefore, private fund-of-funds initiatives should be promoted. This includes improving the framework conditions and ensuring legal certainty: existing tax uncertainties regarding trade tax must be eliminated.

With the new fund-of-funds model, the so-called "Wachstumsfonds" ("Growth Fund"), KfW Capital has successfully mobilized more than 600 million euros in capital from institutional investors. This was an important first step, which must be consistently pursued with the planned launch of Growth Fund II.

## Creating New Risk-Return Profiles through Tranching

Despite an attractive risk-return ratio of fund-of-fund structures, investments from institutional investors, particularly insurance companies, are still lacking to the desired extent. This is partly due to equity restrictions (such as "Solvency II" for insurers) and the varying risk profiles of institutional investors. To address these challenges, a further development of market-oriented fund structures based on the Growth Fund should be implemented with corresponding tranching solutions. Structuring fund-of-funds with multiple risk tranches allows for the mobilization of a broad spectrum of investors according to their risk-return profiles.

Senior tranches provide a suitable investment framework for institutional investors with a

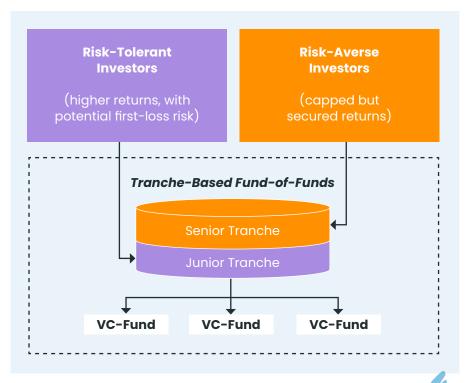
slightly lower but more secure return. The equity requirements for these investors could be partially addressed through appropriate access structures, such as fixed-interest bearer bonds. In contrast, more risk-tolerant investors benefit from a junior tranche, which can also bear the first-loss risk ("first-loss piece"), by achieving higher returns. These investors leverage the fund with their investments. Greater state participation can help to leverage more private capital in this context. While a return of 5-8 percent with strongly limited

default risk should be satisfactory in the senior tranche, more risk-tolerant investors benefit from the difference to the actual realized return – and this with a strongly limited partial loss risk.

## Allowing Private Individuals to Participate in Economic Success

Private individuals in Germany currently benefit only to a very limited extent from the economic success of German and European growth companies. As a result, a significant capital pool is missing for growth financing in Germany. This needs to change. Investment opportunities for small investors should be expanded, starting with stronger, mandatory education in economics at the school level. Moreover, suitable models should be established to make private retirement planning more attractive, such as retirement savings accounts modeled after the USA (Traditional IRA, Roth IRA) or Switzerland ("3rd pillar").

Specifically, it should be possible to save a certain amount annually from gross income for retirement. To close both the pension gap and the currently very low equity ratio in German re-



Simplified Schematic Representation for Tranche-Based Fund-of-Funds Structures

tirement planning, this account should allow for a sufficiently high tax-exempt savings amount of up to 20,000 euros annually or 10 percent of income. Employer contributions (similar to the 401k in the USA) would further enhance this dynamic. Through such instruments, both private and public markets, in addition to the investors themselves, can sustainably and substantially benefit from increasing demand.

In wealth management, new product classes or fund vehicles with a clear VC orientation should also be developed. Banks and asset managers play a crucial role in this. Here too, tax incentives, such as the creditability of VC fund investments, tax allowances for returns from VC fund investments, depreciation options, or tax allowance regulations for reinvestments ("roll-over"), are important levers.

## More Transparency for the Venture Capital Asset Class

There is still a great deal of intransparency in the venture capital asset class, both regarding its exact functioning and the returns achieved. As a result, potential investor groups who have had little exposure to this asset class (such as pension schemes) tend to shy away from venture capital investments. A generally accessible and independent data base is, therefore, a crucial first step toward greater transparency in the risk-return profile. For this purpose, the previously unpublished but extensive data from the European Investment Fund (EIF), which has over 30 years of investment experience in Europe, should be utilized. After all, it is an international standard practice to publish corresponding returns and metrics based on individual funds - anonymized (as seen in the USA, Scandinavia, etc.). Moreover, currently underrepresented investor groups, such as family offices and foundations, should be targeted, for example, with the help of selected multipliers.

## Ensuring Tax Competitiveness for VC Investments

Venture capital funds operate as asset managers, which is generally undisputed. However,

some claim that they engage in entrepreneurial activities. These claims create significant tax uncertainties, particularly deterring international investors from investing in German VC funds. To prevent this, so-called tax transparency should be codified into law. This would not result in reduced revenue but would provide urgently needed legal certainty.

#### **Adjust Regulatory Framework**

The existing regulation of capital-raising entities does not fundamentally exclude venture capital investments; however, high equity requirements often make such investments comparatively unattractive. The equity requirements of the insurance regulation "Solvency II" should be adjusted accordingly. This also involves making greater distinctions between investment and risk classes: for example, growth capital has a different risk profile than early-stage financing. This should also be taken into account from a regulatory perspective.

## 3. Exit: Create Investment Cycles and Strengthen Exit Channels

The initial public offering (IPO) and the sale to other companies (trade sale) are the two most important exit channels. From an economic standpoint, it is essential that they take place in Germany or at least Europe. Without sufficient exit channels, a strong startup ecosystem cannot sustain itself in the long term. Without exits, no proceeds from sales can be realized, and invested capital remains locked. While an exit outside Germany or Europe also serves the purpose for investors, the economic consequences are dramatic: Since 2015, IPOs of European companies in the USA have resulted in an economic value loss of more than 400 billion euros.15 From an economic standpoint, we should keep exits in Germany. Additionally, establishing a secondary market for VC fund shares represents an important step toward expanding the European VC ecosystem. In this way, we enhance the liquidity and attractiveness of this asset class.



## Deepen the European Capital Market and Implement the Capital Markets Union

Sustainably successful initial public offerings require a strong capital market. It is also essential to strengthen the demand from institutional investors, which in turn necessitates creating incentives. The Capital Markets Union plays a crucial role in this. Currently, with 35 exchanges in Europe (compared to three in the USA), there is a high level of complexity and a lack of transparency for institutional investors. In particular, trading activities are spread across too many trading venues compared to the USA, with more than 200 in Europe (versus 50 in the USA). This leads to avoidable fragmentation of liquidity, which ultimately contributes to lower company valuations and impairs international competitiveness.

The widespread assertions to advance and deepen the European Capital Markets Union must be reflected in concrete and consistent measures. These include, among other things, consolidating supervision over prospectus approval procedures across Europe at the ESMA.

Initial public offerings could also be made more flexible by reducing the nominal value of shares to €0.01. This would align the conditions with those of leading European countries, such as the United Kingdom. Furthermore, shortening the prospectus approval process would streamline the IPO process and open more IPO windows in the issuance practice, which could then be utilized more flexibly. Additionally, capital increases for already listed companies should be facilitated, including more flexibility in pricing during capital increases with a simplified waiver of subscription rights.

Especially for growth companies, discounts for successful placements often exceed five percent, necessitating greater legally mandated flexibility in the simplified waiver of preemptive rights. Otherwise, companies are left with significantly more time-consuming and costly capital increases that require a prospectus and include preemptive rights for existing shareholders. Ideally, this should be complemented by further

increasing the allowable volume for capital increases with a simplified waiver of preemptive rights, enabling capital-intensive growth in a legally secure and straightforward manner.

Institutionalized dialogues and collaboration between startups, corporates, investment banks, and investors should necessarily support these structural measures. The German Startup Association is actively involved in this effort. Another short-term lever lies in the regulation of equity research, with the United Kingdom serving as a model.

To create incentives for individual investors, horizontal loss offsetting could also be replaced by loss offsetting across asset classes. This would make broader portfolio allocation more attractive.

#### **Create Incentives for Corporate Sales**

To achieve more successful trade sales, we need an extensive infrastructure. This includes the exchange of best practices that demonstrate the concrete added value of acquisitions through the acceleration of innovation, cost reduction, and the development of new market segments.

Furthermore, additional structural measures are required, such as special depreciation options for companies acquiring startups during loss phases. Government-supported loans could also facilitate acquisitions, for example, by offering reduced interest rates for high R&D ratios or when meeting ESG criteria.

Attractive frameworks for trade sales must apply regardless of the exit form and consider all variants of collaboration between startups and companies. The spectrum ranges from full acquisitions and asset deals to licensing agreements in cooperation with European corporates. Existing tax disadvantages for asset deals and cooperations compared to full sales as share deals should be eliminated.

Additionally, foreign trade laws should not be further tightened. Although only a few corporate sales have been prohibited so far, the mere scrutiny creates significant uncertainties and the

#### **Financing**

risk of delays, which can negatively impact the sales process. The possibility of exit restrictions not only makes acquisitions themselves but also entry investments less attractive. The protection of domestic technology must not become an exit stopper.

#### Quick Wins for the Current Legislative Period:

- Create greater transparency by providing public access to EIF data and ensuring their targeted use
- Introduce statutory tax transparency
- Implement tax allowance regulations for reinvestments ("rollover")
- Enable the nominal value of shares to €0.01
- Facilitate capital increases for listed companies



# Role of the State



## Role of the State

Whether "the state" – which ultimately includes all of us – acts as a catalyst for innovation or as a hindrance depends on our administrative processes, legal frameworks, and the use of state resources. To remove obstacles, promote innovations, and gain momentum, we must partly rethink the role of our state and consistently align it with future-oriented issues. These include five central areas: 1. (Digital) infrastructure, 2. Digitization of administration and reduction of bureaucracy, 3. Updating our administrative culture, 4. Modernizing public procurement procedures, 5. New competition rules for existing and future markets

It is necessary to openly review existing processes and to more strongly centralize the digitization and openness to innovation of our state. One option would be to create the effective position of a Chief Digital Officer, equipped with their own competencies and resources to coordinate and implement the overall activities in the Federal Chancellery.

## 1. Infrastructure & Basic Services – Essential Prerequisites

Startups, which rely on agility, innovation, and rapid market penetration, especially need a modern, well-developed, and secure infrastructure. This is essential for sustainable growth and competitiveness. Therefore, Germany must consistently further develop its infrastructure by 2030 and adapt it to the needs of young, dynamic companies. This progress can be measured through satisfaction surveys.

While infrastructure also includes innovative transport policy (which continues to be awaited), environmentally friendly energy supply, and progressive urban development, as a startup association, we focus in the following paragraphs on the topics of digital basic infrastructure, state (digital) basic services, and social entrepreneurship.

#### Digital (Network) Basic Infrastructure: Internet, Mobile Networks, Data Centers

The expansion of our fiber optic networks is crucial to ensure the required speeds and bandwidths for data-intensive applications and new technologies such as AI, IoT, and Big Data. This is especially important for real-time tracking and transparency, efficiency gains through data analysis, predictive maintenance, and the reduction of downtime. In short: Without a fast, modern internet, we are not operational.

Seamless mobile coverage, especially in rural areas and on trains, remains necessary to improve work in everyday business operations and to provide employees with a higher quality of life. It must not be the case that trains are chosen as an environmentally friendly travel alternative and effective work is then not possible.

To become an internationally competitive digital player, Germany must recognize and prioritize the expansion of computing capacities, particularly for AI development. The existing capacities are limited and are currently mainly used by research institutions. Sufficient energy supply with corresponding grid capacity is essential for the expansion.

Existing supercomputing centers must be expanded with Al-specific hardware to support promising hardware development projects that are expected to achieve the greatest success and whose results can be quickly applied. A software solution that includes all necessary components would facilitate the use of the hardware. Al-assisted chip and software development could optimize FPGA designs for AI applications. We need reference cases in this area. Equally important is that the federal government commits to expanding and promoting European AI data centers and GPU production volumes to ensure digital sovereignty in the AI sector as well-because without secure access to such infrastructure innovations in this field are hardly possible.

## Digital IT Basic Infrastructure of the State: Open Platforms and Services

The digital state requires appropriate IT infrastructure: without unified platforms, cloud, and ID solutions, consistent and secure digitization is unimaginable – neither internally within the administration nor at the interface with the population or businesses. Therefore, a centrally controlled digital infrastructure with clear, unified rules and interfaces is necessary. In Estonia and Finland, for example, "X-Road" enables public and private organizations to securely exchange data. The platform allows for the seamless integration of both state and private offerings. Such an infrastructure facilitates the embedding and scaling of startups' IT systems while simultaneously protecting sensitive data through its decentralized nature.

Such a standardized infrastructure requires open and market-compliant government interfaces. These should adhere to industry standards to give startups a chance to become part of the governmental ecosystem, both in terms of bureaucratic processes and, especially, data exchange (see also: 5. New Competition Rules). The widely adopted architectural pattern "REST" for APIs in the tech industry has led to a tremendous innovation boost toward modular IT systems, thereby creating new business models. It should also be primarily used in government to offer open interfaces, as proprietary interfaces do not lead to more innovation!

Additionally, state basic services help strengthen the innovation ecosystem. They are fundamental building blocks for digital services and crucial for efficient digital economic processes. These include, above all, widely accepted digital identities as well as legally binding digital signatures, which are essential for digital transactions such as M&A deals and contractual matters. Moreover, they enable efficient digital administrative processes.

In the Netherlands, a reliable digital identification system called "DigiD" has been established, providing access to numerous government online services. In contrast, the German eID system,

with the online ID function at its core, is primarily designed for the highest security. However, for almost all transactions in the economy and a wide range of administrative services, the more user-friendly security level is already "substantially" sufficient. This could, for example, be achieved through a one-time identification in a government app, which is then used for additional services without users having to verify themselves each time. Additionally, the integrability of the eID into platforms and digital products, such as those of startups, should be further promoted and simplified.

## Social Entrepreneurship: Democracy and Social Market Economy as a "Basic Service"

Germany's competitiveness is based on the performance of its economy and the state, supported by democracy and the social market economy. The state must ensure fundamental goods such as the protection of human rights, social security, public health, education, the rule of law, and a healthy environment. Due to often self-induced challenges such as financial constraints, skill shortages, and bureaucratic hurdles, the state is frequently unable to provide these goods adequately. Therefore, social innovations by social enterprises and social entrepreneurs are necessary. To be effective, they need an innovation-friendly and cooperative state.

By promoting private social innovations from startups, Germany strengthens its social market economy and sustainably secures the competitiveness of its economy and the state. Startups and scaleups contribute innovative ideas to solving societal challenges and support sustainable developments.

Therefore, cooperation-friendly structures should be established in authorities at all levels to support social enterprises in their collaboration. So far, these companies often do not fit into governmental structures and have to go through complex, time-consuming processes to make their work legally secure and sustainable. It is therefore the responsibility of innovation officers in authorities to initiate, simplify, and support these processes.

Public funding practices should aim to achieve change and establish a constructive culture of learning from mistakes during implementation, without prescribing the path to solving a problem from the outset. Innovation hubs within the state should actively promote innovations and initiate collaborations in the sense of "collective impact."

Of course, the expansion of these cooperation structures must be financed. Our proposed solution: In Germany, there are estimated to be up to 9 billion euros in "unclaimed assets" – assets for which ownership has been lost. These assets should be returned to society and used purposefully. This is already happening in other G7 countries, such as the United Kingdom.

## 2. Digital Administration & Reduction of Bureaucracy – To Keep Germany Competitive for Startups

Nearly 90 percent of all founders see the acceleration and simplification of administrative processes as a key lever to further develop the startup ecosystem<sup>16</sup> While in other countries companies can be fully established and managed digitally, in Germany one often has to wait weeks or even months just to obtain a tax number or VAT ID. Estonia demonstrates with its "e-Residency" program that this can be done automatically and immediately.

Additionally, our federal structures lead to shifting responsibilities, inconsistent processes, a multitude of different regulations, and the absence of unified standards. All of this complicates the establishment and scaling of businesses. A reorganization is needed: the digitization of administration must be approached as a nationwide, comprehensive task.

We aim to become, by the end of the current decade, the country in Europe where entrepreneurs have to invest the least amount of their time in administrative processes.<sup>17</sup>

## Digital First: Finally Implement a Unified "One-Stop-Shop" for Company Formations

The state needs to consolidate digital contact points much more along life situations or target groups, rather than prioritizing its own jurisdictional logics. A good example of this is Denmark, where Virk.dk has been established as a single point of contact for businesses and entrepreneurs. Such a central contact point must be designed as a digital platform, so that applications are not only submitted digitally but also processed digitally.

The goal must be to accelerate application procedures significantly. As early as 2021, the federal government committed to "Startup in a Day," meaning the establishment of a company within a single day.<sup>18</sup> This can only be achieved through the development of a robust digital infrastructure. Specifically, we therefore need an efficient, nationwide unified digital "One-Stop-Shop" in the form of an end-to-end platform that enables the entire establishment process to be conducted online and utilizes modern technologies for decision-making.<sup>19</sup> Such a central platform should reduce the interaction points between the administration and businesses and actually automate all processes that can be automated. We welcome many measures in the amendment of the Online Access Act (OZG 2.0), adopted in June 2024, such as digital organizational accounts for companies and the creation of nationwide unified standards. However, for us, it is clear that these measures are only foundations on which we must continue to build.

In this context, the Once-Only Principle provided for in OZG 2.0 must also be rigorously applied in the corporate context, so that data is collected only once and consolidated by authorities. This must be possible in accordance with data protection laws. Administrative and approval records without discretionary power should also be issued automatically, while objection procedures should be reviewed by humans. Chatbots and Al tools can answer frequently asked questions and support startups in the establishment and admi-

<sup>16)</sup> DSM 2023, Seite 55.

<sup>17)</sup> To define a measurement basis for this, corresponding metrics need to be developed.

nistrative process. Low-threshold, general legal claims, such as compensation for duplicate data entries, can promote the Administration-as-a-Service principle and encourage authorities to create efficient interfaces.

The entire establishment process could be conducted digitally in this way, including registration with the commercial register, business registration, and application for necessary licenses and permits. This reduces unnecessary effort and waiting times caused by multiple data requests from various authorities. Once the "One-Stop-Shop" is functioning with the aforementioned basic functions, it should be expanded in the long term to include recurring processes (such as the submission of annual financial statements or notifications of beneficial ownership in the UBO register). This way, further bureaucratic redundancies are eliminated step by step.

Digitalization must also include the notary office, which is an important partner in startup formation even in a modern and efficient state. Therefore, together with the Federal Chamber of Notaries, ways should be found to de-bureaucratize and further digitize the notary office in Germany in its current form. Notarial certification should only be mandatory when clarification and instruction are actually required.

The current legal situation leads to sustainable irritations, especially for foreign investors, due to the additional time and financial effort. The legal foundations of the notarization process must be appropriately reformed by the legislature: This applies both to the scope of mandatory notary services and to a greater digitization of notary services themselves (e.g., in powers of attorney).

#### Master Plan: Understanding Digitalization and **Bureaucracy Reduction as Strategic Priorities**

For bureaucracy reduction and administrative digitalization, a concrete master plan and strong vertical as well as horizontal leadership are necessary, where roadblocks are considered and eliminated holistically. A Chief Digital Officer should be equipped with comprehensive competencies from the federal and state governments and develop a top-down digitalization strategy and-more importantly-implement it. In this case, each federal ministry should appoint a responsible office for bureaucracy reduction and digitalization, which works closely with the other departments and the Chief Digital Officer and prepares annual progress reports.

To design future legislation with minimal bureaucracy, we consider the measurable increase in digital and practical usability through early consideration in the legislative process and the reform of impact assessments to be essential, particularly for entrepreneurs. The digital check that has been in effect since 2023 must not remain just a checklist at the end of a draft law. Instead, a law must be developed—also with the help of digital expertise and enforcement experience—so that it is truly suitable for digital use. It must allow for simple, outcome-oriented implementation and leverage digital potentials for the benefit of all stakeholders. How can this be achieved? By formulating regulations simply and clearly, and placing the needs of those affected at the center through active involvement during the legislative process. The Netherlands serves as a model here, as both of these practices are already in place.

Analogous to the proposed Chief Digital Officer, a concentrated and interdisciplinary approach is also necessary in this case: We need to establish a central task force for digital-ready, outcomeoriented legislation. Our goal is to quickly and effectively develop 15 to 20 essential political initiatives per year with minimal bureaucracy in collaboration with the relevant departments. Internal innovation units such as the DigitalService should be utilized, and where appropriate, existing tools like checks and bureaucracy reduction procedures should be merged or eliminated. At the same time, the practical impacts of legislative proposals should be tested early with those responsible for implementation, for example through "reality checks" with focus groups of businesses. This way, specific consequences can be more easily assessed. Additionally, this approach would allow for the targeted application of the "One in, one out" rule for startups.<sup>20</sup>

## trengthen and Further Develop the Evaluation Role of the Regulatory Control Council

Due to its overarching function, the Regulatory Control Council ("Normenkontrollrat" - NKR) should again be directly connected to the Chancellery as an institution. Laws and political measures must be assessed more rigorously regarding their actual impact. Accordingly, evaluation concepts need to be developed further to structurally contribute to the continuous improvement and reduction of bureaucracy in regulations. Additionally, there needs to be a reform of impact assessments by consolidating guidelines and compliance costs: every law must be reviewed for bureaucratic challenges before adoption, just as it is currently checked for digital suitability – an approach that has proven effective.21 The NKR should also provide recommendations for reducing bureaucracy, which the federal government should comment on, particularly explaining why certain recommendations are not implemented.

The approaches to digital suitability, bureaucracy reduction, and evaluation should be promoted by the federal government at the EU level as well as towards the states and municipalities. Microenterprises<sup>22</sup> should largely be exempted from state and statutory regulations, mandatory connections, and hidden fees of all kinds (e.g., occupational medical care, data protection officers, dismissal protection laws, chamber of commerce fees, broadcasting contributions, statistical reports, etc.).

In summary: For future technologies and business models, an ex-post regulatory approach is ultimately needed that promotes innovations from the outset rather than primarily focusing on risks. This approach provides companies with a grace period to test their products in limited markets or living laboratories (see also the chapter on "DeepTech"). After this phase, adjusted regulation occurs based on technological and political experiences. This way, a balanced

balance between innovation promotion and government regulation can be maintained.

#### 3. Personnel & Culture – People Drive Change

If we want an economically resilient, innovationpromoting state, we also need a cultural shift within the administration. Without this, technological progress and digitalization cannot be managed. Yes, we need a new culture that fosters creativity, flexibility, and openness.

We require competent personnel, particularly leaders with management experience and skills in digitalization, technology, design, and project management. Current hiring processes emphasize formal qualifications and theory over practical competence, fostering a culture devoid of risk-aware action. Low rates of career changers exacerbate the problem.

Compared to other countries in the EU, Germany has the fewest people transitioning from the private sector to public administration. Furthermore, administrations are generally lacking in diversity and operate in overly formalized silos.<sup>23</sup> Especially at the interface with startups, a flexible, dynamic mindset and an innovative culture are needed. How can we achieve that?

Upskilling and reskilling of existing personnel are necessary, although not sufficient on their own. We need external expertise to build new capabilities within public authorities. At the same time, we must reform the structures themselves to establish a modern, goal-oriented work and performance culture.

Let's summarize: We need to structurally improve and promote the transition from the private sector to public administration. We must rethink the requirements for leadership positions and intentionally recruit "externals," as one in three

<sup>21)</sup> The assessment of digital suitability within the draft bill for the Gesetzesentwurfs zur Modernisierung und zum Bürokratieabbau im Strom- und Energiesteuerrecht (German only) has, for example, led to significant cost savings through regulatory design and digital implementation. 22 Definition according to the recommendation (2003/361/EC) of the European Commission based on revenue and employee size categories.

<sup>22)</sup> Definition according to the recommendation (2003/361/EC) of the European Commission based on revenue and employee size categories.

<sup>23)</sup> Hertie School: <u>Querwechlser als die Impulsgeber von morge</u>n (2020)

public service employees will retire by 2030. This wave of retirements will disproportionately affect middle and upper management levels—those most likely to drive a cultural change. Therefore, we propose a fundamentally new promotion policy that mandates, for example, that 30 percent of replacements be filled with personnel from outside the administration. This will enable rapid implementation of changes and the integration of external knowledge from the private sector into public administration.

Additionally, a charter for "Open Doors in Administration" can be helpful in achieving these goals. Such a charter would require authorities to make job postings public and understandable, focus on relevant competencies, and publish them online. It would provide for transparent bonus systems for scarce qualifications and clear justifications for rejecting external candidates. The charter would also promote further education and job changes for existing employees. There are no legal hurdles; the civil service law offers the necessary flexibility. Therefore, policymakers should encourage ministries and authorities to sign and publish this charter to leverage the benefits of transitions from the private sector.<sup>24</sup>

Transfer programs like Work4Germany, which already help acquire digital expertise for public administration, can also contribute to targeted recruitment from the private sector and should be expanded to 100 to 150 participants per cohort. The goal must be to retain at least 30 percent of the personnel acquired in this way permanently.

The staffing increase of recent years must be redirected into budgets and positions focused on future topics. We need digital, data-driven analysis centers, planning teams, change competency centers, and digitization teams. Areas such as data science, data analytics, process and project management, digitalization and automation, risk management, compliance, as well as communication and human resources

management require targeted skill development. The salary and wage structures of the administration should be fundamentally reformed, including a significant expansion of employment relationships. To ensure competent placements, new job profiles for digitalization and transformation roles are necessary, modeled after the British Digital & Data Profession Capability Framework, which has placed over 20,000 individuals in such roles.

Hybrid institutions such as in-house consultancies and innovation units must also be strengthened. Examples include "BwConsulting" and "PD – Berater der öffentlichen Hand," which drive complex change processes and enhance the state's ability to commission projects. Data labs and the Federal DigitalService have also built digital competencies and should be increasingly utilized to shape important interfaces between the state and the innovation ecosystem and to advance the digitalization of administration. The state should align the participation management of these internal units more clearly with performance and evaluate, consolidate, and strengthen existing units. Ineffective models should be phased out to maximize efficiency and innovative capacity.

#### 4. Modern and Inclusive Procurement System – Opportunity for Startups and the State

The state is the largest client in our country and therefore an important customer for startups. At the same time, it requires the innovative solutions and specialized knowledge that startups provide. Currently, however, founders generate only about 6 percent of their revenues in the B2G sector.<sup>25</sup> Even dedicated GovTech<sup>26</sup> startups generate little revenue in the B2G sector: Only 21 percent generate all of their revenues from public clients, and another 37 percent earn at least more than half in this area.<sup>27</sup>

<sup>24)</sup> This is also reflected in the <u>demands of the "Querwechsler"</u> <u>Network 2021</u>.

<sup>25) &</sup>lt;u>DSM 23</u>, Page 27.

Our goal is for the state to become a solid pillar of innovation promotion in Germany through its procurement practices by 2030. By then, startups should receive at least their fair share of around 5 percent of all public spending. We aim to establish public tenders as a driver for innovation and economic progress, supported by a new generation of agile and highly specialized companies that the state actively promotes as a customer. To achieve this, we must change the procurement system and practices.

#### **Centralization of the Procurement System**

The legal requirements have significantly increased. Each federal state has specific laws and regulations, the federal government has its own procurement law, and European law applies to all above-threshold procurement. Without legal expertise, participation in such procedures is hardly possible. On the authority side, the growing complexity also leads to slowdowns and risk aversion.

Procurement law must therefore be unified and simplified across the states and the federal government. By the end of the decade, the numerous laws and regulations should be consolidated into a central nationwide procurement law, thereby following the example of European partners. This would also bring significant simplifications for both administration and business. At the same time, individuals without legal expertise and small startups must be able to navigate procurement processes smoothly. Additional requirements for tenders, such as adherence to collective agreements, would unnecessarily complicate access to procurement procedures for most startups.

Until new rules are established, procurement offices should already take measures to provide startups with fair opportunities for contracts – and view this as a leadership responsibility. The currently developing Startup Procurement Index aims to collect data throughout the entire procurement process (particularly regarding the number of participating startups and their contracts relative to total orders) and derive actionable

recommendations from it. We call for all procurement offices to participate in such index projects. Current criteria, such as minimum annual revenues up to double the contract value and extensive references, often prevent startups from applying for public tenders. Especially early-stage startups find it difficult to meet these requirements. They can only circumvent the criteria through a bidding consortium or qualification loans, which, however, is rare.

The introduction of the direct award threshold for innovative services as part of the announced procurement transformation package is a good start. Additionally, there should be more flexibility in demonstrating suitability in below-threshold procurements, such as through financing confirmations from external investors. To give startups a chance, we demand that procurement procedures up to a limit of €100,000 be exempted, as long as price/performance transparency is ensured through the platform availability of the affected product/service category.

#### **Further Changes in Procurement Practices**

Beyond legal changes to the procurement system, there are numerous ways to enable the opening and inclusion of startups today: Although tenders are now published digitally, there is still significant room for improvement in process design. The goal is for (early-stage) startups to be able to quickly and accurately compile the necessary documents and for procurement offices to make decisions swiftly and efficiently. Both aspects must be reflected in the UI/UX design approaches, which currently happens too infrequently. Additionally, lawmakers should establish a unified and centralized procurement platform that considers the needs of both the market and the procurement offices from a UI/ UX perspective.

To open up more to innovative solutions, task and performance descriptions should be formulated functionally rather than as detailed specifications. The choice of procurement procedure is also crucial. Therefore, procurement offices should be encouraged to adopt more flexibility.

and ensure clear, transparent communication about the process.

In this context, the innovation performance of a tender should actively be considered as a key element in public procurement, rather than focusing solely on costs. This approach allows not only large companies but also innovative startups and scaleups to receive contracts. Ultimately, public procurement institutions and their leaders must commit to designing their procurement processes in a way that provides startups with fair opportunities for contracts. This should lead to faster, more user-friendly, and ultimately more effective processes.

In this context, we have also identified a need for awareness regarding startups in public institutions: the perception of small garage companies that cannot deliver sustainably still prevails. Targeted awareness campaigns should address this misconception.

Furthermore, in the spirit of a "learning administration," collaboration between procurement offices across federal levels must be improved. Joint pilot projects between the federal government, states, and municipalities can help test better processes. After a few months, the effects could be evaluated to assess whether the new approaches increase the number of bids received and how cost structures and implementation durations develop. In the startup world, this process is known as "test and learn."

#### 5. Level Playing Field - Adapting Competition Rules to Technological Developments

A functioning democracy and an innovative, growing economy require equal opportunities. Therefore, the state must ensure suitable framework conditions for fair competition. For startups and scaleups, market access is crucial, as only fair competition allows them to compete against established companies and successfully position their innovations.

Our goal by 2030: We aim to create a level playing field, particularly in digital markets, that enables German and European startups and scaleups to compete in open markets and unleash their innovative potential.

Essential to this is the consistent application of antitrust law, as well as the Digital Markets Act (DMA) and the Digital Services Act (DSA). On this foundation, the rights of users will be protected, and concentrations, particularly in digital markets and dynamic sectors like AI, will be prevented. To achieve this, EU and national authorities must be empowered to use merger control tools and respond more quickly and effectively to market power abuse in emerging markets. The example of generative AI shows that large tech companies are already dividing significant portions of this new market among themselves through partnerships and investment dominance, as well as their market power and customer access.

A second essential topic is the promotion of the data economy to support innovation and growth. In addition to the progress made so far, further measures must be taken to facilitate access to both private and public data and to clearly regulate the connection between data protection and trade secret protection. The focus should be on opportunities rather than just risk minimization, similar to the approach taken by the U.S. Department of Justice.

## Consistently Implement Competition Rules and Further Develop Them for Emerging Markets

With the DMA and the recent amendments to the Act Against Restraints of Competition, competition authorities have gained significant powers. The federal government must ensure that the Federal Cartel Office has sufficient resources in the coming years to effectively wield this powerful tool and carry out merger control.

However, this alone is not enough. Technological developments are advancing rapidly. New markets emerge faster than the legal framework can adapt. Therefore, the federal government should advocate at the European level for the classi-

#### **Role of the State**

fication of large and established providers of generative AI (GenAI) as core platform services by the EU Commission, thereby obliging them to comply with DMA regulations.

Measures to protect recently published digital news content from being used for AI training and input purposes are as important as revising the legal framework for GenAI providers to use websites for text and data mining purposes. For the former, content should be protected for a specific period (e.g., 48 hours) after publication. For the latter, opt-out mechanisms should be ensured that do not impair indexing by search engines.

European copyright law must also be applicable to GenAl providers and defined gatekeepers, especially when the reproduction of protected content occurs within EU member states, regardless of the server location. It must be ensured that any use of content, including for training and memory formation of models, falls under the Copyright Directive.

For defined GenAI gatekeepers, there should be enforceable compensation claims for text and data mining. Rights holders should have the right to receive fair compensation for the use of their content by GenAI providers. This compensation should be indispensable and enforceable through collecting societies or legally established arbitration mechanisms that can be initiated by both parties. Otherwise, only the AI providers could decide with whom they enter into agreements regarding the use and compensation of content, which contradicts the principles of the Copyright Directive.

#### Treat Data as a Strategic Priority

Access to and availability of data are essential prerequisites for fostering innovation. The European "Data Act" and the "Data Governance Act" provide a foundation for revitalizing the private data economy, but they are not sufficient. The unclear connection to data and trade secret protection will hinder data access. Furthermore, the Data Act focuses only on raw or minimally processed data from the IoT sector, addressing only a small part of the important data eco-

nomy. Therefore, a data access claim for third parties, both to aggregated individual data and to aggregated data, is absolutely necessary.

Access to public data must also be facilitated. Until now, the focus has been on risk minimization, with opportunities not being sufficiently considered. Although there has been progress, such as with the Health Data Utilization Act, more can be done. For instance, state-owned companies, particularly in the energy and transport sectors (such as public utilities and public transport), should provide much more generous data access to spur innovation. Access to foreign trade data (imports and exports), as seen in the U.S., should also be considered.

In this context, state-owned enterprises need to act even more in the public interest and make data available even when they do not directly benefit from it. In sectors where private and public companies are in competition, data-sharing obligations that apply only to public entities tend to make private providers more profitable. Therefore, data-sharing obligations in such cases should also apply to private companies in the interest of competition and the common good, rather than, as is often argued, applying to no one. Only in this way can we ensure that trade secrets do not become an obstacle to innovations that benefit society as a whole.

#### **Quick Win for the Current Legislative Period:**

 Allow free procurement of public contracts in the below-threshold area up to €100,000 without additional requirements.

# 04) DeepTech



## DeepTech

We live in a world characterized by rapid technological change and profound societal challenges. DeepTech technologies are becoming increasingly important in these times, and they are already much more than a niche. Here, new solutions are being developed based on protected or hard-to-reproduce breakthroughs in science or technology. DeepTech startups differ from "regular" startups due to longer development times resulting from complex requirements and regulations, higher capital needs for investments in demonstration plants, and a more pronounced risk-and-opportunity profile due to technological uncertainties. German examples of successful DeepTech startups include Isar Aerospace, Marvel Fusion, Sunfire, and also BioNTech. These startups provide solutions for some of the most pressing problems of our time, such as the climate crisis and resource scarcity, demographic change, and new diseases.

Our goal is to establish Germany as a global leader in DeepTech by 2030. Yes, we aim to be among the top three DeepTech locations in the world. To achieve this, we need to create a robust, dynamic, and internationally connected ecosystem. Germany offers ideal conditions for this, thanks to our strong industrial base, particularly in the automotive and mechanical engineering sectors, as well as in high-tech manufacturing. Furthermore, Germany has an excellent research landscape and a pool of highly qualified talent, especially in technical disciplines. Universities and research institutes also actively support technology transfer and innovation: Germany ranks second in the world for patent applications, accounting for 13 percent of all new patents in 2023. Support from targeted government initiatives, such as the Federal Agency for Jump Innovations (SPRIND) and others, is also a plus.

However, we are not yet fully leveraging this unique potential. Currently, only about 2 percent of global DeepTech funding is directed towards German startups, and only 3 of the 100 highest-funded DeepTech startups worldwide are headquartered here. By the end of the decade, we aim to increase the number of DeepTech unicorns to at least 30. Additionally, by 2030, there should be at least 500 spin-offs from universities and research institutes, and early-stage investment in DeepTech should rise to at least 1 billion euros. The instruments that can be used for this are listed in Chapter 2 ("Finances") in section (A): Early Stage.

#### **Our Greatest Challenges**

Establishing Germany as one of the top three global locations for DeepTech by 2030 is an ambitious goal. We see numerous challenges across four central pillars: financing, market entry, technology transfer, and regulation. For each of these challenges, we also know measures to address them. First, however, we will outline the various difficulties we face in universities, at the founding stage, in investments, and during market entry:

#### 1. Limited Access to Financing

A significant—if not the largest—barrier for German DeepTech startups is access to sufficient capital. There is particularly a lack of risk-taking investors for scaling phases, especially during Series B and Series C funding rounds.<sup>29</sup> This significantly complicates the scaling of these startups. Consequently, they increasingly migrate abroad during later funding rounds, particularly to non-European countries. As we have already

described in the chapter on "Financing", this results in dramatic economic damage for Germany.

Additionally, the structures of government funding programs are often complex and inefficient, unnecessarily complicating access to essential financial resources that already exist. The limited use of tax incentives for research and the lack of transparency in the funding landscape exacerbate the situation. Furthermore, the limited exit opportunities in Germany and across Europe are also problematic.

## 2. Market Entry Barriers Specific to DeepTech

DeepTech startups often face barriers to market entry or initial customer acquisition, such as unfavorable selection criteria in public tenders. We have already addressed this issue in the previous chapter, "Role of the State". Public tenders are often designed (with requirements regarding age, minimum revenue, etc.) in a way that excludes these startups from participation.

In addition, there are structural barriers and a lack of mindset that hinder industrial partnerships. This is especially true for the German mid-sized companies, which have only partially recognized how attractive it is to collaborate with or invest in startups, despite this being a vital long-term source of innovation for established companies. These barriers prevent a smooth integration of startups into the industrial value chain and impede their market opportunities.

#### 3. Barriers in Technology Transfer

Founding activities at universities and research institutions are often not sufficiently supported because there are little to no incentive systems for spin-offs. The processes for transferring intellectual property from research to startups are currently often dysfunctional and time-consuming, complicating the commercialization of research results. While German universities pub-

lish at the same level as U.S. universities, they significantly less frequently engage in spin-offs. This stems from a lack of entrepreneurial orientation within academic institutions. Another major obstacle is the restricted access to critical resources and infrastructure necessary for the development and scaling of DeepTech innovations.

#### 4. Complex Regulatory Frameworks

Industrial regulation is currently adjusted too slowly to keep pace with rapid technological advancements, which overall hampers the speed of innovation. Existing regulatory frameworks, such as sandboxes and approval processes, lack agility, further unnecessarily slowing down startups. Additionally, lengthy and bureaucratic visa processes for international professionals hinder access to urgently needed global talent, as we have also described in a previous chapter on "Talent". There is neither focused DeepTech regulation nor an organized exchange between the state and industry on this issue.

#### **How We Can Achieve Our Goals**

That concludes the problem descriptions. Now let's move on to the solution measures along the four pillars: financing, market entry, transfer, and regulation (see depiction).

## Make Germany the Global Leading Hub for Entrepreneurs to Commercialize and Scale DeepTech via Startups

Facilitated Access to **Financing** 

Investors specifically for late-stage growth phases (including expansion of DTCFs)

Simple and clearly structured performance-based **funding programs** 

**Promotion of FOAK investments** in
DeepTech with low

technical risk

Facilitating market entry for DeepTech

Internationally connected ecosystem for global scaling/ marketing.

Strong partnerships between industry and startups in development and procurement

Increase in public procurement from DeepTech startups

Strong focus on **technology transfer** 

Clear and simplified IP transfer processes from universities to startups/industry

Incentives for spinoffs and a supportive mindset from universities and research institutions

Further development of **startup factories** 

Enabling and anticipatory **regulation** 

Rapid and adequate adjustment of regulations to technological developments

Sandboxes/real laboratories as protected testing environments

Timely and targetoriented **communication** of **regulations** 

Note: DT = Deep Tech

1. Deep Tech & Climate Fonds

2. First -of-a-Kind Pruduktionsanlagen für Deep Tech Unternehmen

Quelle: 1A2030 DT Working Team

Our Solution Approach for DeepTech in Germany Along the Four Pillars.

#### 1. Facilitated Access to Financing

The existing Deep Tech & Climate Fund (DTCF) should be expanded. This would enable it to support larger financing rounds at later stages as an important co-investor, thereby contributing significantly to the scaling and international competitiveness of DeepTech scaleups (further information on mobilizing capital can also be found in the chapter on "Financing".

In addition, the increased use of performance-based funding programs<sup>30</sup> should create more incentives for DeepTech startups to efficiently achieve set goals. The state provides a funding guarantee that only applies if the defined milestones are actually achieved: this not only promotes goal-oriented work but also minimizes potential financial risks for the public sector.

Furthermore, we want to promote FOAK<sup>31</sup> investments in DeepTech with relatively low technical risk, such as for the establishment of production capacities. The introduction of government guarantees, loan guarantees, and de-risking measures would strengthen confidence in FOAK investments and attract more private investments. This would also serve as a response to international initiatives such as the "US Inflation Reduction Act" and build effectively on existing credit guarantee programs (EIB Venture Debt or NZIA/GDIP). Additionally, smart debt programs, such as those offered by BPI in France, could enhance the liquidity of DeepTech startups.

A greater flexibility of SPRIND is also necessary. Specifically, in addition to the SPRIND Freedom Act, the already expanded financial autonomy should be enhanced through multi-year budgets, and duplicate oversight structures should be eliminated. Furthermore, the self-management rate (currently at 30 percent) should be increased, allowing for the retention of all own revenues. This will enhance the efficiency and effectiveness of the measures.

The use of the tax research allowance must also be expanded. Despite substantial improvements to the allowance recently, its utilization by startups in practice is still significantly lacking. To address this, communication about the programs should be intensified to increase the usage rate among DeepTech startups. The biotech sector serves as a positive example, as it has already utilized the tax allowance on a larger scale.

Additionally, existing funding programs should be presented more transparently and simply. In this context, the BMWK funding database needs an update. Indirect funding opportunities should also be communicated more clearly and established through standardized application processes. Here, AI can accelerate the process and make it more efficient for all parties involved. This will minimize effort and maximize chances of success.

#### 2. Facilitate Market Entry for DeepTech Startups

We need to increase public procurement of DeepTech. Because there is practically never an existing (open) market for DeepTech startups, we aim to achieve a shift in public procurement practices: In the future, public authorities should consider solutions from DeepTech startups through LOIs<sup>32</sup>- or PCP<sup>33</sup> declarations whenever possible and sensible. Ultimately, purchasing innovative tech solutions can provide advantages for the state in terms of cost, performance, and its own capacity for innovation.34 A government declaration of intent also greatly aids in the search for investments and talent. Furthermore. public tenders for "(Pre-)Commercial Procurements" should be designed to be startup-friendly. Ideally, startups should be actively involved

in tenders (e.g., IRIS<sup>2</sup>) and not excluded by high requirements (such as minimum revenue or total time on the market).

Both startups and the mid-sized sector benefit from their cooperation. However, we are still not fully tapping into this potential. Therefore, the German mid-sized companies should be incentivized to engage more strongly in the DeepTech sector. This can be systematically achieved through cooperation vouchers, the development of standardized contracts, or the expansion of networking programs.

The strict separation between military and civilian research and development (R&D) and procurement should also be dissolved. This would allow us to enhance spillover effects and dual use, promoting projects that lack civilian funding or investment mechanisms. An international example of this is DARPA in the U.S., which successfully combines military and civilian innovations. Similarly, UNIT 8200 in Israel exemplifies how a military IT/cyber unit has contributed to the development of the entire AI/IT ecosystem. This dissolution would not only strengthen the development of innovative technologies but also contribute to greater security. Given the changing security situation in Europe and current geopolitical challenges, this would represent a win-win situation.

#### 3. Strong Focus on Technology Transfer

A central lever for technology transfer is the greater prioritization of spin-offs at universities and research institutions. Better incentive systems need to be created: we propose that universities commit to allocating at least 1 percent of their total budget (including third-party funding) for spin-offs. Specifically, technical universities should be held accountable for developing technologies related to DeepTech. This measure would direct significantly more financial resources into supporting spin-offs, which would also include more specific training programs, events, infrastructure, and resources.

<sup>32)</sup> A Letter of Intent (LOI) is a non-binding declaration of intent that outlines the basic terms and intentions of a proposed agreement between the parties.

<sup>33)</sup> A Pre-Commercial Procurement (PCP) is a procurement pro-

Additional funding should be provided for universities that meet or exceed this self-commitment. This creates further incentives and reduces potential conflicts over resource distribution within the universities. Given constitutional requirements, the federal states are primarily responsible, but the federal government should support these developments with smart measures. In addition to simply measuring the one-percent budget target, universities should also be assessed based on the success of the initiative. We propose systematically and permanently tracking the number of spin-offs per university to create a common basis for measurement.

Furthermore, we need to create more incentives for spin-offs among professors. Often, technology transfer is already established as a third pillar alongside research and teaching<sup>35</sup> in the higher education laws of the states. However, in practice, there is no equality among the pillars. As a result, we miss opportunities that arise from inventions. The independence of research and teaching must be ensured. But without a stronger emphasis on technology transfer, especially regarding spin-offs, the necessary commercialization will not succeed.

The goal must be to align professorships more towards an entrepreneurial mindset and to consider entrepreneurship experience in new appointments, so that the third pillar is reflected in the professorships. Incentives could include sabbaticals for professors who participate in startups, as well as for student entrepreneurs themselves.

In this context, the IP transfer should also be simplified and processes expedited. Too often, IP transfer remains a bottleneck for spin-offs. In addition to consistently designing contracts to preserve liquidity and support entrepreneurship, the procedures need to be accelerated. A timeline of twelve weeks should be sufficient for the process. The "IP Transfer 3.0" program (a coalition of nearly 20 universities, the Stifterverband, and SPRIND) is driving important simplifications and providing guidance. The German Startup

Association is also constructively contributing to the debate together with the TransferAllianz.

It is important to quickly and efficiently establish practical and legally secure solutions across the higher education landscape. This means creating extensive standardizations while not overlooking industry-specific peculiarities. This could also include the allocation of virtual shares.

Research institutions should be (financially) motivated to implement these standards to accelerate technology transfer. The phasing out of the "WIPANO Program" during this legislative period undermines these efforts. This needs to be urgently addressed once again.

In addition, the yet-to-be-selected startup factories<sup>36</sup> should be further developed in a targeted manner in a second step. This could be achieved, for example, through new, attractive DeepTech scholarships specifically tailored for students and focused on key technologies such as artificial intelligence, biotechnology, and quantum computing. This would further strengthen the respective locations beyond the currently planned framework and leverage existing collaborations with industry for cluster development. To sustainably ensure the success of the startup factories, the federal states should actively be involved with their respective regional development strategies.

There is also a need for further incentives to professionalize Technology Transfer Offices (TTOs). This would allow for the exchange of best practices, comparison of the performance of different TTOs, and identification of areas for improvement. Ultimately, the use of institutional resources should be increased. A nationwide guideline for usage agreements and a central platform for transparency regarding resources could promote efficient utilization.

Finally, the establishment of the German Agency for Transfer and Innovation (DATI) should be promptly initiated with the aim of enhancing

### **DeepTech**

transfer activities in Germany both quantitatively and qualitatively. By specifically promoting transfer activities, DATI can ensure that transfer is not only recognized as an equal third pillar alongside research and teaching but is also actively lived in everyday university life. DATI must closely network with the existing DeepTech ecosystem and take the concerns of DeepTech spinoffs into account when designing its funding initiatives. This should also be ensured through appropriate representation in DATI's committees, as well as the compatibility of DATI funding with other forms of financing.

### 4. Create Enabling and Anticipatory Regulation

Regulation for DeepTech technologies needs to become clearer and more agile, for example, through the establishment of a novel "Advisory Council." This council should reorganize and coordinate the exchange between the DeepTech ecosystem and the federal government or relevant regulatory authorities. The focus here is primarily on the proactive transfer of current and upcoming topics from the DeepTech ecosystem into policymaking. Such institutionalized exchange helps to quickly address issues, promote coordination with industry-specific funds, 37 and modernize regulation. This is essential to increase the overall speed of adjustments to regulation.

Once new regulations have been developed, they must be communicated early to the appropriate stakeholders. For this purpose, there should be a "target-oriented" guidance outlining the key points of regulation for DeepTech startups and investors. This ensures planning certainty. Such proactive communication from the government is an important signal and builds trust within the DeepTech ecosystem.

Another measure is to enable and scale living labs in a timely manner. Experimentation clauses should be anchored in existing laws and defined as broadly as possible to avoid being limited to specific projects. This allows innovative solutions to be tested and brought to market more quickly.

#### **Quick Wins for the Current Legislative Period:**

- Make the funding landscape more transparent and simpler.
- Further advance and widely communicate the standardization of IP transfer models.
- Pass a living laboratory act and create more space for DeepTech innovations.
- Enable early and target-oriented communication of regulations.



# 05 ClimateTech



### ClimateTech

We live in a time of multiple and interconnected global crises. The ever-increasing risks of the climate crisis, species extinction, and the consumption of natural resources present us with enormous challenges. Startups are the engine for the urgently needed transformation of the economy. This is particularly true for the ClimateTech sector: nearly 30 percent of startups in Germany are addressing the climate crisis with their innovations.<sup>38</sup>

We now have the opportunity to add a new, forward-looking chapter to the success story of "Made in Germany" with groundbreaking climate technologies. In doing so, we achieve three objectives at once: we contribute significantly to decarbonization by 2045, shape the transition to a climate-neutral economic system, and strengthen our domestic location.

### ClimateTech: A New Vision for "Made in Germany"

To achieve all this, we need ambitious goals—and determination in their implementation.

Currently, there are only 6 climate unicorns in Germany. This is insufficient to become a global leader in climate technologies. By 2030, we aim to at least double this number and establish at least one German top "Climate Venture Capitalist" operating globally. Furthermore, one of the three leading universities worldwide in climate innovations should be located in Germany.

Currently, there is significant political uncertainty in the relevant lead markets, hindering the scaling of ClimateTech innovations in Germany. Additionally, there is a lack of a central industrial policy that translates the EU's "Net-Zero Industry Act"<sup>39</sup> into decarbonization strategies and sets clear goals for sectors such as energy, mobility, buildings, and the FALU sectors.

The federal government should particularly highlight the opportunities presented by this transformational task, as it represents a promising investment program, as exemplified by the impressive IRA in the U.S.<sup>40</sup> For a "ClimateTech Innovation Program Germany," we therefore propose the following six measures:

### 1. Establish Task Forces at the BMWK

To support innovative technologies, it will be crucial to institutionalize the collaboration between expertise from (startup) industry, research, and politics at the same table. We need an enabling environment for ClimateTech that sets specific incentives, identifies regulatory barriers, and ideally eliminates them.

For this institutionalized dialogue, we propose establishing results-oriented task forces. These should be organized by the Federal Ministry for Economic Affairs and Climate Action (BMWK) and bring together relevant experts from the aforementioned target groups. Their primary focus must be on analyzing innovation needs and developing a cross-sectoral metric. We will elaborate on both tasks in the following paragraphs.

### 2. Conduct a Comprehensive Analysis of Innovation Needs

First and foremost, the task forces must analyze the actual challenges related to CO<sub>2</sub> reduction tasks. Only in this way can they identify existing and new ClimateTech innovations according to need. The Federal Climate Protection Act defines the decarbonization goals in this context.

Additionally, the task forces must gain an overview of the current landscape of ClimateTech startups and established industry companies to

uncover potential synergy and cooperation effects. This process should, on one hand, highlight the scaling potential of mature technologies that primarily require growth capital, and on the other hand, quantify the available capital for developing new technology classes until they reach market readiness. These technology classes include battery recycling solutions, closed carbon cycles, and fusion energy. Funding opportunities for innovations that strengthen the resilience of damaged ecosystems<sup>41</sup> should also be considered to facilitate adaptation to climate change in the coming decades using available startup technologies.<sup>42</sup>

# 3. Create New Incentives for Innovative Climate Technologies with a Cross-Sectoral Metric

Additionally, a central cross-sectoral metric should be developed to measure the CO<sub>2</sub> reduction potential of climate technologies. The task forces can draw on existing regulatory proposals for guidance. A practical example is provided by the World Fund with its Climate Performance Potential, which measures the ability of startups to achieve significant positive impacts on climate protection.<sup>43</sup> It is important that they not only consider current emissions but also account for future emission reductions addressed by an innovative solution, similar to a growth projection or a return-on-investment calculation.<sup>44</sup>

In addition to the described metric, appropriate incentives are needed for the development and deployment of innovative climate technologies:

innovations with significant CO2 reduction potential should be supported through a "Climate Performance" bonus program. This program still needs to be developed. By 2030, however, our goal is for one in four companies receiving this support to be a startup or scaleup. An expanded research allowance or tax incentives for revenues from climate technology patents can also incentivize the development of ClimateTech. When innovative climate technologies are implemented in existing industrial facilities, this should be rewarded with targeted grants or voucher programs for industrial companies. While this would primarily benefit established companies, such investments would create new scaling potential for ClimateTech startups.

As a final component, a realistic CO<sub>2</sub> price of €180 should be introduced to penalize increased emissions in production. This would also make investments in climate-neutral technologies more attractive.<sup>45</sup>

In our view, the combination of targeted incentives and a new pricing mechanism represents a worthwhile investment program for the economy. Moreover, as significant growth in international CO<sub>2</sub> markets is expected in the future, carbon-neutral production of goods will provide a crucial competitive advantage.

# 4. Secure Financing for Future-Oriented Technologies

Many ClimateTech startups are based on Deep-Tech and are therefore capital-intensive (see

<sup>41)</sup> The focus here is essentially on developing nature-based substitutes for fossil raw materials and contributing to the removal of CO<sub>2</sub> from the atmosphere, particularly through carbon dioxide removal (CDR) technologies.

<sup>42)</sup> This primarily focuses on promoting startup innovations from the AFOLU sektors.

<sup>43)</sup> World Fund: How to measure the climate performance potential (2021)

<sup>44)</sup> Examples for metrics:

<sup>• &</sup>lt;u>DIN Spec 90051-1</u> is a standard for the sustainability assessment of startups, developed in 2020 under the leadership of the German Institute for Standardization and with the involvement of the German Startup Association. This standard could be expanded into a norm

Assessing the Climate Performance Potential of Start-ups: Insights and Guidance on Environmental Sustainability Assessment of Young Ventures is an evaluation of the scientific literature (particularly the aforementioned DIN Spec) and a "Climate Performance Potential" methodology developed by the venture capital firm "World Fund" in this context.

Pre-Investment Considerations is a collection of methodological best practices from the association "Project Frame," which represents 345 venture capital and private equity investors managing a total of \$670 billion in capital.

<sup>•</sup> Impact Forecast is a software tool that utilizes the lifecycle indicator database "OpenLCA" to provide startups and investors with an easy way to quantify their LCA-based impact and have it verified by consultants. A tailored version is already being developed in collaboration with GIZ and "Climate KIC" for relevant innovation-supporting programs in Europe, Africa, and Latin America.

The Article 9 requirements of the EU Taxonomy for so-called "dark green" funds aim for evidence-based metrics that consider not only climate protection but also adaptation and biodiversity. However, they do not provide a methodology for calculation. We propose that a developed metric should be compatible with these requirements.

<sup>45)</sup> The Federal Environment Agency even recommends a CO2 price of up to 215 euros per metric ton for 2030

also the previous chapter on "DeepTech". To achieve our current climate goals, investments need to be increased by at least 590 percent.<sup>46</sup> This requires significant and diverse efforts.

For scaling, specific funding instruments, guarantees, or loan guarantees, such as for the establishment of FOAK facilities, are of central importance. The new funding guidelines for the decarbonization of the mid-sized sector published by the Federal Ministry of Economic Affairs in August 2024 is a step in the right direction in this context—but it is not a decisive lever for startups. In addition to our recommendations from the chapters on "Financing" and "DeepTech," we propose the following tailored measures:

In addition to increasing the "DeepTech & Climate Fund" (DTCF), we recommend orienting the fund's financing structure along the entire "Climate Finance Stack" and linking it to impact and financial KPIs.<sup>47</sup> To accelerate the establishment of often hardware-based ClimateTech startups, the DTCF could be expanded to include a "Green Infrastructure" component.

In addition to pure funding instruments, the development of know-how and tools for ClimateTech investments still needs improvement. For example, an education program from KfW could help in this regard. This could also convey standards for evaluating ClimateTech and impact criteria (see section 3 on "cross-sectoral metrics"). Databases of funding programs should be made significantly more transparent and user-friendly (see also the chapter on "Deep-**Tech**"). Programs specifically for ClimateTech startups should be clearly marked: currently, a combined search for the terms "startups" and "climate" in the central funding database of the federal government, states, and EU yields only seven (!) entries.

The use of smaller, low-threshold funding amounts (Small Grants) for idea development and validation of innovations with minimal administrative effort should also be increased.

Additionally, the "Natural Climate Protection" action program of the Federal Ministry for the

Environment should be expanded to include ClimateTech startups.

Furthermore, startups and scaleups should have easier access to funding for (partly regional) structural transformation. Additionally, the practices of public procurement should be reorganized. The key term here is: "the state as a customer" (see the chapter on "DeepTech").

# 5. Promotion of Spin-Off-Oriented Research Programs

In the ClimateTech sector, the transfer from research and science plays a significant role. We can build on a strong starting position: Germany and Europe are global leaders in patent applications in the climate sector, accounting for nearly 30 percent of global applications, with almost half of those coming from Germany. In comparison, China only represents 10 percent. We should better leverage this enormous potential. To do so, we need to specifically promote the transfer from the ClimateTech sector. We propose establishing a central Climate Office to support Technology Transfer Offices (TTOs) in the field of climate innovations. Startup factories, currently being selected, can also play a special role here: at least one startup factory should have a clear focus on climate technologies. This would create an international beacon for the spin-offs of ClimateTech startups.

### 6. Create Enabling Regulation

High bureaucratic requirements and unclear, lengthy approval processes also pose significant challenges for ClimateTech startups. The proposed "Advisory Council" (see the chapter on "DeepTech") can help address this issue.

### Quick-Win für die laufende Legislaturperiode:

 Make databases of funding programs more transparent and user-friendly, so that ClimateTech startups can more easily connect with funding opportunities.

# **OB** Diversity



# **Diversity**

The startup ecosystem stands for diversity and openness in many ways. Talents from around the world have found their place here. At the same time, there is a significant need for improvement in this area: women are massively underrepresented among founders, and the considerable potential of founders with a migration background ("Migrant Founders") is far from being fully utilized. There is also much room for improvement regarding social background and age.

On one hand, it is about equal opportunities as a central aspect of social cohesion. On the other hand, strengthening women, founders from abroad, and reducing additional barriers is also economically necessary—promoting diversity in the German startup landscape means unleashing the full innovative potential of our society. Furthermore, women are more likely than men to found businesses in socially and culturally relevant areas, thereby shaping our community in a lasting way.

We need a startup ecosystem that empowers all societal groups to found businesses under the best possible conditions. Moreover, we require a culture of openness and diversity that paves the way for the best talents from around the world. This necessitates a supportive, encouraging, and permeable societal structure.

There is no simple solution to this issue. Instead, changes are needed in various areas. The focus of this chapter is—somewhat exemplarily—on women and migrant founders, with the awareness and understanding that diversity cannot be restricted or definitively defined, but rather encompasses countless facets and dimensions.

# Female Founders in the German Ecosystem

Currently, only 21 percent of founders are female. By 2030, we aim to increase this share to 30 percent. Additionally, there is a significant gender gap in accessing capital<sup>48</sup>, and women are also significantly underrepresented among investors. For instance, the proportion of female business angels is currently only about 13 percent.<sup>49</sup>

Many factors prevent a higher number of female founders and investors. These range from too few role models and nearly nonexistent networks to a lack of female representation at decision-making levels.

# Entrepreneurship or family? Entrepreneurship and family!

The compatibility of entrepreneurship and family is, to put it mildly, in need of improvement. Often, the timing of a potential startup founding coincides with the timing of starting a family. This wouldn't be an immediate problem if there were widespread offerings for childcare or maternity protection for self-employed individuals. However, such provisions do not exist.

In the startup sector, as in the rest of the workforce, childcare and family responsibilities often fall more heavily on women. As a result, female founders with children have, on average, six fewer hours of work time per week available for their startups.<sup>50</sup> But our aging society urgently needs a broad succeeding generation.

schutz für Selbständige (2024)

Therefore, decisive measures are needed that must be supported collectively. Maternity protection should take into account the specific needs of female founders, as this will create incentives for a higher willingness to start businesses. To achieve genuine compatibility, the regulations regarding parental benefits also need to be rethought. The current framework primarily focuses on employed individuals.

### **Improve Maternity Protection**

In Germany, self-employed women (including founders and entrepreneurs) generally have no entitlement to statutory maternity leave or maternity benefits: the provisions of the Maternity Protection Act (MuSchG) do not apply to them. They are only entitled to sickness benefits, which must be secured in advance through the purchase of additional insurance with their respective health insurance provider. Current surveys indicate that very few are even aware of this insurance option. Therefore, as a first step, it is essential to establish an obligation for health insurance companies to provide information about sickness benefits in the event of maternity.

To provide comparable coverage to that received by employees under maternity protection, self-employed individuals must be integrated into the "U2" contribution.<sup>52</sup> The expansion of this solidarity contribution system would provide financial security for founders, entrepreneurs, and self-employed women in the weeks following childbirth. According to calculations by the Institute for SME Research, this would amount to about 50 to 70 euros per year for each self-employed individual. A small amount with a significant impact on achieving better compatibility.

### **Adjust Parental Benefits**

The required prediction of order volume and working hours during the planned benefit period of "ElterngeldPlus" is highly error-prone due to

external factors (economic conditions, order volume, etc.). This often leads to unexpected repayments, which can put self-employed individuals in financial distress. As a result, some self-employed people even forgo parental benefits altogether. This is an absurd outcome that is often perceived as undignified by those affected.

It simply does not align with the nature of self-employment to track working hours, fill out time sheets, and sign off on them. The requirement for forecasting must be abolished. This would reduce bureaucracy around ElterngeldPlus and align it better with the working reality of self-employed individuals. If no agreement can be reached on this, at least a more flexible calculation of working hours should be allowed to cushion peaks and troughs in workload: Instead of a weekly average of working hours and order volume, we believe that a quarterly average would be sufficient.

In general, the assessment basis must also be adapted to the working reality of self-employed individuals: while the income of the last twelve months before the birth of the child is used for employed individuals, self-employed people rely on the profit from the last approved tax assessment period, typically the last calendar year. Due to unpredictable fluctuations or drops in orders, there can be negative income developments that adversely affect the amount of parental benefits. Therefore, we demand a choice when applying for parental benefits: either the income in the twelve months before the birth (analogous to employed individuals) is used as the assessment period, or the average annual income over several years, such as the past 36 months.

### **Promote Childcare**

The compatibility of entrepreneurship and family can only succeed if childcare is implemented as equally as possible. Incentives are needed for this: for example, the maximum parental benefit could be paid out only with a nearly equal division of parental leave.

We also propose expanding the deductibility of childcare costs as business expenses and/or operating expenses: the two-thirds calculation, which currently allows only up to two-thirds of actual childcare costs to be considered, should be abandoned. Ideally, the cap (currently set at €4,000) should be completely lifted—or at least increased to €6,000. Childcare costs should be fully deductible.

A "classic" issue we cannot overlook is the current shortage of approximately 430,000 daycare places in Germany.<sup>53</sup> This is a fundamental problem. In our case, comprehensive, reliable, and high-quality childcare from the first year of life would allow founders to work flexibly. Therefore, we demand just that.

### **Key Lever: Improve Access to Capital**

Good access to capital is crucial for the success of startup founding. There is still a glaring imbalance in the allocation of venture capital: 84 percent of female founders report that they believe they are scrutinized more critically in investment decisions than their male counterparts.<sup>54</sup>

There is a gender bias in investment decisions. To address this, we need more female investors. Currently, only 14 percent of top positions in VC funds in Europe are held by women. This imbalance comes at the expense of female founders, as only about 2 percent of VC funding goes to all-female founding teams. The "Emerging Manager Facility" (EMF), a module of the German Future Fund ("Zukunftsfonds"), is an important step toward reducing this imbalance.

Creating role models has a signaling effect, and diverse decision-making positions lead to more diverse allocations of venture capital. Therefore, it is crucial to consistently promote diversity at the top of publicly and publicly funded venture

capital funds. Targeted funding programs and mentoring offerings (e.g., the "Scholarships for Female Investment Managers" program in the BMWK action plan for more female entrepreneurs in the mid-sized sector) can help achieve this.

# Expand Entrepreneurial Education for Female Students in Schools and Universities

Education is a crucial key to promoting a diverse ecosystem. Female founders are less likely than their male counterparts to have a STEM background. Therefore, it is essential to strengthen the interest of young girls in STEM subjects from an early age. This should be achieved through workshops, competitions, and partnerships between schools and relevant role models.

Female students should be introduced to self-employment and entrepreneurship as career options while still in school. This pathway must be further pursued in higher education, with accessible offerings that spark interest in founding businesses. These measures should be supported by additional activities, such as summer academies, visits from successful female founders, workshops, "Girls Days," and innovation competitions. Tailored funding programs, such as EXIST Women, are an important component and should be continued after evaluation and continuously expanded with more specific programs.

### **Migrant Founders**

Over 20 percent of founders in Germany have a migration background.<sup>57</sup> The first generation, in particular, is characterized by an above-average level of qualification and strong growth ambitions.<sup>58</sup> However, migrant founders face various challenges in Germany. First-generation migrant founders often feel disadvantaged

57) Note: A migration background is present when a person or at least one parent was not born with German citizenship. If the person was not born in Germany, they are referred to as first generation, while those born in Germany are considered second generation.

58) German Startup Association (German Only): Migrant Foundation (2023)

<sup>53)</sup> Bertelsmann Stiftung (German only): <u>Mehr Plätze und bessere</u> Qualität in Kitas bis 2030 – wenn jetzt entschlossen gehandelt wird (2023)

<sup>54)</sup> German Startup Association (German only): <u>Female Founders</u> <u>Monitor</u> (2022)

<sup>55)</sup> Invest Europe: The VC factor (2024)

<sup>56)</sup> German Startup Association (German only): <u>Female Founders Monitor</u> (2022)

when interacting with authorities, banks, and in building networks.<sup>59</sup> Since language is perceived as a critical barrier, it is necessary for authorities, banks, and other key institutions for startups to communicate in English. English should be established as a second official language (see also the chapter on "Talents").

## Create Role Models, Promote Visibility, Strengthen Networks

"You can't be what you can't see!" This slogan emphasizes that I can only choose from options I know. As a crucial component in promoting better conditions for migrant founders, we propose to specifically showcase successful founders with a migration background through public campaigns. Visits to schools, universities, and other educational institutions are also meaningful measures. The highlighted success stories can then serve as role models.

Networks provide crucial support and guidance, playing a central role especially for migrant founders. They can help counter feelings of being unwelcome and offer a platform for sharing specific experiences and challenges. Networks such as Migrapreneur, Startup Migrants, 2hearts, Migration Hub, or Vision LAB should be made more visible and receive greater recognition.

### **Strengthen Funding Support**

There is also a need for action in the area of financing for migrant founders: the gap between the desire for and the receipt of capital is particularly large in this group. <sup>60</sup> This indicates that the enormous potential in this area has not yet been fully realized. Therefore, it is important that KfW Capital is currently working to extend the initiated EMF to include investors with a migration background. In general, particular attention should be paid to diversity in the allocation of state funding programs and grants, and this should be documented accordingly.

### **Social Background of Founders**

Another important aspect that is often not sufficiently considered is the social background of founders. The statistics indicate that significant barriers exist in this area as well: startup founders disproportionately come from families with an academic and/or entrepreneurial background. A large portion also holds an academic degree themselves (85 percent). This shows that role models have a significant impact. Thirty-eight percent of founders have at least one parent who is self-employed, with 24 percent of those running businesses with employees. Thus, there remains enormous potential within the entire educational landscape that can greatly advance the German startup ecosystem.

If we want to achieve more startup foundations in Germany, we need to promote the option of entrepreneurship much more broadly. This means that the topic of entrepreneurship must not only be firmly anchored in the entire education system, but we also need visible role models. For this, networks must be expanded and made more accessible.

### Founders with LGBTQIA+ Backgrounds

Promoting an LGBTQIA+-friendly and accepting ecosystem is becoming increasingly crucial.

Networks and role models must also be established in this context. Additionally, we all—startups, politics, and society—must work to eliminate prejudices, build platforms, and enhance visibility. Currently, the data on this topic is insufficient. Therefore, it is also necessary to gather and analyze comprehensive, regular data in the coming years to reliably measure the impact of the measures taken.

### **Quick Win for the Current Legislative Period:**

• Reform the Deductibility of Childcare Costs

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At the outset, all members (startups, scaleups, and investors) were actively involved, providing concrete proposals during the process. Central to this were the task forces: nearly 100 contributors significantly shaped the content of the agenda across six task forces focused on the chapters of Talents, Financing, Role of the State, DeepTech, ClimateTech, and Diversity. Through

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# About the German Startup Association

The German Startup Association (Bundesverband Deutsche Startups e.V.) is the voice of startups in Germany. It represents their interests to politics, the economy, and the public. With a network of 1,200 members, the association fosters exchange among startups, scaleups, investors, and established businesses. The goal of the German Startup Association is to make Germany and Europe more startup-friendly locations.

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