

# Startup Heatmap Europe

2025

Top Entrepreneurial Hubs in Europe: A Data-Driven Look at Startup Ecosystems



# On this Report



"Startup Heatmap Europe Report 2025" delves into the complex yet dynamic relationship between startup ecosystems and urban development, emphasizing how technological advancements, particularly in AI, and sustainability related challenges are shaping these ecosystems.

The report aims to provide a data-driven analysis and insights into how cities can foster an environment conducive to startup growth by leveraging their own place-based specificities.

# A message from the authors

We decided to write "**Top Entrepreneurial Hubs in Europe: A Data-Driven Look at Startup Ecosystems**" to explore the rapidly evolving relationship between urban development and startup ecosystems, particularly in the context of technological innovation and sustainable growth.

In an era where **cities** are emerging as hotbeds of entrepreneurial activity, it is crucial to understand how they can **foster** and support **startup growth** while addressing pressing challenges such as sustainability, social inclusion, and equitable economic development.

There is a growing need for **actionable insights** that can help cities, governments, and other stakeholders **support thriving startup ecosystems**. Startups play a pivotal role in job creation, innovation, and tackling modern urban challenges, from climate change to housing shortages. However, building a sustainable and inclusive ecosystem requires more than just financial investment or infrastructure; it demands **informed decision-making** driven by **real-time data and predictive analytics**.

# About



DEEP Ecosystems is the world's most active accelerator for ecosystem projects helping entrepreneurs to build up their local startup community rather than moving away.

With the Startup Heatmap Europe, DEEP in collaboration with the non-profit European Startup Initiative is measuring the growth dynamics of startup hubs since 2016 and successfully turned these insights into guidelines and strategic insights for policy makers and practitioners alike.

You can join the movement to build better, data-driven ecosystems and start accelerating your growth too.

Visit our website and get in touch:

[www.europeanstartupinitiative.eu](http://www.europeanstartupinitiative.eu)

[www.deep-ecosystems.com](http://www.deep-ecosystems.com)

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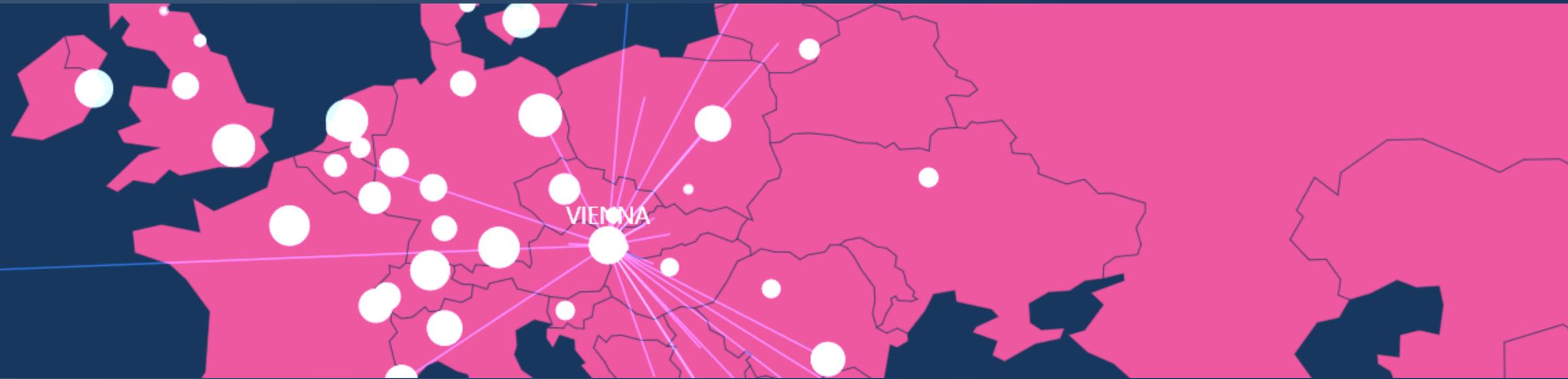
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# CHAPTER I: POPULARITY

# EUROPE'S MOST POPULAR STARTUP CITIES



Since 2016, the Startup Heatmap Europe Survey has been the longest-running analysis of founder sentiments in Europe.

Find out where the **most popular startup hubs** rank based on founders' opinions. Since 2016, we have asked founders: "*Where would you start your company if you had free choice?*" Participants can select up to three hubs from a list of over 200 cities across geographical Europe with populations greater than 250,000.

The survey specifically targets **Europe-based founders**, whom we actively invite to participate following a pre-screening process. Additionally, a smaller portion of respondents complete the survey directly on our website.

Explore the **full rankings**, detailed insights, and live updates at [www.startupheatmap.eu](http://www.startupheatmap.eu).

# TOP 10

Asking European founders to pick up to 3 cities, where they would start their company if they could choose freely from all cities in Europe, these are the most popular hubs.

Since 2016 the Startup Heatmap Europe Survey is tracking the attractiveness of cities for tech founders. London and Berlin have ever since led the ranking with both 32% of founders choosing them as a potential next destination. This is a sizeable margin ahead of Paris (19%). Amsterdam and Munich follow with 16% and Barcelona (13%) is ahead of Zurich (9%).

## Most Popular Startup Hubs 2025

- 1 London (+/-)
- 2 Berlin (+/-)
- 3 Paris (+2)
- 4 Amsterdam (+/-)
- 5 Munich (+2)
- 6 Barcelona (-3)
- 7 Zurich (+3)
- 8 Madrid (+3)
- 9 Vienna (+11)
- 10 Copenhagen (+3)



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# TOP 10 - 20

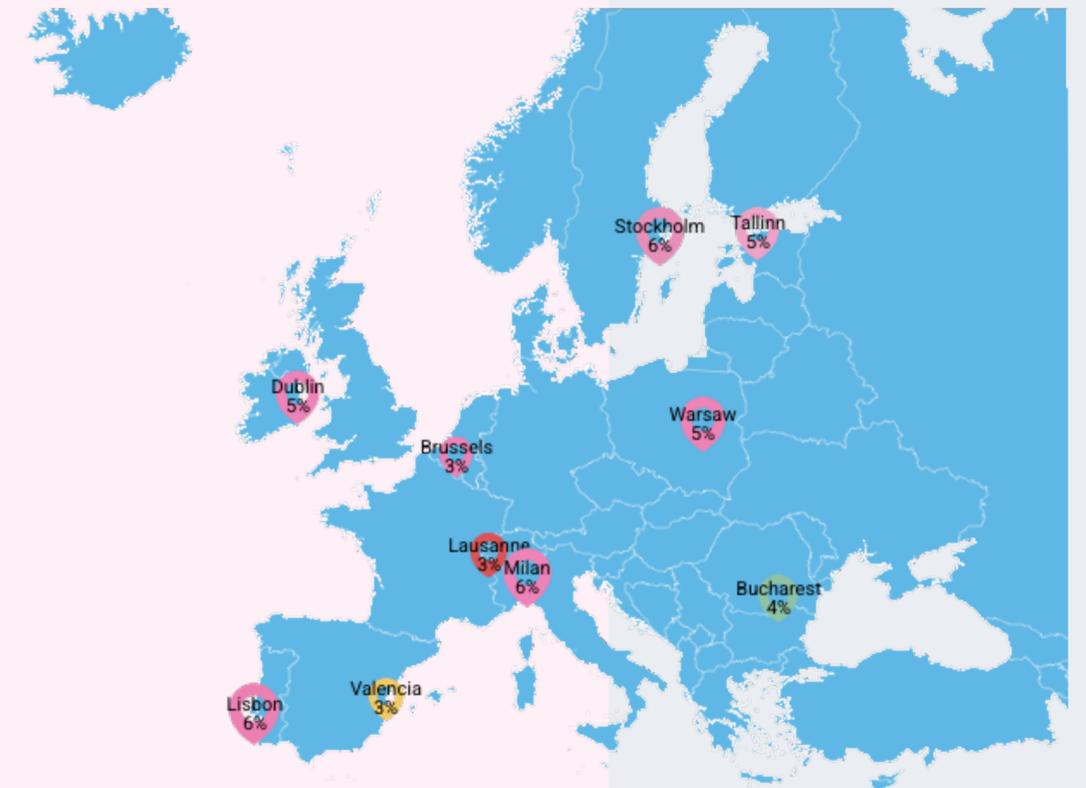
The Top 10-20 shows that many active ecosystems compete for the attention of entrepreneurs and are separated only by a few percentage points of the vote.

In 2024 15 hubs convince more than 5% of all European founders. In most cases, these hubs are not the first choice, but a secondary or third option for founders.

The Top 20 also feature three new entries: Bucharest, Lausanne, and Valencia, each receiving 3% of the preferences.

## Most Popular Startup Hubs 2025

- 11 Lisbon (-5) 
- 12 Milan (+3) 
- 13 Stockholm (-4) 
- 14 Warsaw (+/-) 
- 15 Dublin (-3) 
- 16 Tallin (-8) 
- 17 Bucharest (new) 
- 18 Lausanne (new) 
- 19 Valencia (new) 
- 20 Brussels (-3) 



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# COMPLETE TOP 50 List

Rank	City	% of Founders *	YoY Change	YoY % change
1	London	32.57%	0	-2.35%
2	Berlin	31.57%	0	-2.47%
3	Paris	18.87%	2	+6.57%
4	Amsterdam	16.33%	0	-0.51%
5	Munich	16.22%	2	+6.20%
6	Barcelona	13.12%	-3	-4.01%
7	Zurich	8.99%	3	+1.90%
8	Madrid	8.30%	3	+1.34%
9	Vienna	7.54%	11	+4.48%
10	Copenhagen	7.24%	3	+1.78%
11	Lisbon	6.45%	-5	-5.75%
12	Milan	6.15%	3	+1.71%
13	Stockholm	6.08%	-4	-3.10%
14	Warsaw	5.25%	0	-0.05%
15	Dublin	5.01%	-3	-0.45%
16	Tallinn	4.90%	-8	-4.45%
17	Bucharest	3.98%	4	+1.35%

Source: Startup Heatmap Survey 2024.

# COMPLETE TOP 50 List

Rank	City	% of Founders*	YoY Change	YoY % change
18	Lausanne	3.37%	40	+2.72%
19	Valencia	3.09%	14	+1.48%
20	Brussels	3.00%	-3	-0.38%
21	Bilbao	2.79%	23	+1.88%
22	Ljubliana	2.69%	20	+1.72%
23	Hamburg	2.45%	6	+0.64%
24	Malaga	2.36%	-5	-0.79%
25	Kiev	2.28%	30	+1.59%
26	Tel Aviv	2.25%	8	+0.68%
27	Frankfurt	2.04%	0	+0.18%
28	Wroclaw	1.91%	3	+0.16%
29	Cluj-Napoca	1.73%	9	+0.46%
30	Athens	1.72%	-8	-0.82%
31	Helsinki	1.69%	-15	-2.31%
32	Luxembourg	1.53%	-4	-0.28%
33	Prague	1.51%	-9	-0.50%
34	Gothenburg	1.50%	25	+0.92%

Source: Startup Heatmap Survey 2024.

# COMPLETE TOP 50 List

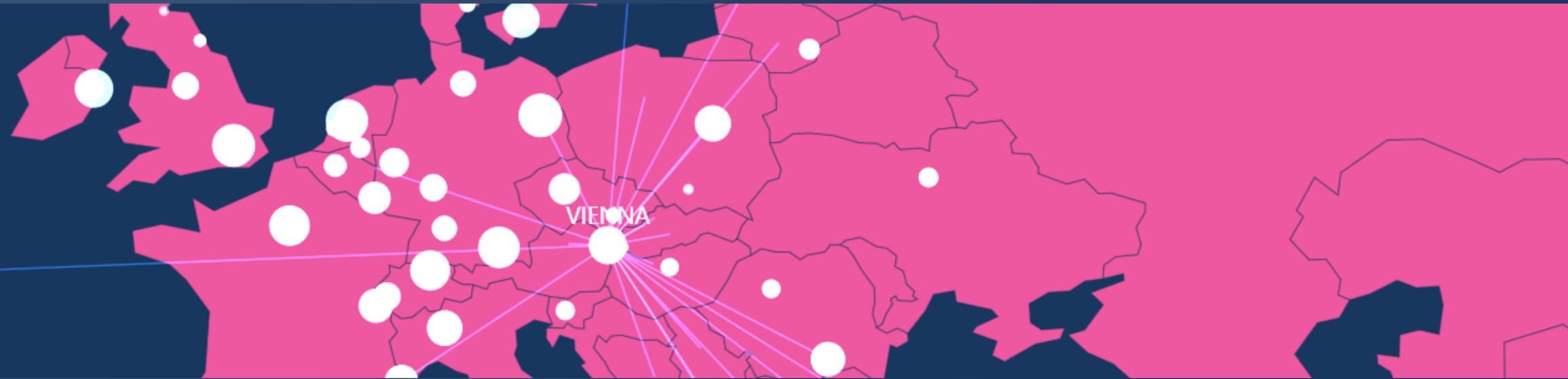
Rank	City	% of Founders*	YoY Change	YoY % change
35	Oslo	1.50%	-12	-0.64%
36	Geneva	1.50%	33	+1.06%
37	Nice	1.50%	15	+0.76%
38	Riga	1.50%	-4	-0.23%
39	Liverpool	1.50%	48	+1.50%
40	Florence	1.50%	45	+1.35%
41	Bristol	1.50%	25	+0.92%
42	Sofia	1.47%	-24	-1.73%
43	Belgrade	1.35%	-13	-0.42%
44	Eindhoven	1.33%	25	+0.89%
45	Aarhus	1.21%	20	+0.66%
46	Stuttgart	1.19%	1	+0.36%
47	Porto	1.18%	28	+0.86%
48	Brno	1.10%	20	+0.61%
49	Bratislava	1.10%	6	+0.37%
50	Nicosia	0.93%	31	+0.79%

Source: Startup Heatmap Survey 2024.

\* % Founders refers to the proportion of founders who, when asked to choose an ecosystem for starting up, selected that city.

# CHAPTER II: PERFORMANCE & MOBILITY

# PART I: EUROPE'S PERFORMANCE IN 2024



Investment trends across Europe's startup ecosystems show a significant decline after the COVID-19 market surge in 2021, indicating a shift toward stabilization and renewed growth.

Performance in the startup ecosystem is measured through key metrics such as investment levels, the number of new startups, and successful exits. Together, these indicators provide a snapshot of economic vitality and the wealth generated within the startup world.

- **Investments** reflect financial backing and confidence in innovation.
- **New startups** indicate the ecosystem's growth and dynamism.
- **Exits**, whether through acquisitions or IPOs, highlight potential returns and business maturity.

While performance is a key indicator of wealth in startup ecosystems, it does not capture the full picture. Other crucial factors, such as innovation, talent, and cultural and social dynamics, play a vital role in driving long-term success.

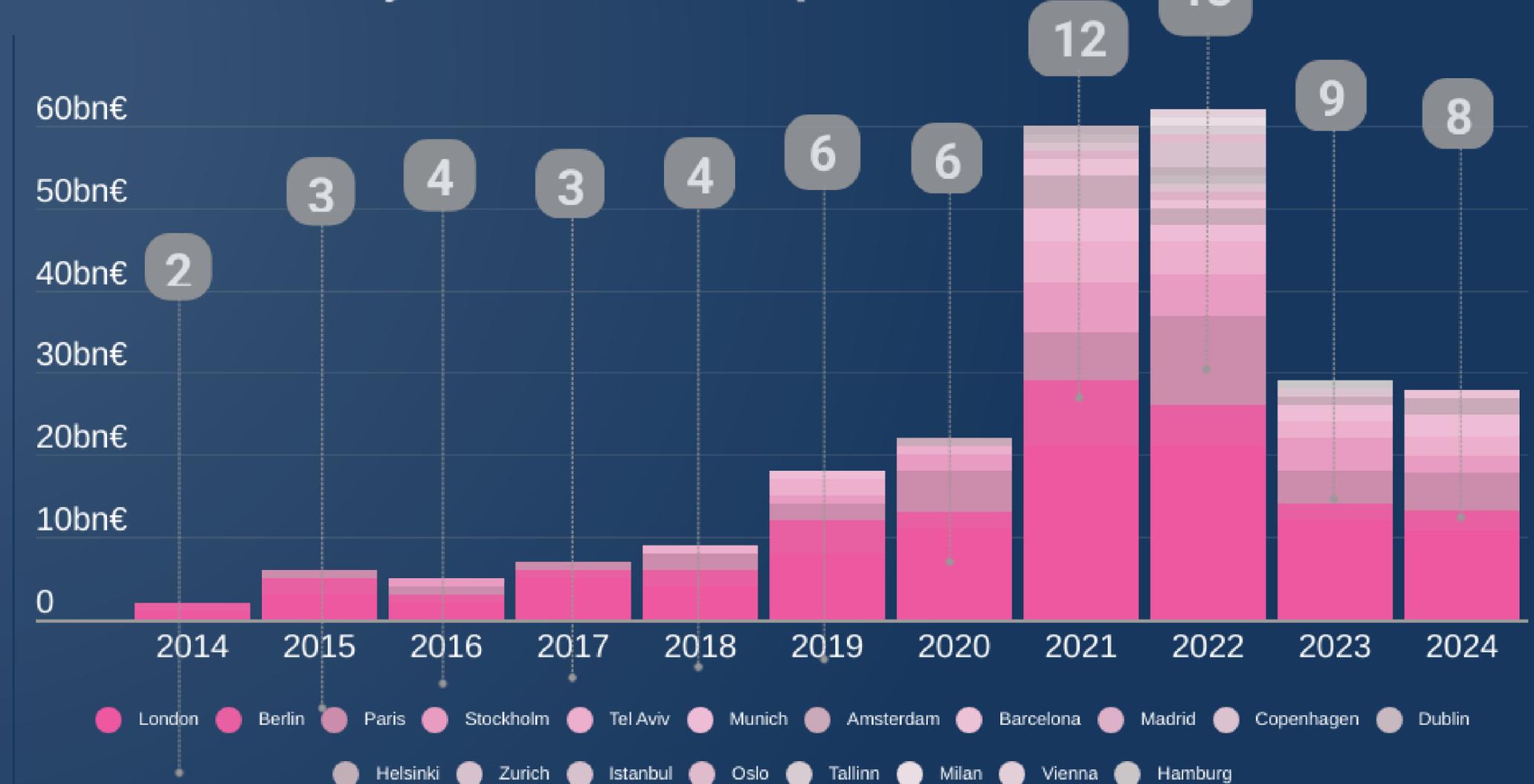
# "Unicorn" Ecosystems Raising > €1 Billion per Year

## Not Start ups, but the City as a Whole Must Become a "Unicorn"

After a peak in 2022, when the combined valuation reached its highest point at around €60bn, the total amount of investments raised dropped significantly in 2023 to below €30bn. This sharp decline suggests a cooling-off period in the European unicorn landscape, possibly driven by macroeconomic factors, reduced funding availability, or declining valuations.

The number of prominent unicorn hubs also decreased from 18 in 2022 to 9 in 2023 and 8 in 2024, indicating a consolidation of activity. While leading ecosystems like London and Berlin remain prominent, smaller hubs may have experienced setbacks, with fewer companies reaching or maintaining unicorn status.

## Unicorn Ecosystems in Europe



Source: Startup Heatmap Europe / Dealroom.co

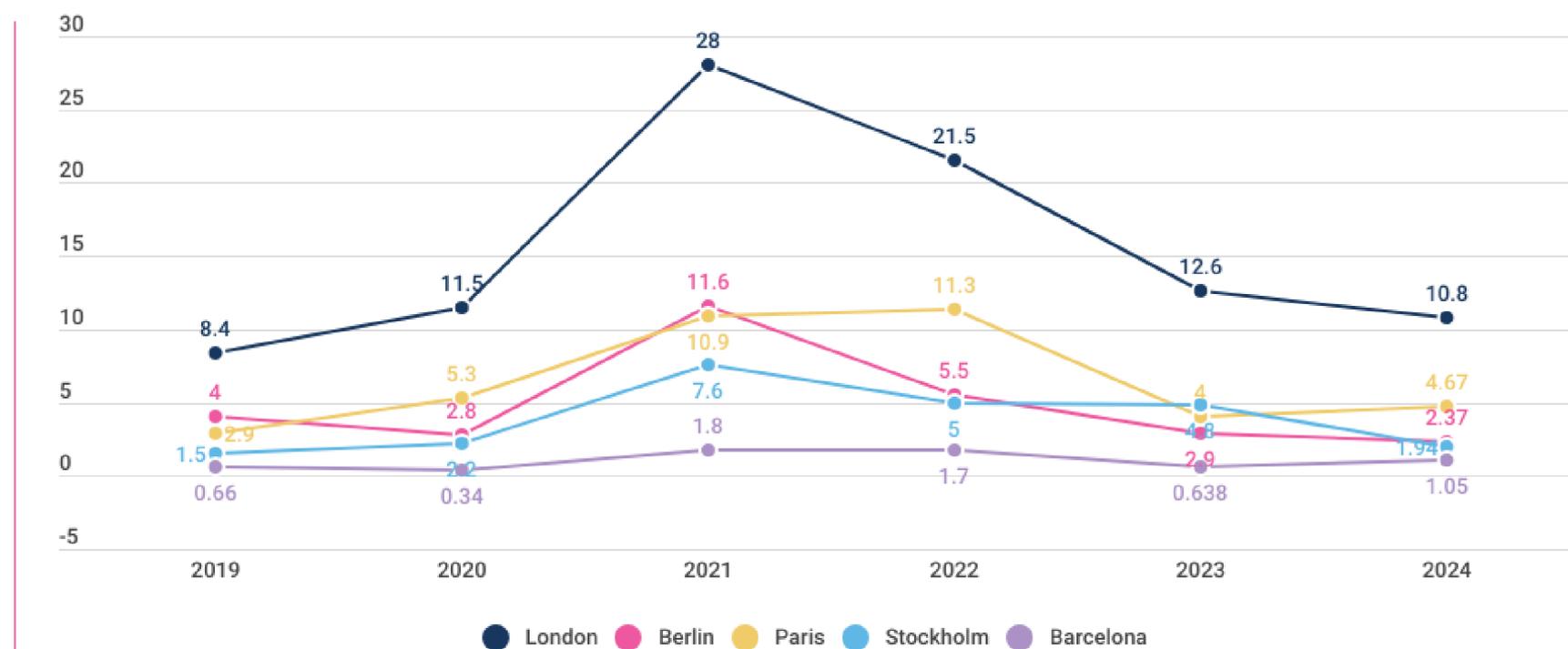
# From Peaks to Declines: The Fall of Europe's Top Investment Hubs

The graph illustrates investment trends in Europe's top five startup ecosystems, **London, Berlin, Paris, Stockholm, and Barcelona**, between 2019 and 2024. While London maintained a strong lead throughout the period, all five cities experienced significant declines after peaking in 2021, likely reflecting a market "bubble" driven by the COVID-19 pandemic.

Paris and Berlin showed steady growth early on but followed a similar downward trajectory post-2021. Stockholm and Barcelona, with comparatively smaller investment levels, saw limited growth before also declining.

Overall, the data reveals a sharp drop in investments across all five ecosystems in recent years, signaling broader market challenges or structural shifts, as well as a return to more stable conditions post-pandemic.

Top 5 investments cities (billion €)



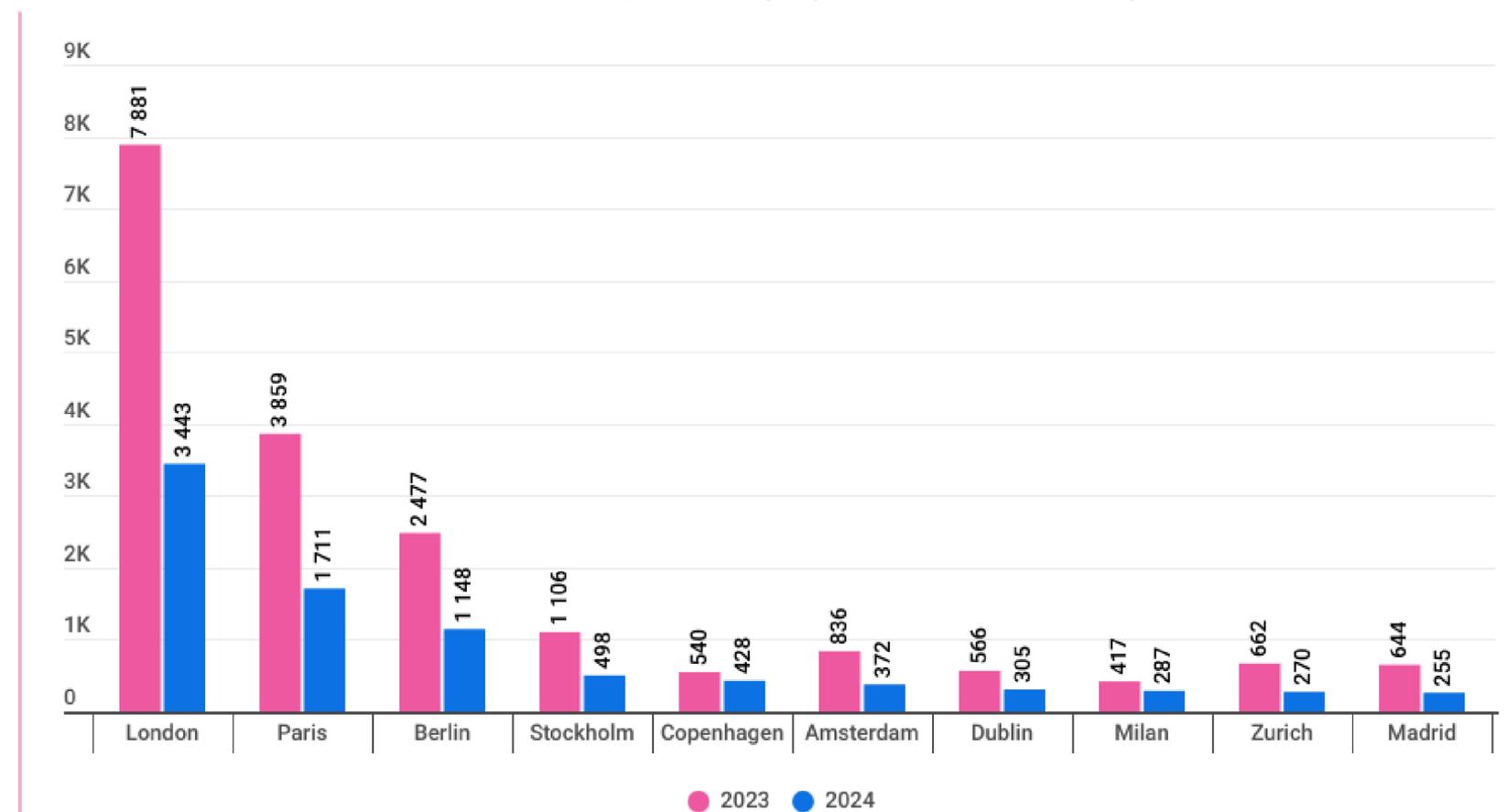
Source: Dealroom.co

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# European Investment Trends: A Shift in Momentum

The investment landscape for deals under \$100 million has seen a significant shift from 2023 to 2024, with London, Paris, and Berlin maintaining their leadership positions but experiencing notable declines in funding. London, the dominant player, saw investments drop from \$7.88 billion to \$3.44 billion, while Paris and Berlin also faced reductions. However, resilience is evident in cities like Stockholm, Copenhagen, and Amsterdam, which show relatively stable investment levels. This trend suggests a reallocation of capital, potentially reflecting changing investor confidence, economic conditions, and emerging opportunities in new European markets. As we navigate 2024, businesses and investors must adapt to this evolving funding environment to stay ahead of the curve.

Investments <\$100million per city (in million \$US)

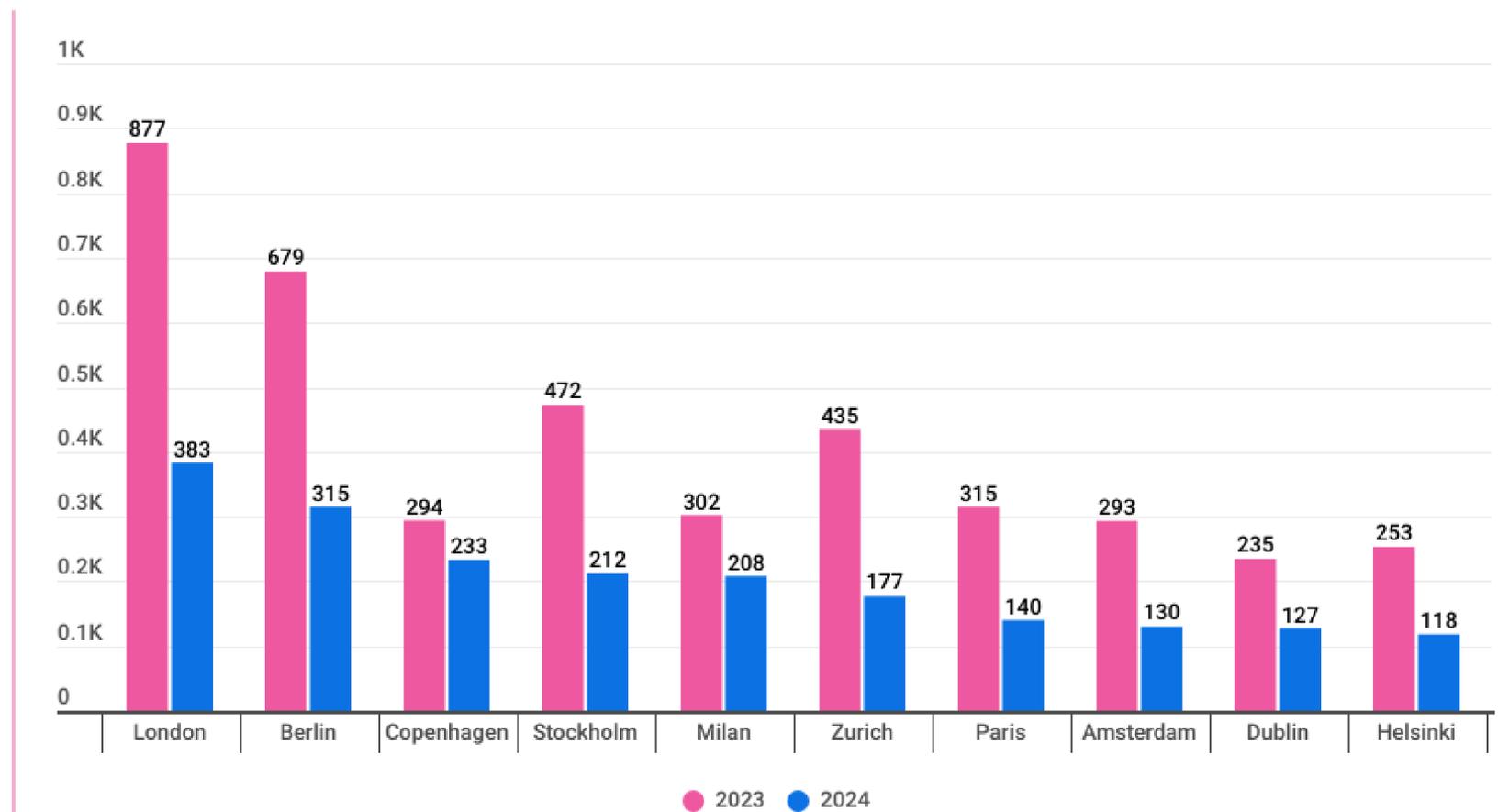


Source: Crunchbase

# European Investment Per Capita: Navigating a New Era

Investment per capita in deals under \$100 million has seen a dramatic decline across major European cities from 2023 to 2024. London and Berlin, previously dominant, have experienced significant drops, with London falling from \$877 to \$383 per capita and Berlin from \$679 to \$315. Other key hubs like Zurich, Stockholm, and Copenhagen also show similar downward trends. While this suggests a cooling investment climate, it also signals potential for strategic reinvestment and the emergence of new opportunities in untapped markets. As 2024 unfolds, stakeholders must adapt to these evolving dynamics to navigate the changing European investment landscape successfully.

Investments <\$100million per capita per city (in \$US)



Source: Crunchbase

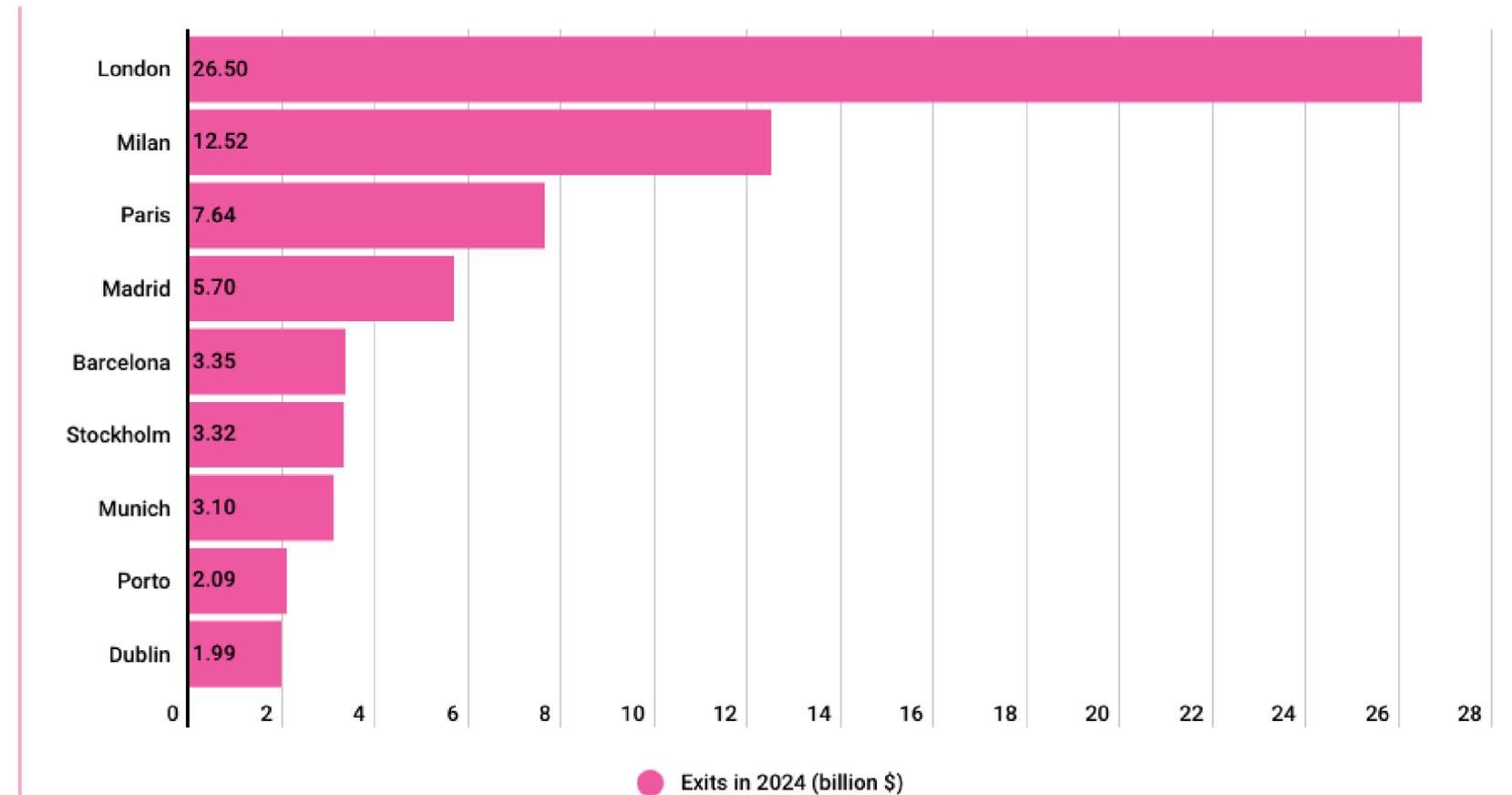
# London Leads the Way: Europe's Top Exit Markets in 2024!

London's dominance is unmistakable, with an astonishing **\$26.5 billion** in exits—more than **double** that of the runner-up, **Milan (\$12.52 billion)**. **Paris ranks third with \$7.64 billion**, highlighting a notable gap compared to Milan.

Cities such as **Madrid, Barcelona, and Stockholm** fall into the mid-range, with exits between **\$3 billion and \$6 billion**, while **Munich, Porto, and Dublin** report lower figures, all below **\$3.2 billion**.

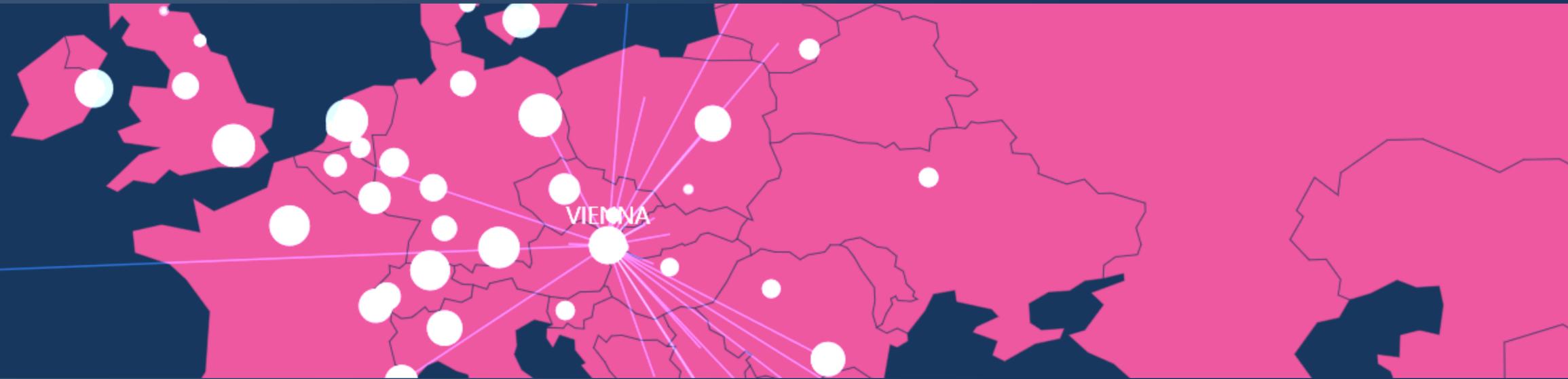
The chart underscores London's central role as a **financial and startup powerhouse**, likely benefiting from its well-established ecosystem and strong global investor appeal. Meanwhile, Milan's strong performance may reflect **growing regional activity** or **strategic industries driving high-value deals**. In contrast, the relatively lower exit values in **Porto and Dublin** suggest differences in market maturity or a focus on **niche specializations**.

Exits in 2024 (in billion \$)



Source: Crunchbase

## PART II: CONNECTIVITY AND MOBILITY

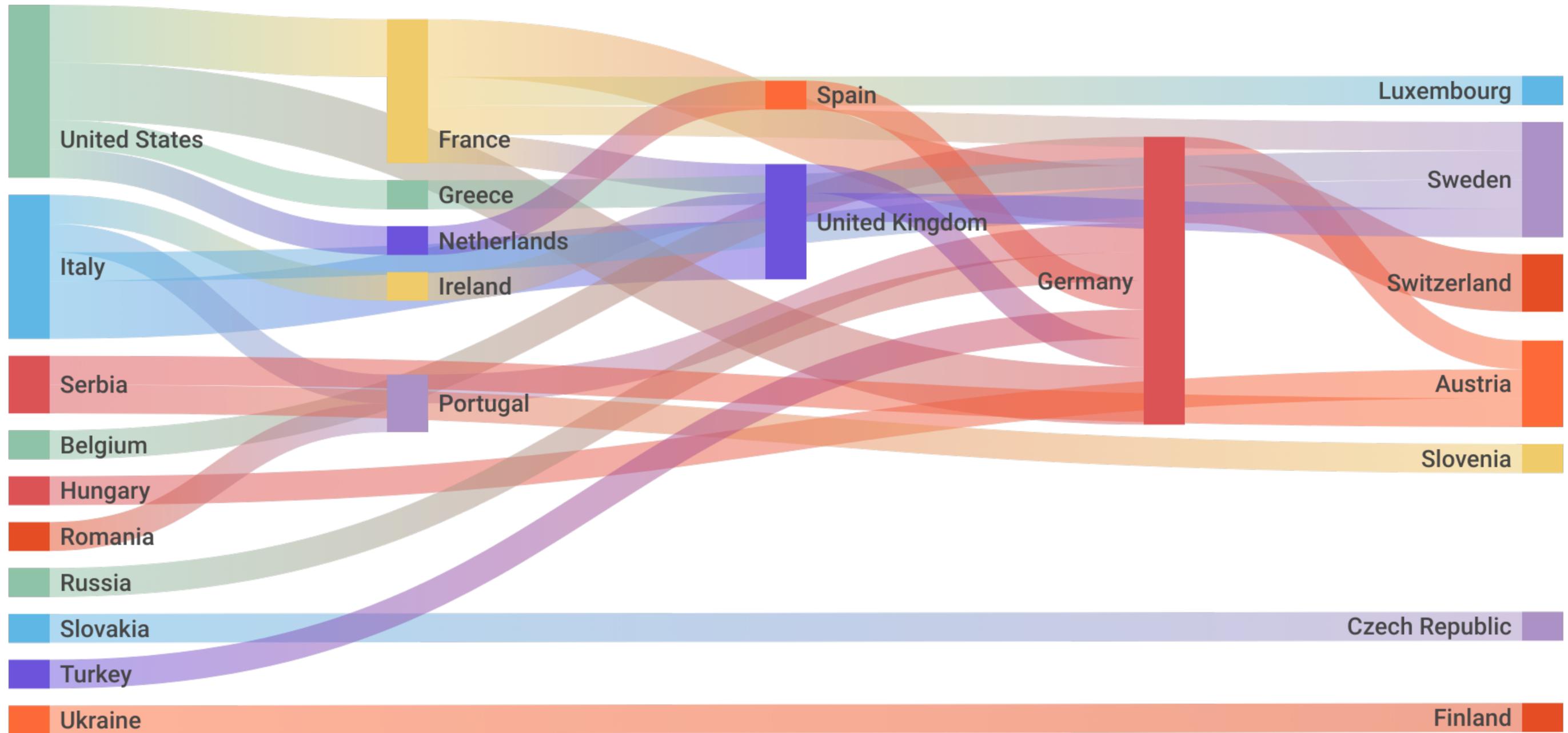


Over 50% of founders lose contact with their hometown, yet founder mobility remains high across Europe, with 70% believing it is the best place to start a business.

Since the launch of this report in 2016, **DEEP Ecosystems** and the **European Startup Initiative** have prioritized the geographic dimension of Europe's startup landscape. Understanding the flow of talent, knowledge, and capital, and tracking these dynamics, is essential to assessing the current state and future potential of startup ecosystems.

This section explores mobility and connectivity trends, drawing on insights from the **2024 Startup Heatmap Survey**.

# Founders' Mobility Among Countries (2024)



Source: Startup Heatmap Europe Survey 2024

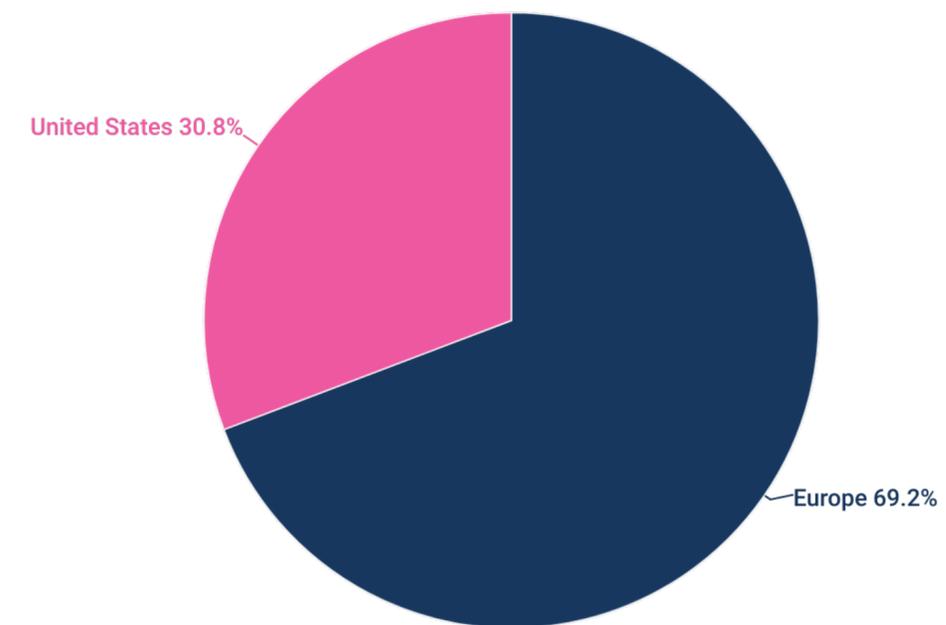
# European Founders Favor Home Turf for Startups in 2024

An overwhelming **69.2% of founders chose Europe**, underscoring the region's growing appeal for innovation, support ecosystems, and market opportunities.

In contrast, only 30.8% preferred the U.S., despite its status as a global leader in technology and entrepreneurship. This result likely reflects Europe's increasing competitiveness, driven by robust funding options, government incentives, and advancements in key sectors like CleanTech, FinTech, and AI.

The data highlights a shifting perspective among European founders, who increasingly view Europe as a viable, and often preferable, place to scale their businesses.

## Europe or the US? European Founders' Preferences



Source: Startup Heatmap Europe Survey 2024

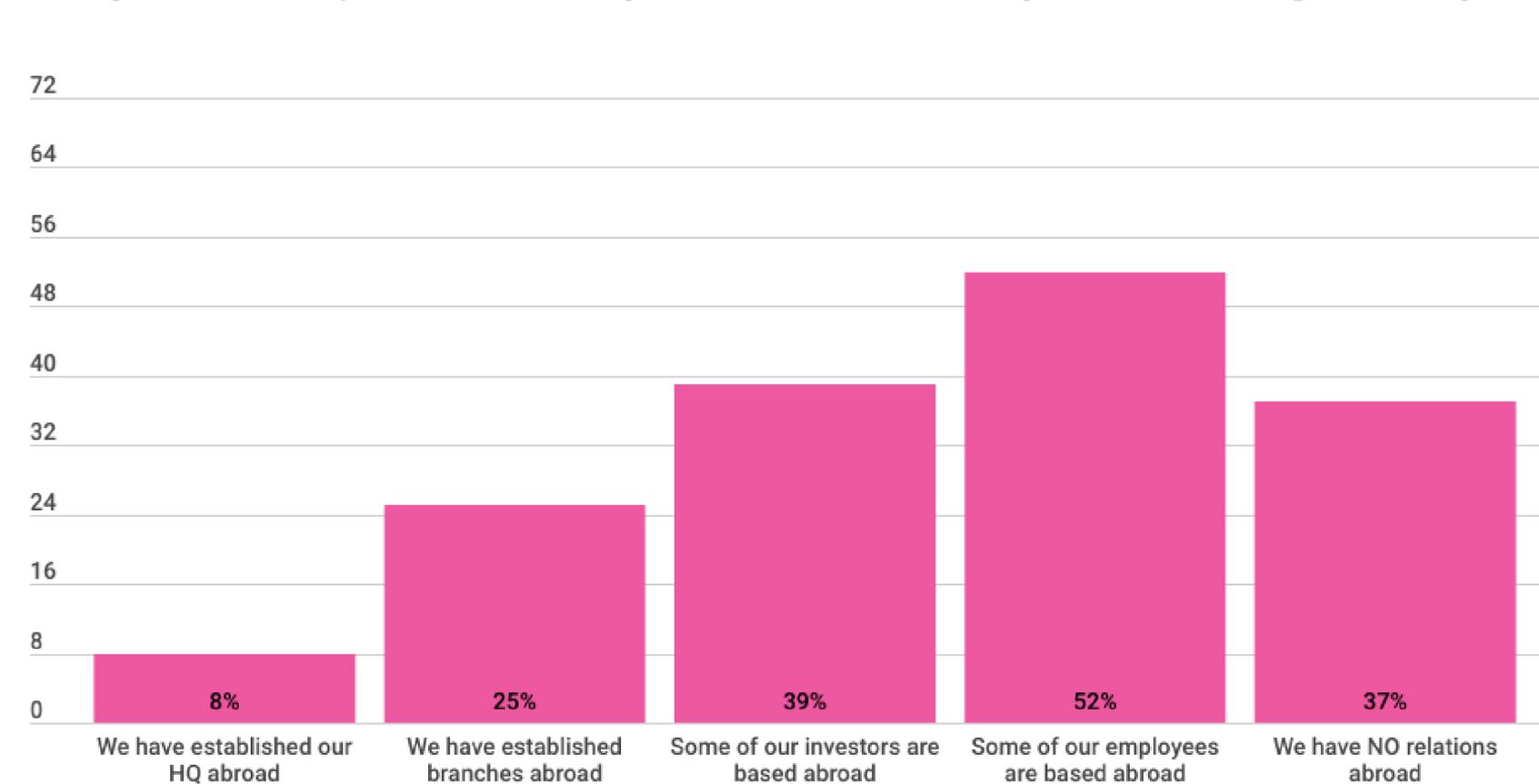
# Global Connections: European Startups Embrace International Ties

A majority (52%) of startups have employees based abroad, highlighting the growing trend of remote and international team structures. Additionally, 39% engage with foreign investors, underscoring the importance of global capital in scaling ventures.

Meanwhile, 25% of companies have established branches abroad, reflecting their ambition to expand into foreign markets. However, only 8% have relocated their headquarters internationally, suggesting a preference to keep their base in their home country despite global operations.

On the other hand, 37% of startups maintain no international relations, indicating that a significant share still operates solely within national borders.

Does your startup maintain any relations outside your founding country?



Source: Startup Heatmap Europe Survey 2024

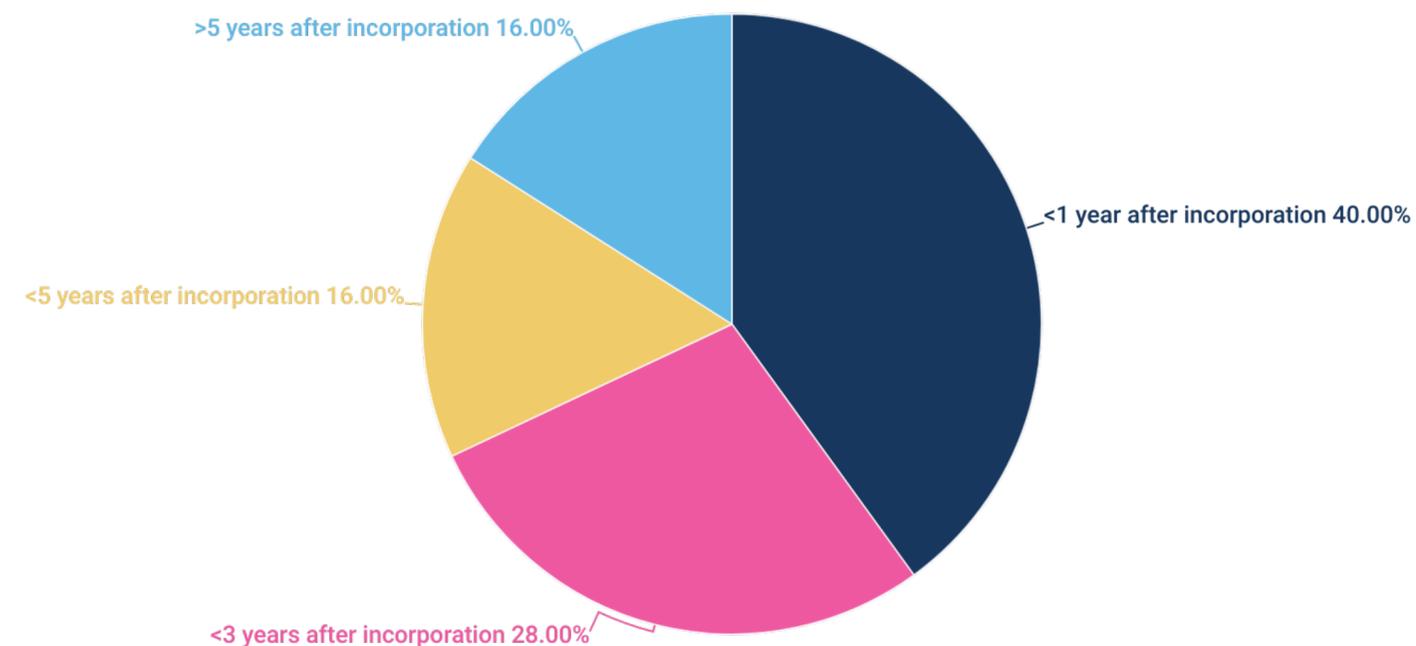
# Speed to Global: Insights from European Founders

Remarkably, 40% of founders opened their first international location within a year, reflecting a strong focus on rapid global expansion—likely driven by industries that require early market penetration or global customer bases.

Another 28% expanded within three years, adopting a more balanced approach that allows time to stabilize operations before venturing abroad.

Meanwhile, 32% took longer, with 16% exceeding five years. These extended timelines may be due to industries requiring significant capital, regulatory compliance, or market-specific preparation before international expansion.

How long did it take you to open your first international location abroad?

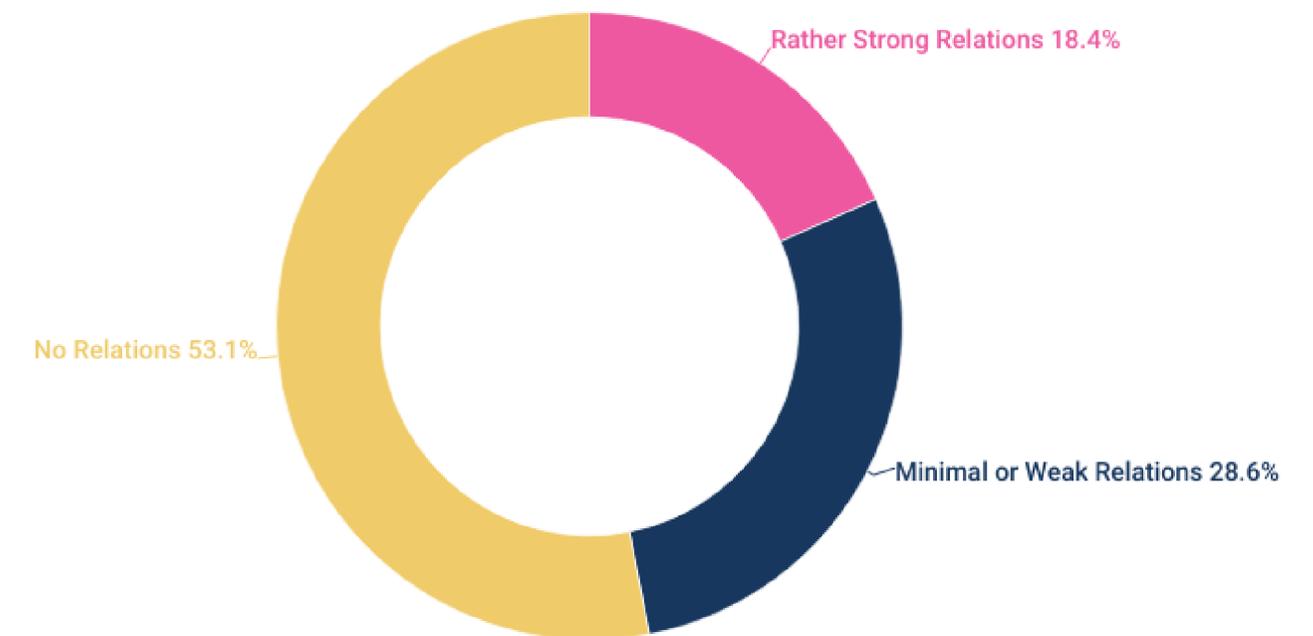


Source: Startup Heatmap Europe Survey 2024

# Entrepreneurs and Their Origin City: A Growing Disconnect

The majority of businesses show limited or no connection to their origin city's entrepreneurial ecosystem. A striking 53.1% report having no relations at all, while 28.6% indicate only minimal or weak ties. In contrast, just 18.4% maintain strong connections. These findings highlight a potential gap in local ecosystem support or a shift in business strategies toward more global networks. Strengthening local engagement could unlock untapped opportunities for collaboration, innovation, and regional economic growth. How can cities adapt to foster deeper ties between startups and their home ecosystems?.

How close are your business relations with your origin city ecosystem?



Source: Startup Heatmap Europe Survey 2024

# **CHAPTER III: OPEN STARTUP ECOSYSTEMS & SUSTAINABLE GROWTH**

# How To Succeed in an Open Ecosystem



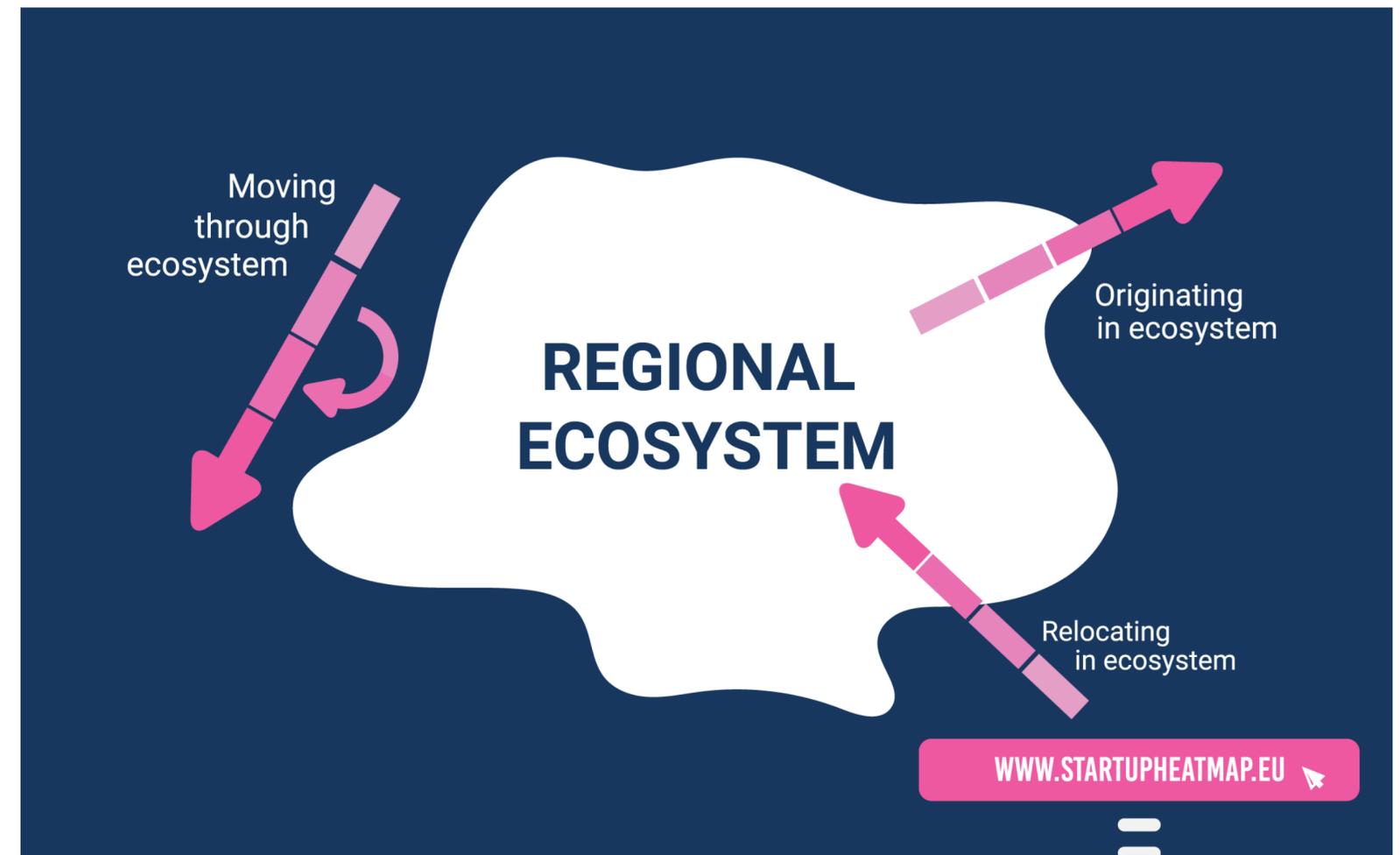
Who is the winner? Who are winners? Is Europe succeeding the startup growth challenge?

In the Open Ecosystem view there is not a single winner, but a multitude of regions taking part in the startup journey. Startups often face challenges and uncertainties during their developing phases: growing, accelerating and scaling-up. Ecosystems need to provide services and infrastructure to support startups in each single phase. To foster an environment of collaboration and innovation, it is crucial to encourage knowledge sharing, networking, and cross-sector partnerships, creating opportunities for startups to access resources, mentorship, and funding.

# Startups Blur Regional Boundaries

Ecosystems can relate to startup processes in multiple ways. Some founders who start out in a city will move away but new ones might move in, while others only pass through, maybe staying only for the period of an acceleration program.

For both policy-makers and investors, it is important to not cling to the idea that founders will remain in the same location all the time. To grow an ecosystem means also to find ways to leverage all sorts of relations with startups moving through the open ecosystem. It means that also policy-makers and investors need to move, adapt and create coalitions with international partners that will help them to adequately serve the needs of hyper-connected startups passing through their region. This is not a nice-to-have, but a must for regions who want to grow unicorn-ecosystems.



Own chart, based on: Schmidt, et al. Open region: Creating and exploiting opportunities for innovation at the regional scale. *European Urban and Regional Studies*, 2018.

# European Startup Journeys

Start at a top entrepreneurial university outside of big centers

Move on to a top accelerator in 2nd tier cities

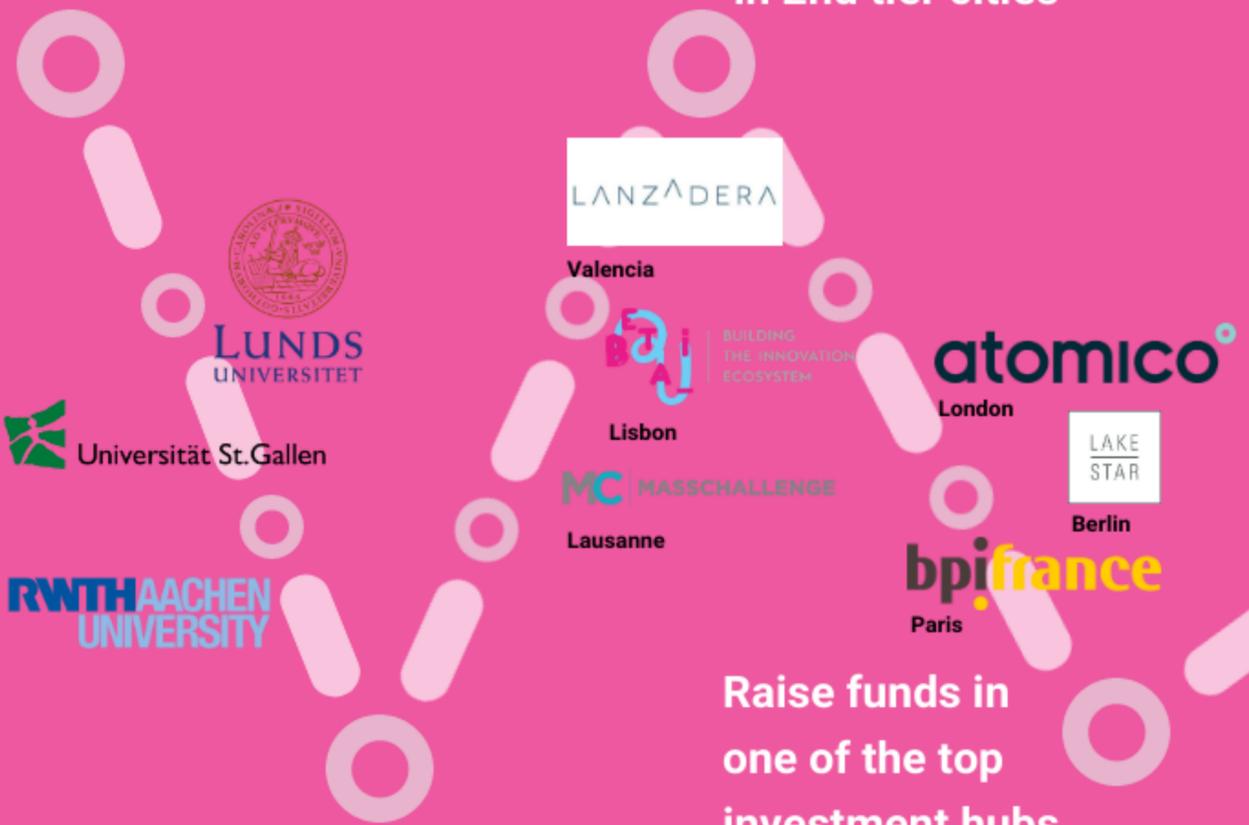
Transnational Scale-ups re-invest in all ecosystems

Different places can have different kinds of benefits along the startup journey.

Startups are born in locations with top universities, but need to move away to test their business cases to slightly larger 2nd tier cities and finally to raise funds they will move to financial centers. However, we see startups growing and re-investing in all regions they touch.

Raise funds in one of the top investment hubs

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# Open Ecosystem Strategies for Regions

## Part I: Growing Entrepreneurs Cities

As the spotlight intensifies on the micro-foundations driving thriving startup ecosystems and urban development, a clearer picture emerges of what truly nurtures new entrepreneurs. By diving deeper, we've uncovered the key elements shaping the growth journey for aspiring innovators:

- Top Vibrant Community Hubs – Fostering energy and support to inspire action.
- Top Spin-off Hubs – Turning ideas into reality through mentorship, resources, and opportunity.
- Top Diversity Hubs – Empowering diverse startups to thrive and make a lasting impact.

## Part II: Top Accelerator Cities

To help early-stage startups gain first traction, ecosystems should:

- Be home to a vibrant scene of support organizations
- Create pools of local seed capital
- Integrate links to other ecosystems
- Keep in touch with role models
- Experiment with alternative financing models

As a benefit the region will see increased collaboration of their SMEs with startups, a higher uptake of technology, the creation of jobs in offices of startups that passed through, as well as financial returns from seed investments and likely an increase of brand visibility in international business networks.

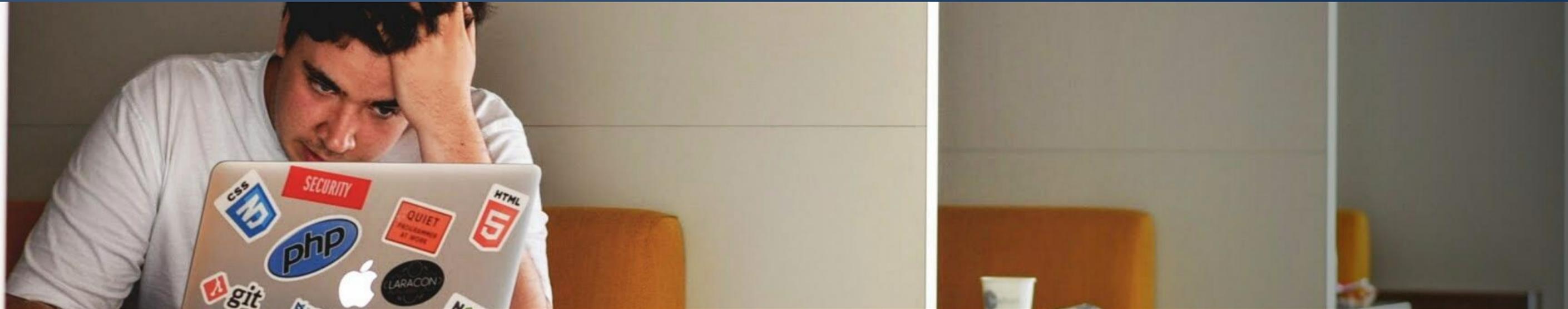
## Part III: Top Scale-up Cities

To supercharge their growth potential, ecosystems should:

- Attract world-class talent
- Increase industry leadership
- Don't compromise when it comes to Venture Capital and Growth
- Focus on internationalization

The competition in this strategy is unforgiving, as only very few regions in the world reach the status of a global Venture Capital destination. In turn these places see massive income from taxes and the creation of a world-class managerial talent pool able to create unicorn after unicorn.

# Part I: Growing Entrepreneurs Cities

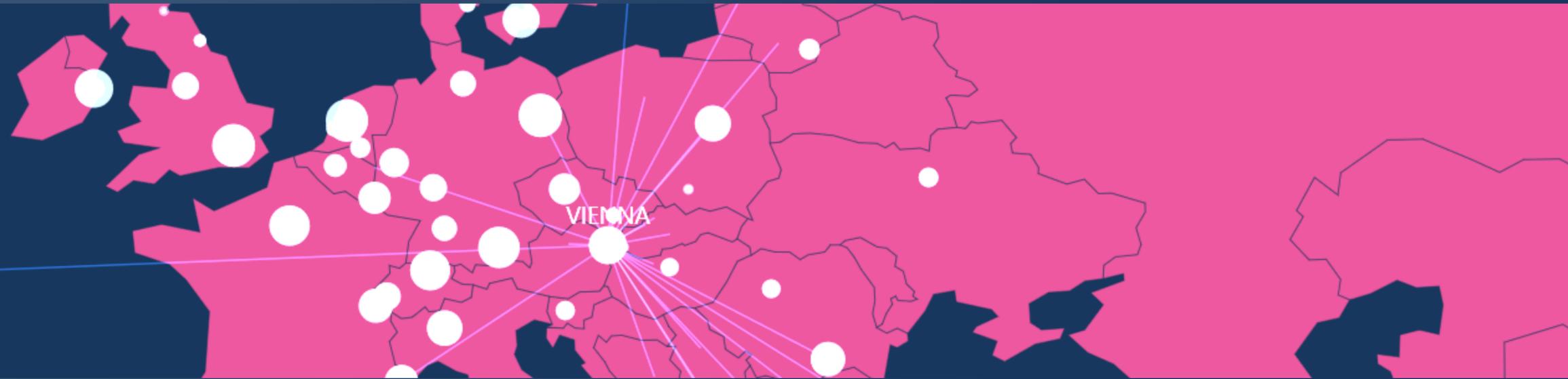


For cities fostering entrepreneurial growth, there is no standardized strategy; success requires informed decision-making based on real-time data and predictive analytics.

Entrepreneurial growth within cities is a **multi-faceted process**, requiring **vibrant ecosystems, innovation capacity, and inclusive leadership**. This section explores three **core dimensions** of entrepreneurial success:

- **Top Vibrant Community Hubs**– Evaluates how **dynamic, community-driven, and engaged** a city's entrepreneurial ecosystem is, recognizing **smaller ecosystems** for fostering strong community dynamics.
- **Top Spinoff Hubs**– Measures how effectively **new ideas, innovations, and initiatives** emerge and thrive, highlighting an ecosystem's **creativity, growth, and sustainability**.
- **Top Diversity Hubs**– Assesses how well startup scenes **embrace diverse founders** across genders and backgrounds, fostering **inclusive and globally attractive ecosystems** where all entrepreneurs can thrive.

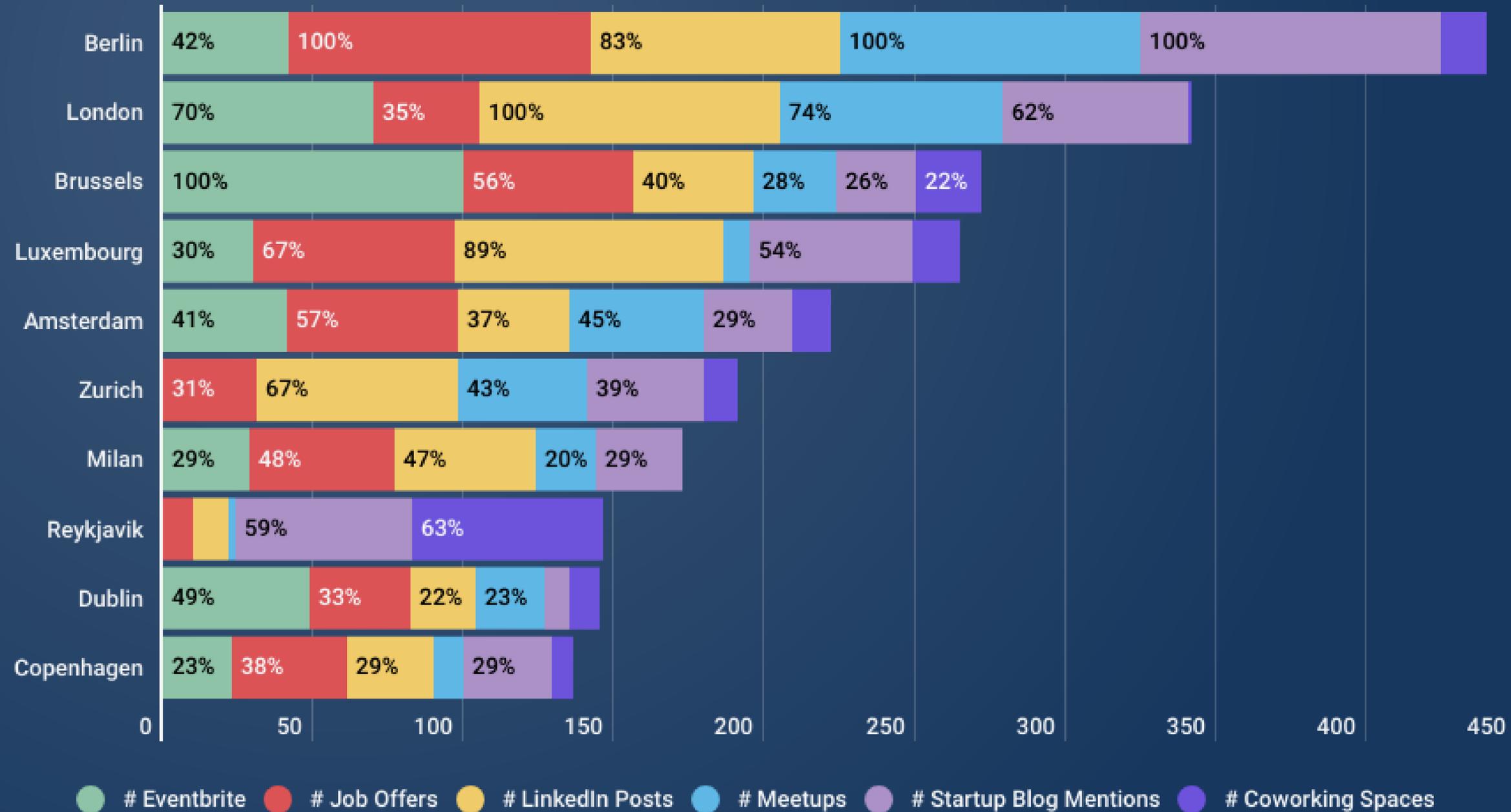
# Top Vibrant Community Hubs



The Top Vibrant Community Hubs ranking evaluates how dynamic, community-driven, and engaged a city's entrepreneurial ecosystem is.

The Top Vibrant Community Hubs ranking reveals that larger ecosystems continue to dominate the top 10. However, smaller and emerging hubs, such as Reykjavik, are making their mark by fostering dynamic, community-driven support for entrepreneurial growth and development.

# RANKING: Top Vibrant Community Hubs

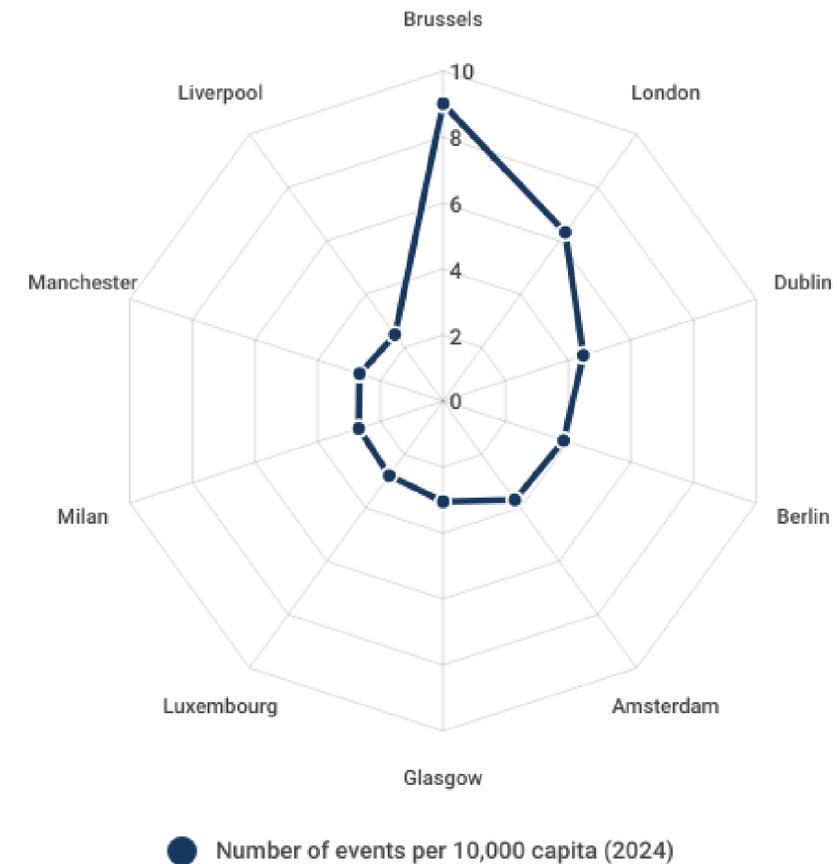


# Measuring Entrepreneurial Buzz: Startup Events

**Eventbrite** serves as a dynamic hub for ecosystem-related **events**, reflecting the **vibrancy** of a city's entrepreneurial landscape. To provide a fair comparison, we analyze the **number of such events, meetups, workshops, and conferences**, normalized by city population.

The data reveal that **Brussels** leads in startup events activity among these ten cities, with **London** following closely in second place. **Dublin**, **Berlin**, and **Amsterdam** form a mid-tier group, each hosting a moderate number of events. Meanwhile, **Manchester**, **Milan**, **Liverpool**, **Luxembourg**, and **Glasgow** exhibit relatively lower, though still noteworthy, levels of activity.

Number of Eventbrite Events per City



Source: Startup Heatmap Europe / Eventbrite

# Entrepreneurial Job Hotspots

The **availability of entrepreneurial job** opportunities is a key indicator of a city's economic dynamism and ecosystem vitality.

This measure captures the number of job postings related to entrepreneurship and innovation, adjusted for population size.

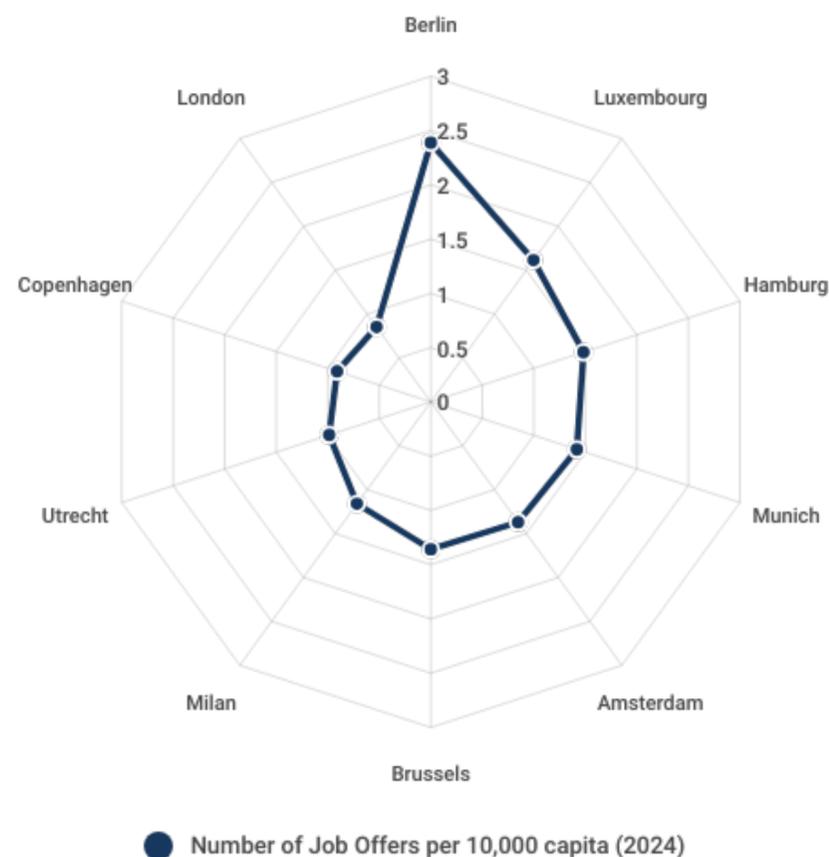
By normalizing job availability per capita, it allows for meaningful comparisons between cities of different sizes.

**Berlin** emerges as the clear frontrunner, showcasing the highest concentration of ecosystem-related job opportunities.

**Luxembourg** follows closely, while **Hamburg**, **Munich**, and **Amsterdam** occupy the mid-range. In contrast, **Brussels**, **Milan**, **Utrecht**, **Copenhagen**, and **London** show lower relative activity on this metric.

activity on this metric.

Number of Job Offers per City



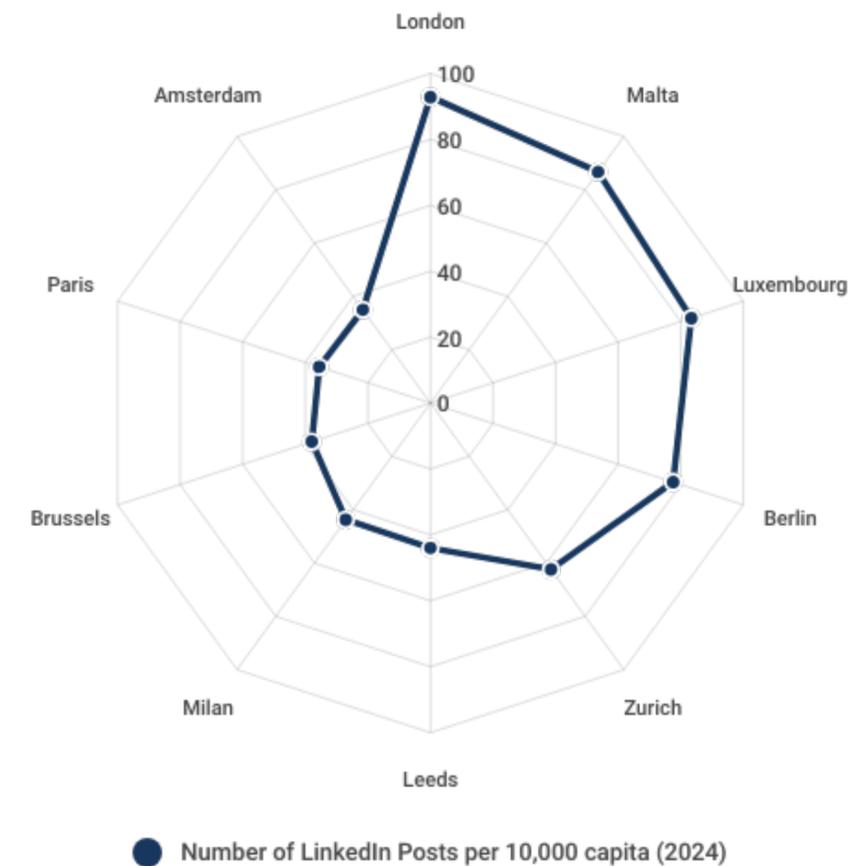
Source: Startup Heatmap Europe / LinkedIn

# LinkedIn Buzz: Which Cities Drive the Conversation on Startups?

**LinkedIn** serves as a key platform for professional discussions, networking, and ecosystem engagement. This indicator measures the number of **relevant LinkedIn posts about startups per capita**, capturing how actively residents in each city contribute to conversations on a startups topic. By normalizing post frequency relative to population size, it offers a clearer comparison of engagement levels across different cities.

**London** leads the rankings with approximately 0.01 LinkedIn posts per capita, followed closely by **Malta** and **Luxembourg**. **Berlin** and **Zurich** demonstrate moderate activity, while **Leeds**, **Milan**, **Brussels**, **Paris**, and **Amsterdam** show lower levels of engagement on this metric.

## LinkedIn Posts per City



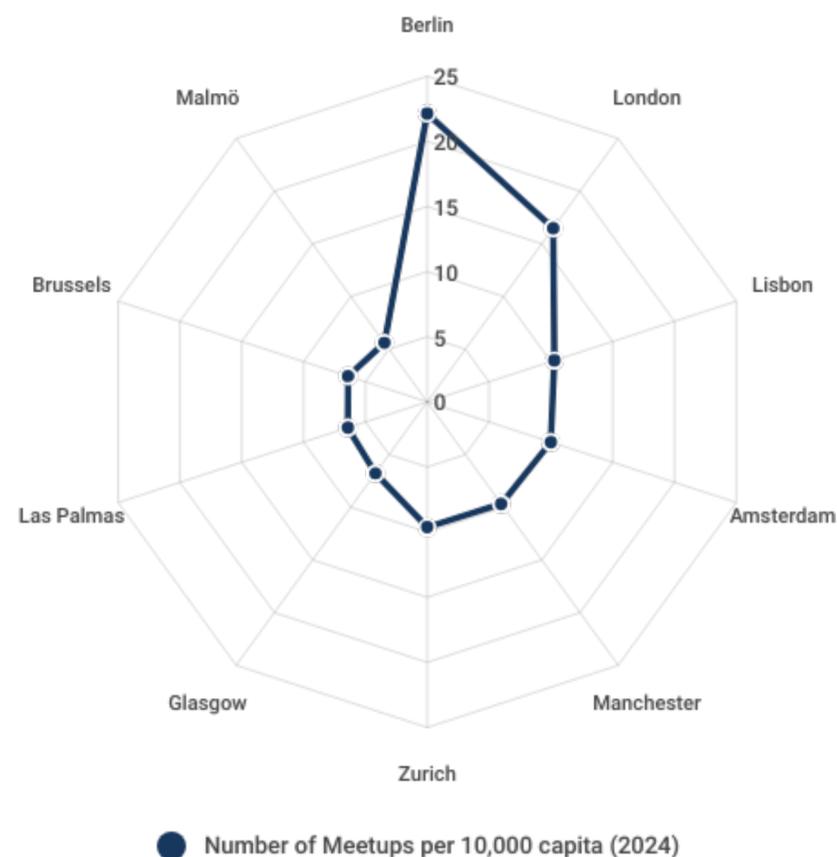
Source: Startup Heatmap Europe / LinkedIn

# Top Cities for Startup Networking: Meetup

**Meetup** also plays a role in fostering entrepreneurial communities by **connecting professionals through events, workshops, and networking opportunities**. This indicator tracks the number of ecosystem-related meetups per capita, offering insights into how actively cities engage in entrepreneurial discussions and collaborations. By normalizing event frequency based on population size, it allows for meaningful comparisons across different urban ecosystems.

**Berlin** leads the rankings with the highest number of meetups per capita, followed closely by **London** in second place. **Amsterdam**, **Manchester**, and **Zurich** form a competitive mid-tier cluster, actively hosting meetups. Meanwhile, **Marl**, **Brussels**, **Las Palmas**, and **Glasgow** complete the top ten, though their meetup density remains noticeably lower than that of the leading cities.

Number of Meetups per City



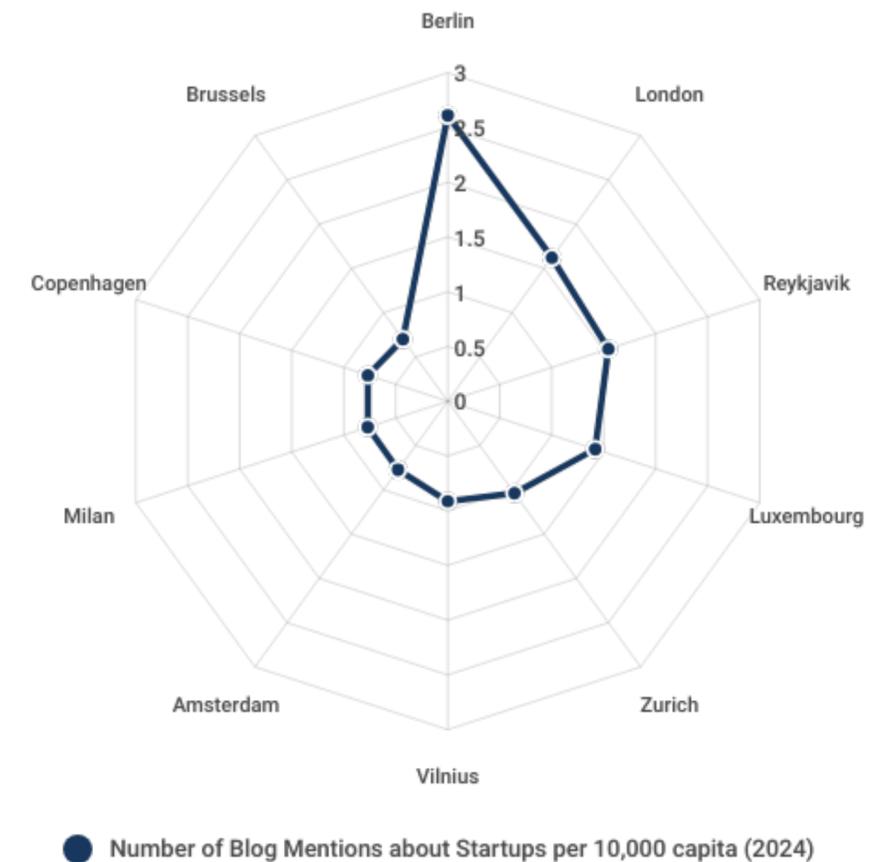
Source: Startup Heatmap Europe / Meetups

# Tracking Startup Blog Mentions

**Media presence** plays a crucial role in shaping the visibility of a city's startup ecosystem. This indicator measures how frequently entrepreneurial or ecosystem activities are mentioned in startup-related **blogs**, adjusted for population size. By tracking these **mentions**, it highlights which cities gain the most attention in relevant blog discussions and media coverage.

**Berlin** leads with the highest density of startup blog mentions, at approximately 0.00025 per capita. **London** follows in second place, with **Luxembourg** and **Reykjavik** close behind. **Zurich, Vilnius, Amsterdam, Milan, Brussels,** and **Copenhagen** exhibit lower levels of per-capita visibility in startup-related blogs.

Number of Startup Blog Mentions per City



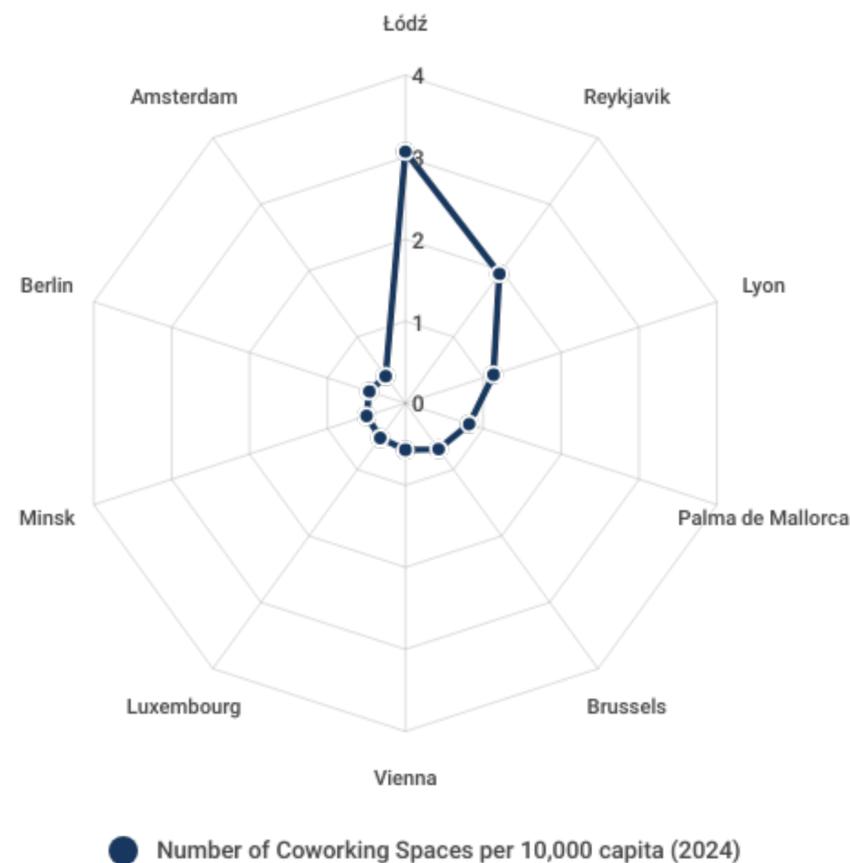
Source: Startup Heatmap Europe

# Where Coworking Thrives: City Rankings

**Coworking spaces** are a key indicator of a city's **entrepreneurial activity and flexible work culture**. This radar chart highlights the top 10 cities with the highest coworking space presence. **Łódź** stands out as the clear leader, demonstrating its dominance in this ranking. Cities like **Reykjavik, Lyon, Palma de Mallorca, Brussels,** and **Vienna** also showcase strong coworking ecosystems, reflecting high demand and activity.

Meanwhile, **Minsk, Luxembourg, Berlin,** and **Amsterdam**, though included in the top 10, rank significantly lower, suggesting emerging or less-developed coworking markets.

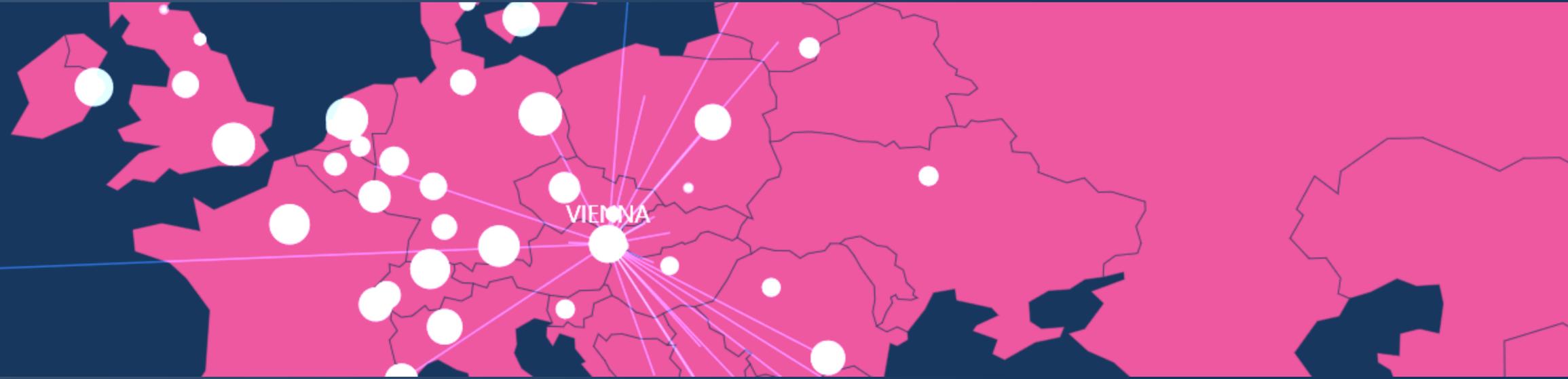
Number Coworking Spaces per Capita per City



Source: Startup Heatmap Europe

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# Top Spin-off Hubs

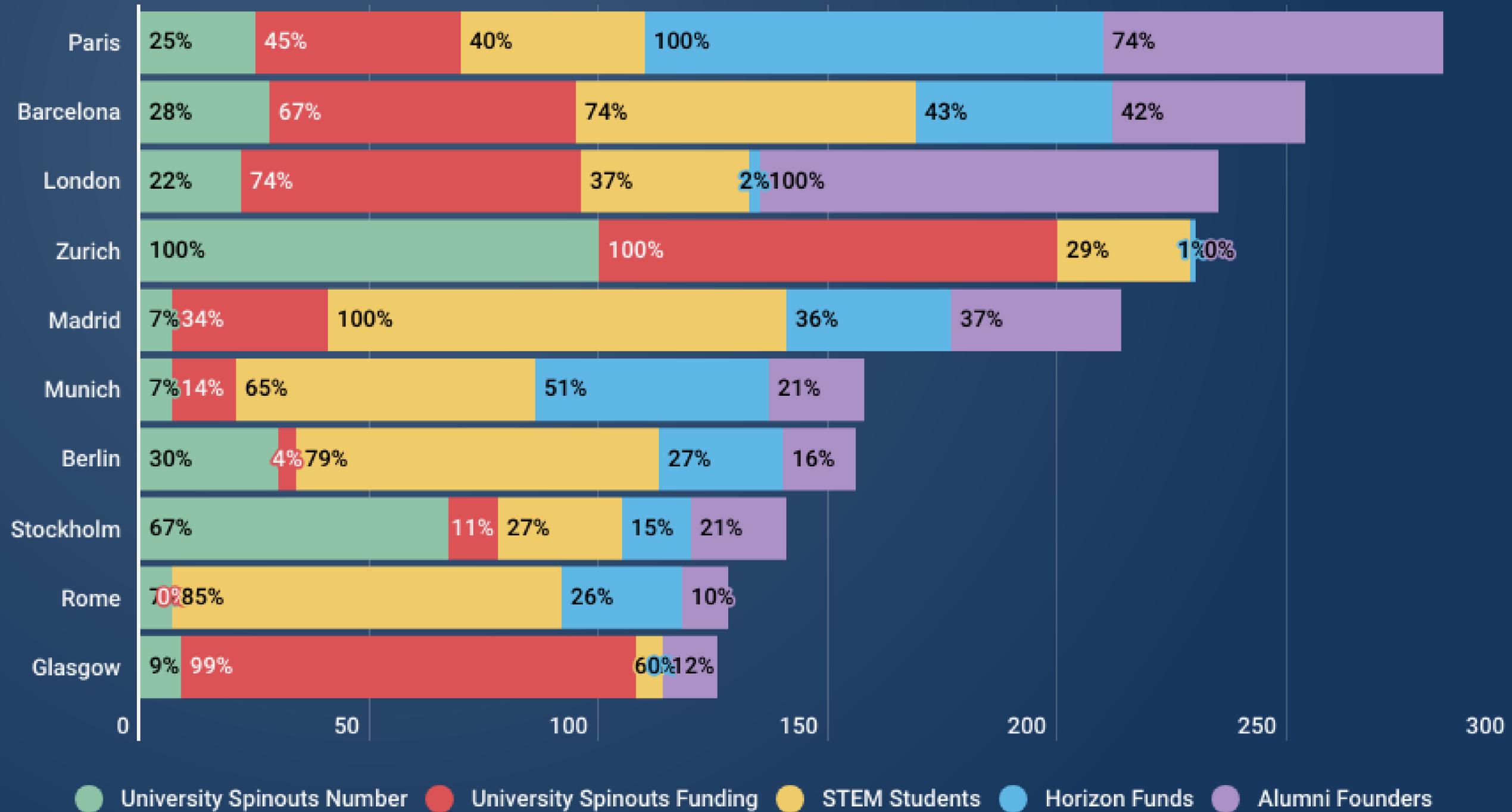


The Top Spin-off Hubs ranking measures how effectively new ideas, innovations, and initiatives branch out and thrive from an original source or venture, reflecting creativity, growth, and sustainability.

The Top Spin-off Hubs ranking aggregates multiple innovation metrics, including university spinout numbers, spinout funding, STEM student population, Horizon funding, and founder production across European cities.

Paris leads the ranking with a 57% score, closely followed by Barcelona (51%), demonstrating how consistently strong performance across multiple dimensions translates into innovation leadership. London secures third place at 47%, excelling in founder production and spinout funding, while Zurich (46%) stands out for its exceptional spinout efficiency, despite operating on a smaller absolute scale.

# RANKING: Top Spin-off Hubs

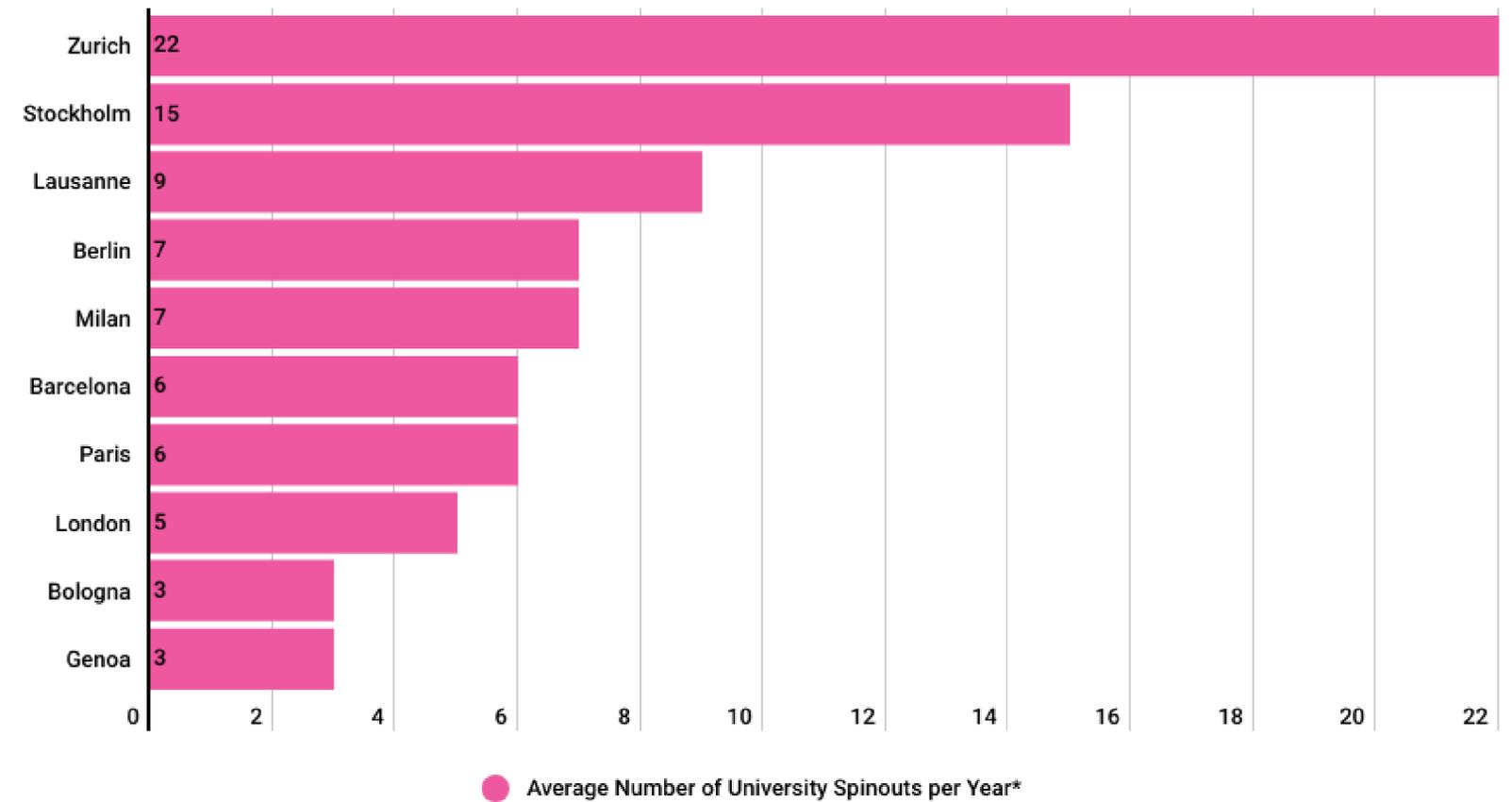


# European University Spin-out Performance: Swiss Cities Lead in Academic Innovation

The annual number of university spin-outs across ten major European cities reveals a significant disparity in academic entrepreneurship, with **Zurich** leading by a wide margin at **22 spinouts per year**. Swiss institutions dominate the top three, as **Lausanne (9 spinouts)** also stands out in third place, while **Stockholm (15 spinouts)** highlights Scandinavia's growing role in academic innovation.

Traditional tech and innovation hubs like **Berlin, Milan,** and **London** show moderate performance, with **5-7 spinouts** annually. This pattern suggests that while established startup ecosystems in major capitals remain influential, smaller, specialized tech hubs, particularly in Switzerland, are proving exceptionally effective at commercializing university research.

Annual Number of University Spinouts



Source: Startup Heatmap Europe

[WWW.STARTUPHEATMAP.EU](http://WWW.STARTUPHEATMAP.EU)

\*Average calculated for the years 2021, 2022, and 2023.

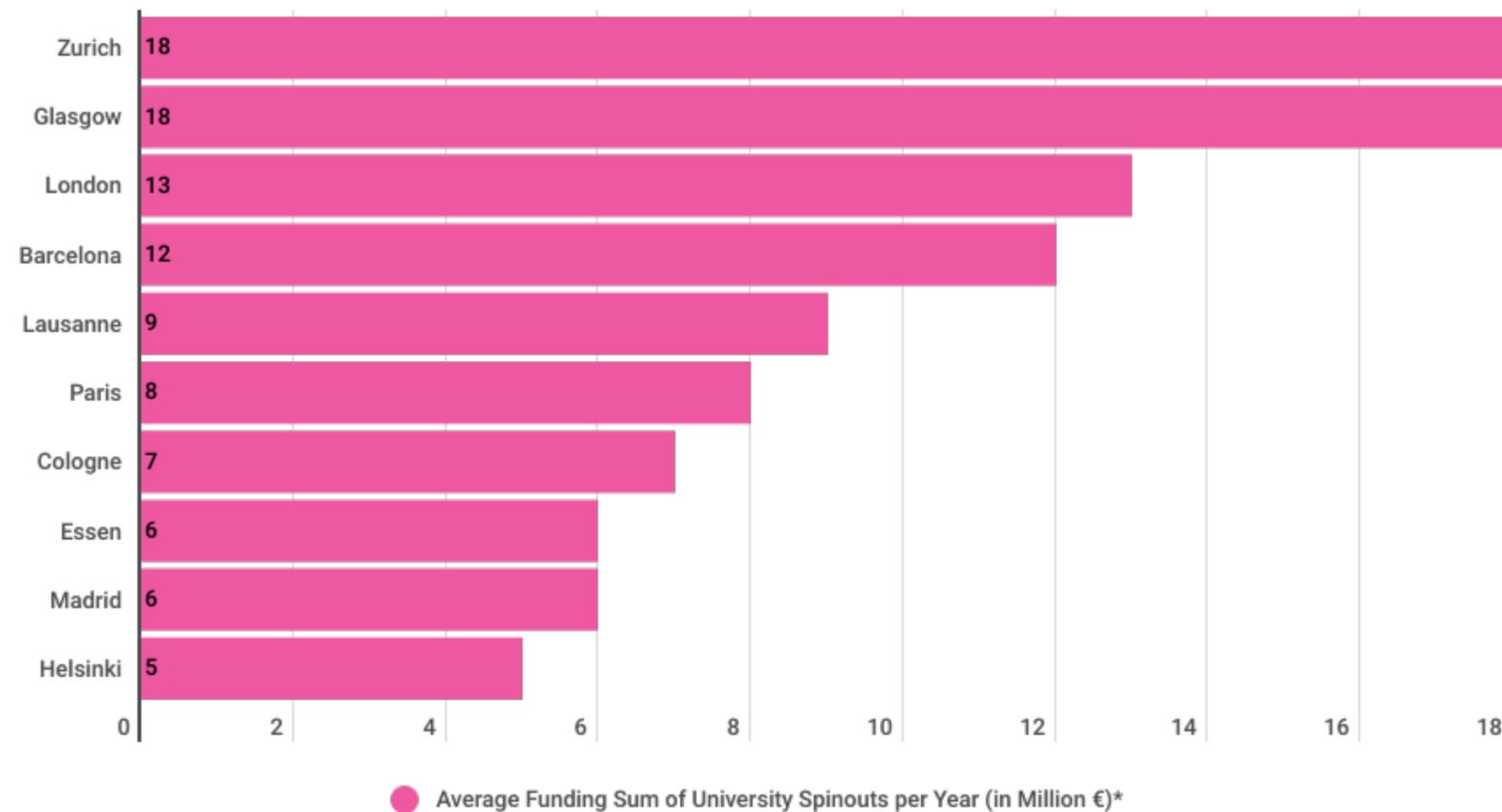
# Leading University Spin-out Funding Hubs

The annual funding amounts (in million euros) received by university spin-outs across ten European cities show distinct tiers. **Zurich** and **Glasgow** lead the ranking with **€18 million each**, followed by a strong second tier, including **London** and **Barcelona (€12-13 million)**. A third tier of continental European cities falls within the **€5-9 million range**.

The data highlights an interesting contrast between the quantity of spinouts (previous slide) and their funding levels. This contrast is particularly evident in the UK, where cities like Glasgow secure high funding volumes despite not ranking among the top producers of spinouts.

This suggests varied approaches to spinout development across Europe, some ecosystems prioritize fewer but well-funded ventures, while others focus on a higher volume of smaller initiatives.

Annual Funding Sum of University Spinouts (in Million €)



Source: Startup Heatmap Europe

[WWW.STARTUPHEATMAP.EU](http://WWW.STARTUPHEATMAP.EU)

\*Average calculated for the years 2021, 2022, and 2023.

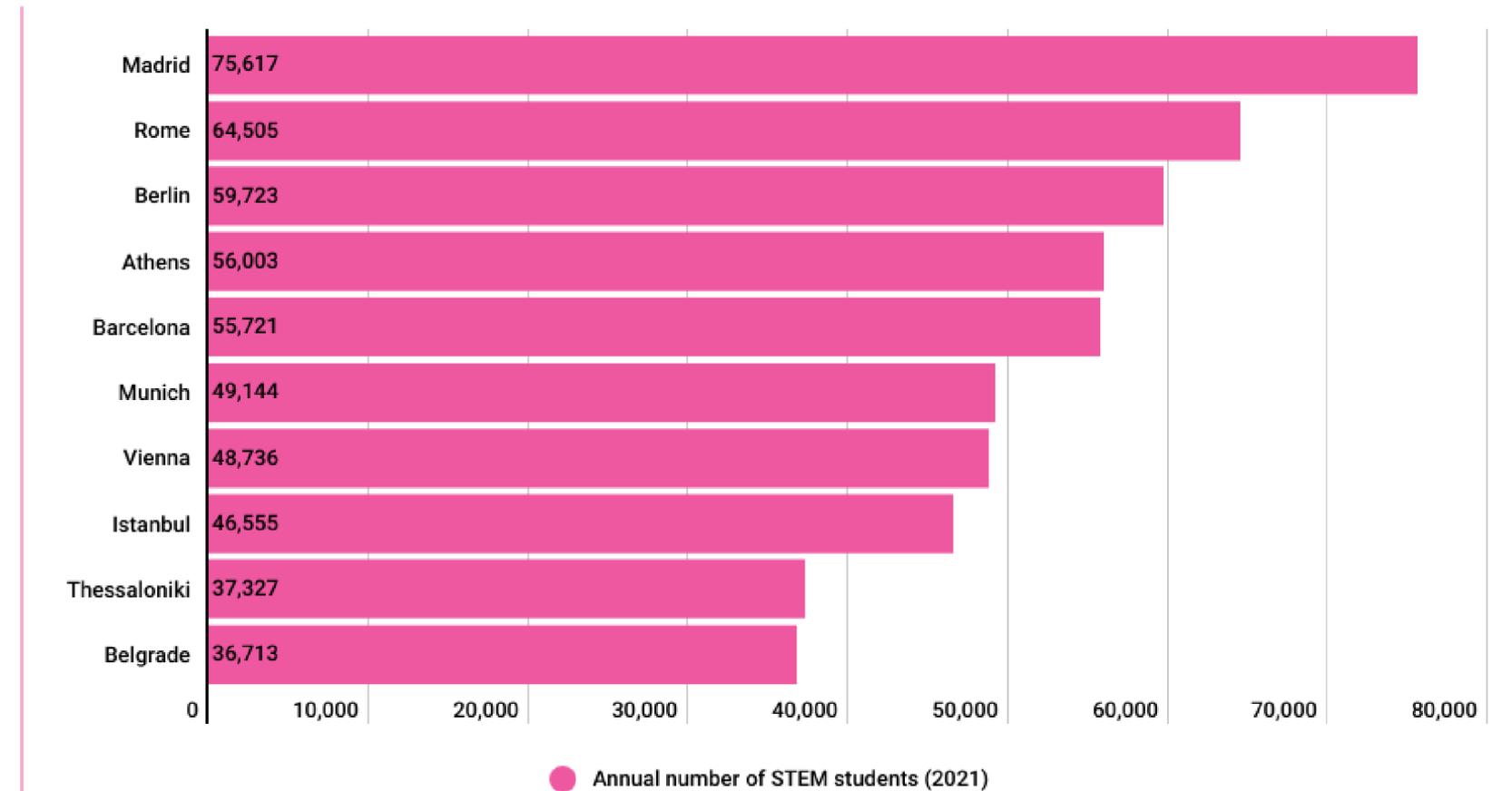
# STEM Student Distribution: Southern Cities Lead the Way

The annual number of STEM students across ten major European cities reveals **Madrid** leading with approximately **70,000 students**, followed closely by **Rome (64,505 students)**.

The data highlights **Southern Europe's strong presence** in STEM education, with Madrid, Rome, **Athens**, and **Barcelona** all ranking in the top five. Central European cities like **Berlin** (59,723 students) maintain a significant presence, while **Munich** (49,000 students) and **Vienna** (48,700 students) show moderate numbers.

In contrast, Eastern European cities see a notable drop, with **Thessaloniki** (38,739 students) and **Belgrade** (37,327 students) recording the lowest counts.

Annual Number of STEM Students per City



Source: Startup Heatmap Europe

# Horizon Funding Distribution: Paris Leads Research Investment

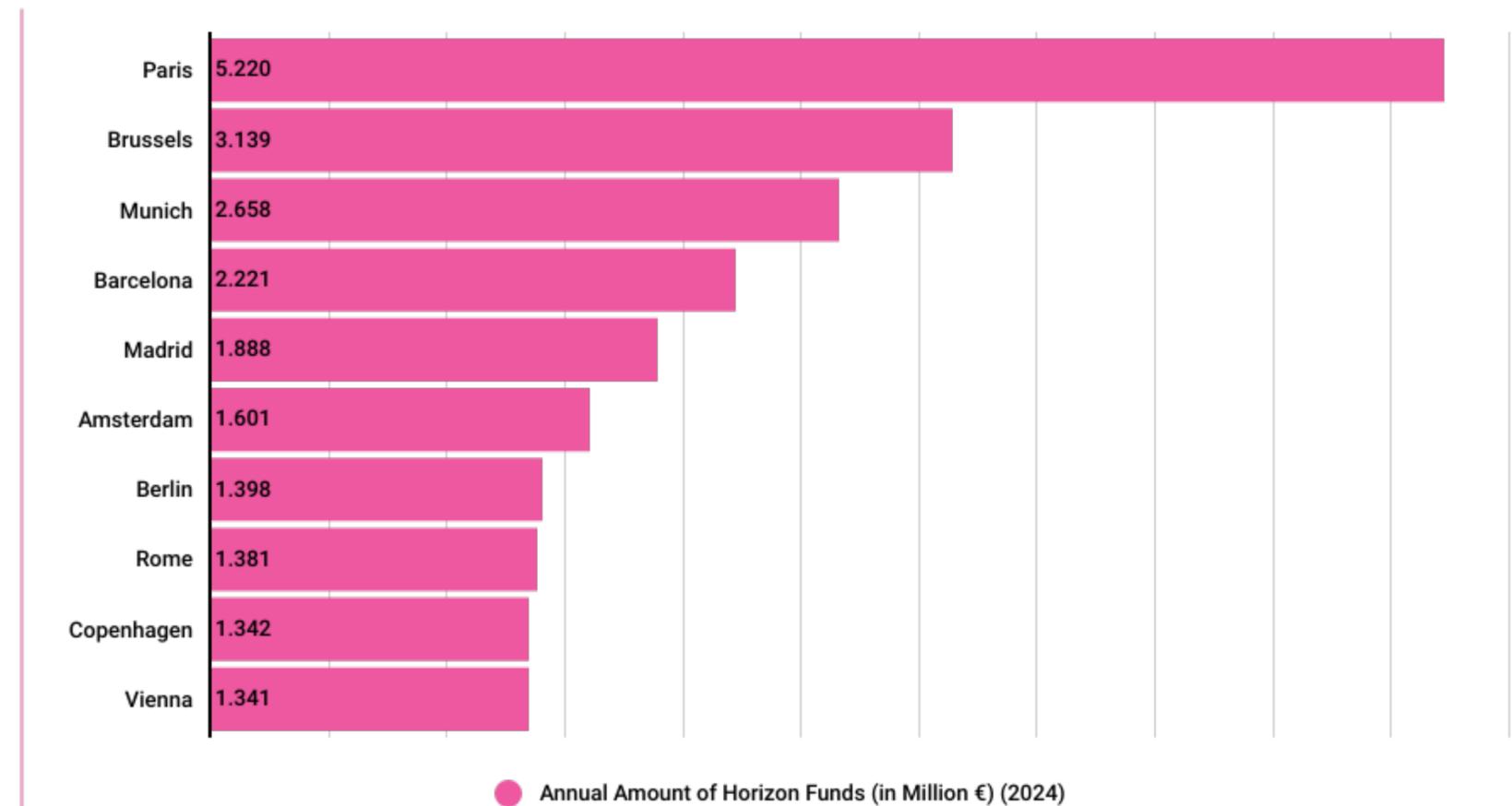
The annual allocation of Horizon funding across ten European cities highlights Paris as the clear leader, receiving €5,220 million, nearly double the amount awarded to second-placed Brussels (€3,139 million).

The concentration of funds in Paris reinforces its role as a major European research hub, while Brussels' strong position likely reflects its status as the EU's administrative center.

German and Spanish cities, including Munich, Barcelona, and Madrid, demonstrate solid performance in securing EU research funding. Meanwhile, despite their strong research traditions, Copenhagen and Vienna receive more modest amounts, around €1,340 million annually.

This funding distribution may reflect both the research capacity and grant-winning capabilities of institutions in these cities

Annual Amount of Horizon Funds (in Million €)



Source: Startup Heatmap Europe

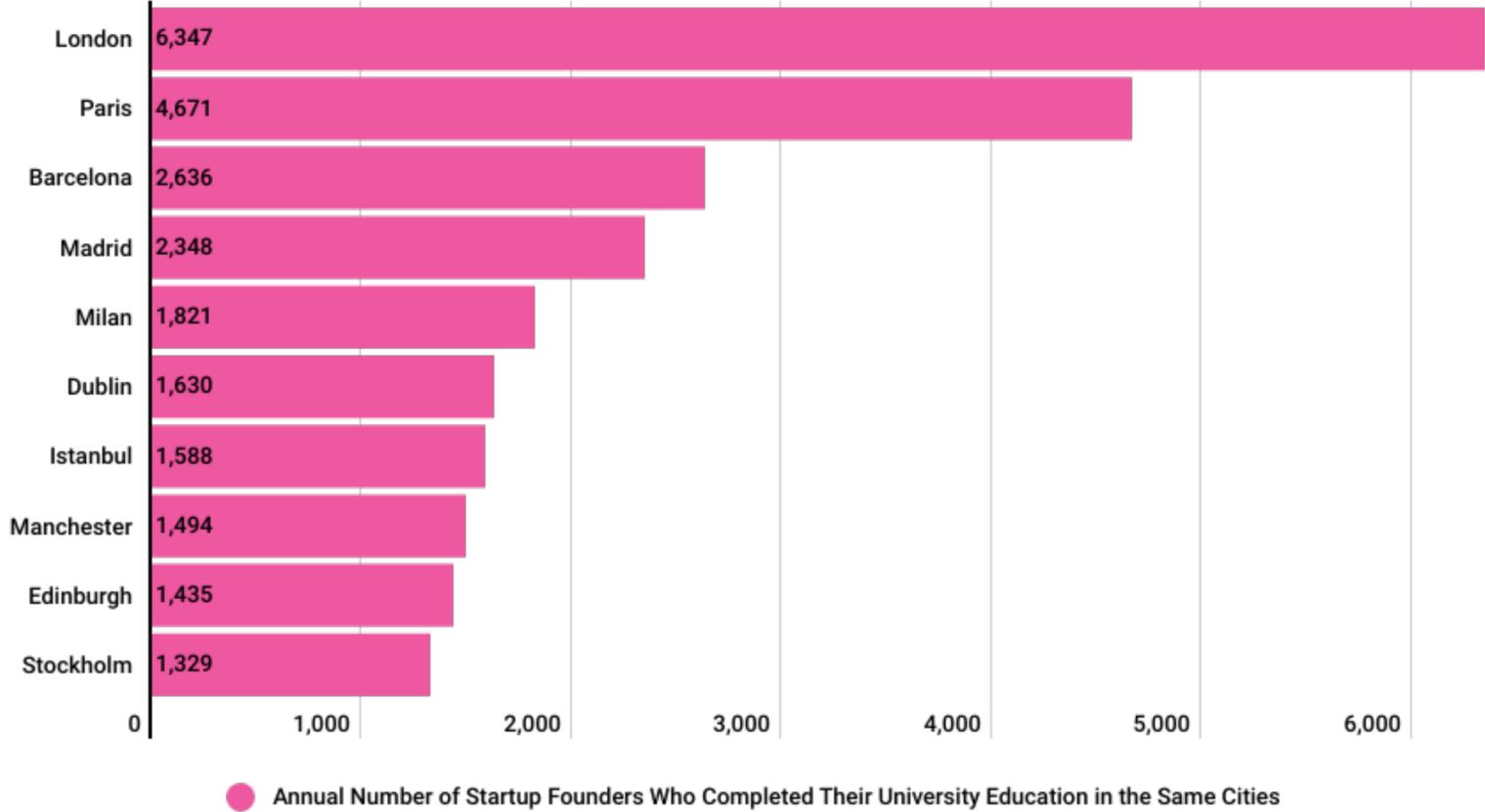
# University Cities as Founder Hubs: London and Paris Lead the Way

This data highlights the annual number of startup founders who completed their university education in the same city. **London** dominates with **6,347 founders per year**, followed by **Paris (4,671 founders)**.

The gap between these two leading cities and the rest of Europe is significant. Spanish cities perform well, with **Barcelona (2,636 founders)** and **Madrid (2,348 founders)** both securing spots in the top four.

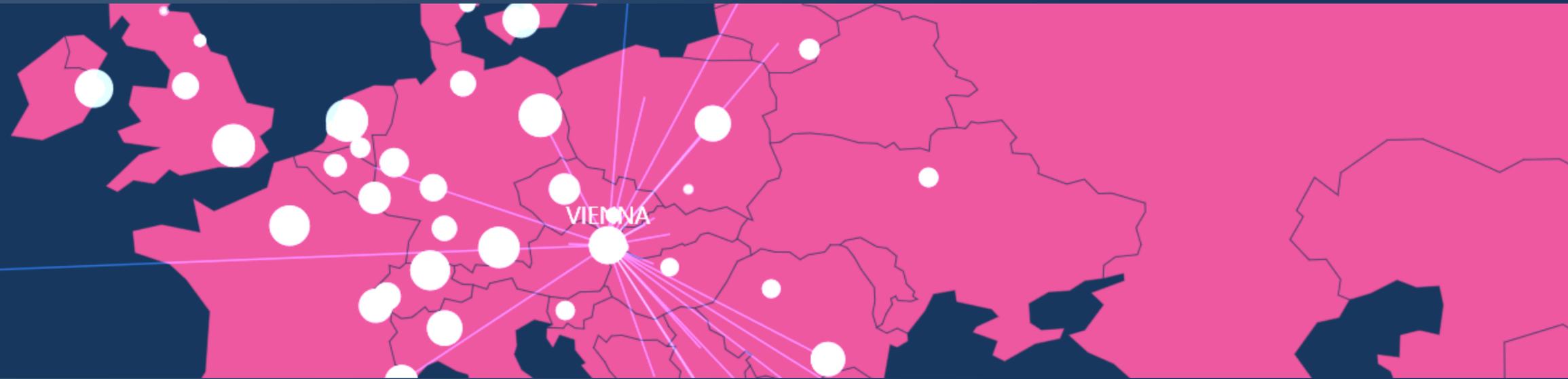
While entrepreneurial talent emerges across Europe, London and Paris stand out as exceptional hubs for developing future founders, likely due to their universities' strong entrepreneurial focus and the broader advantages of their startup ecosystems.

Startup Founders Who Completed Their University Education in the Same Cities



Source: Startup Heatmap Europe

# Top Diversity Hubs

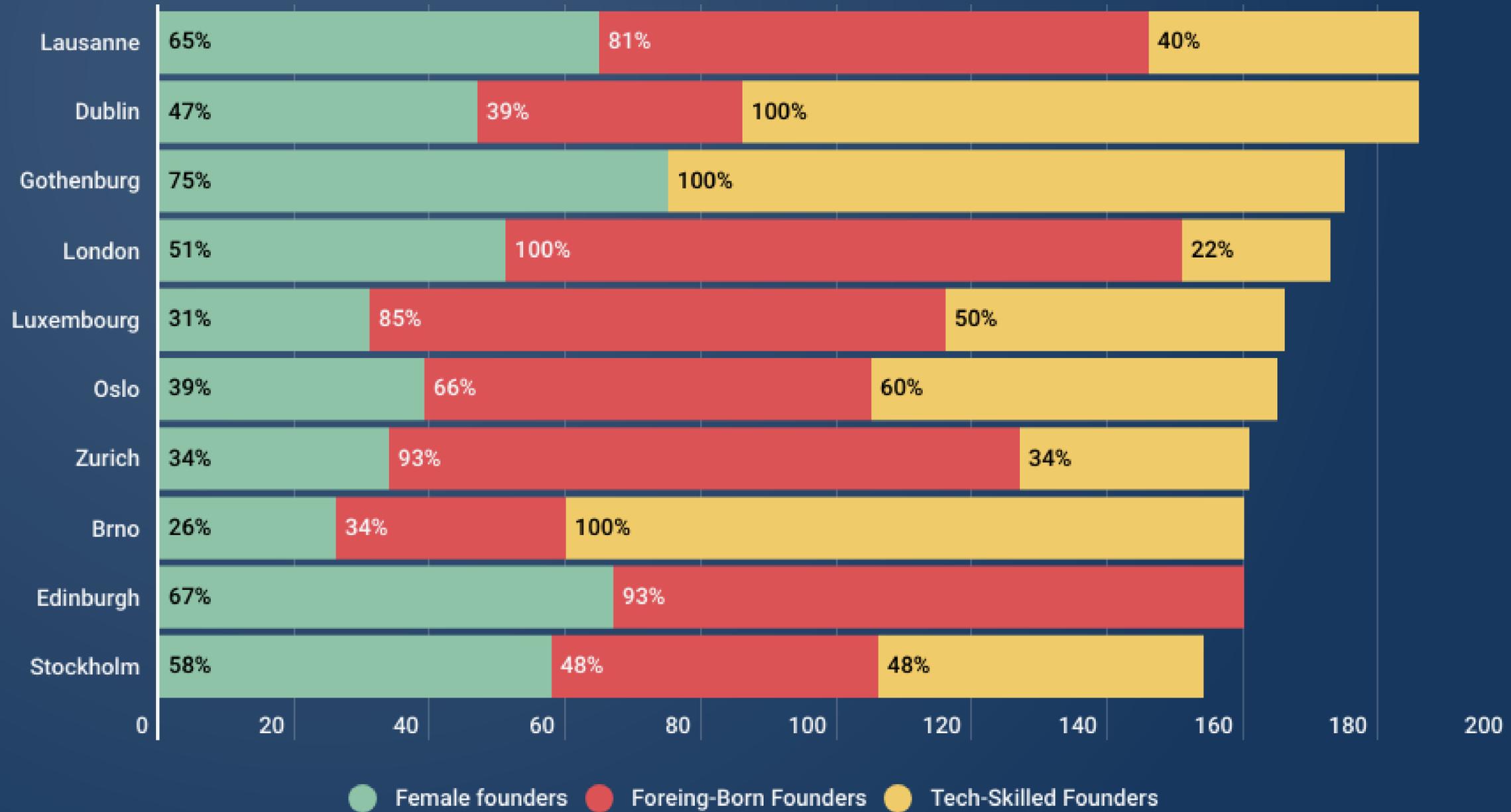


The Top Diversity Hubs ranking evaluates how well the startup scene welcomes founders of different genders and backgrounds, fostering an environment where they can thrive.

Diversity is a key driver of innovation, and Europe's top startup ecosystems are proving that inclusive, globally connected hubs have a competitive edge. The ranking of top diversity hubs showcases cities that attract a strong mix of female founders, foreign-born entrepreneurs, and tech-skilled talent, creating dynamic environments where fresh ideas thrive.

This diversity mix is more than just a statistic—it's a sign of resilience and adaptability. Cities that foster inclusive, international, and skilled entrepreneurial communities are best positioned to shape the future of innovation.

# RANKING: Top Diversity Hubs



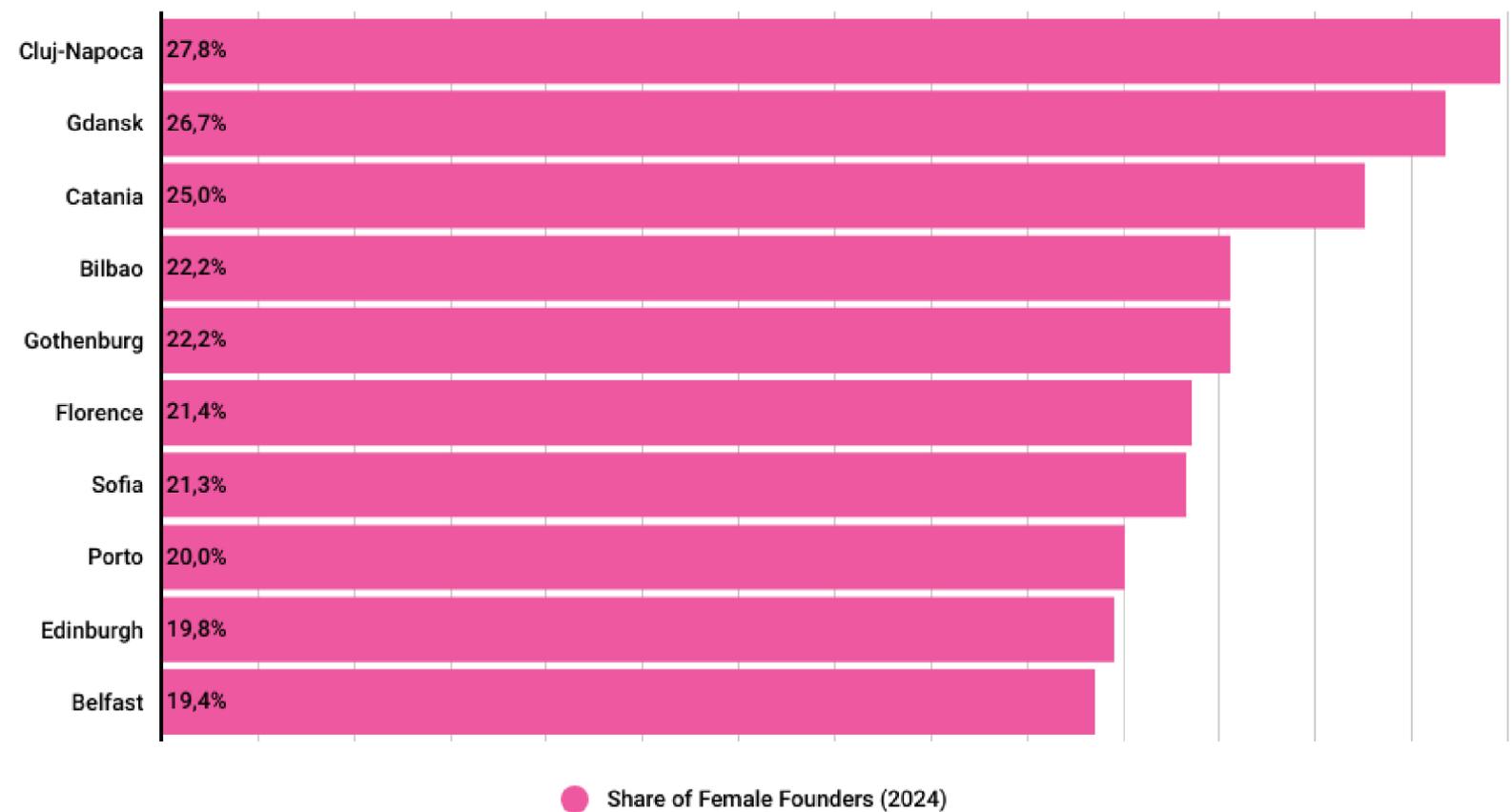
# Small Hubs, Big Impact: Tracking Female Founder Representation Across Europe

The representation of **female founders in small hubs** (population lower than 5 million inhabitants\*) varies significantly across European cities, highlighting different levels of inclusivity in entrepreneurial ecosystems. **Cluj-Napoca** leads the group with almost 30% female founders, setting itself apart from the rest. **Gdańsk** and **Catania** follow, each exceeding 25%.

Meanwhile, **Porto**, **Sofia**, **Florence**, **Bilbao**, **Göteborg**, and **Edinburgh** all fall below the 25% mark, indicating lower female founder representation. The chart reveals substantial variation across these European hubs. However, the presence of tech clusters and supportive policies in cities like Cluj-Napoca, Edinburgh, and Catania may be driving their numbers upward, offering potential models for fostering female entrepreneurship elsewhere.

\*The population refers to NUTS-2 regions as our unit of analysis.

Share of Female Founders in Hubs < 5 Million Inhabitants



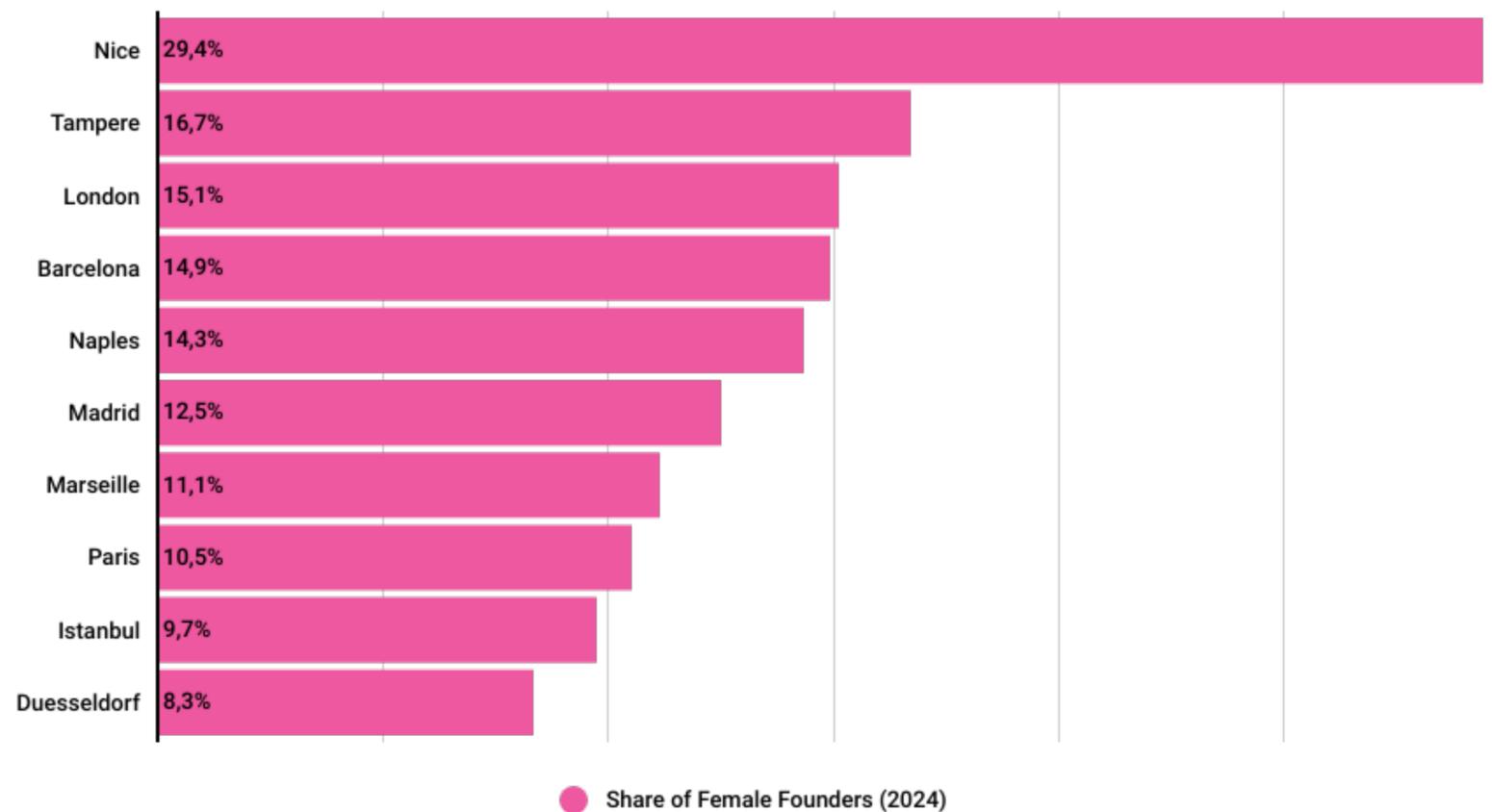
Source: Startup Heatmap Europe

# Breaking Barriers: Female Founder Representation in Europe's Major Hubs

**Nice** leads the group of **big hubs** with approximately 30% female founders, standing out as a clear frontrunner. **Tampere, London, Barcelona, Naples,** and **Madrid** follow, each with shares below 20%.

Meanwhile, **Marseille, Paris, Zurich,** and **Istanbul** rank even lower, with female founder representation falling below 12%, indicating more limited inclusivity in these ecosystems. Overall, the data highlights notable variation across European locations, with Nice emerging as a standout leader.

Share of Female Founders in Hubs > 5 Million Inhabitants



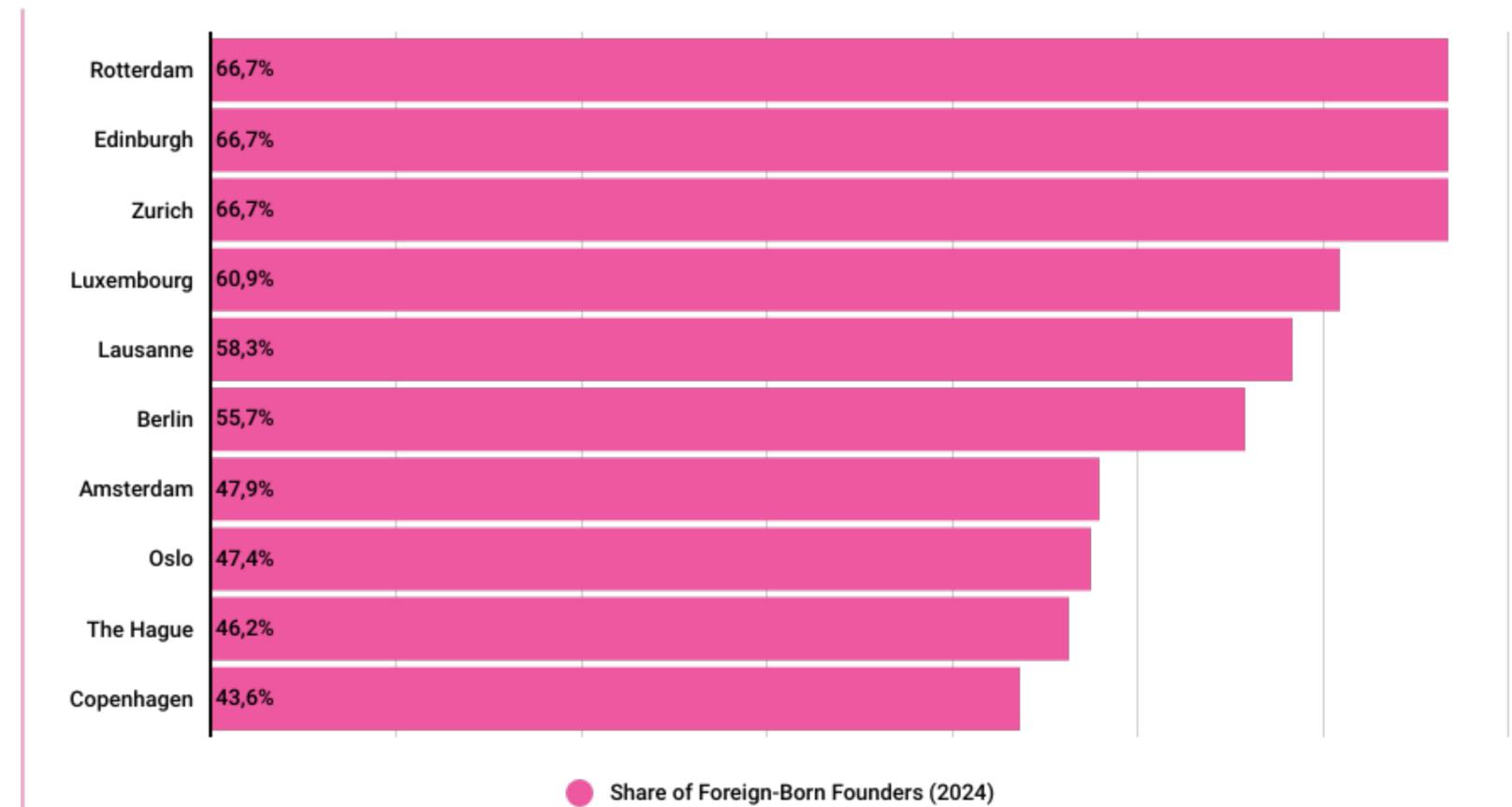
Source: Startup Heatmap Europe

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# European Small Hubs Leading with Foreign-Born Founders

Edinburgh, Rotterdam, and Zurich clearly stand out, with around 70% of founders reported as foreign-born. These cities are concentrated in Northern Europe—regions known for strong economies, established higher education systems, and often more welcoming immigration policies. Because of this, they tend to attract a high share of international talent. Dutch cities (The Hague, Rotterdam, Amsterdam) demonstrate significant draws for foreign founders.

Share of Foreign-Born Founders in Hubs < 5 Million Inhabitants



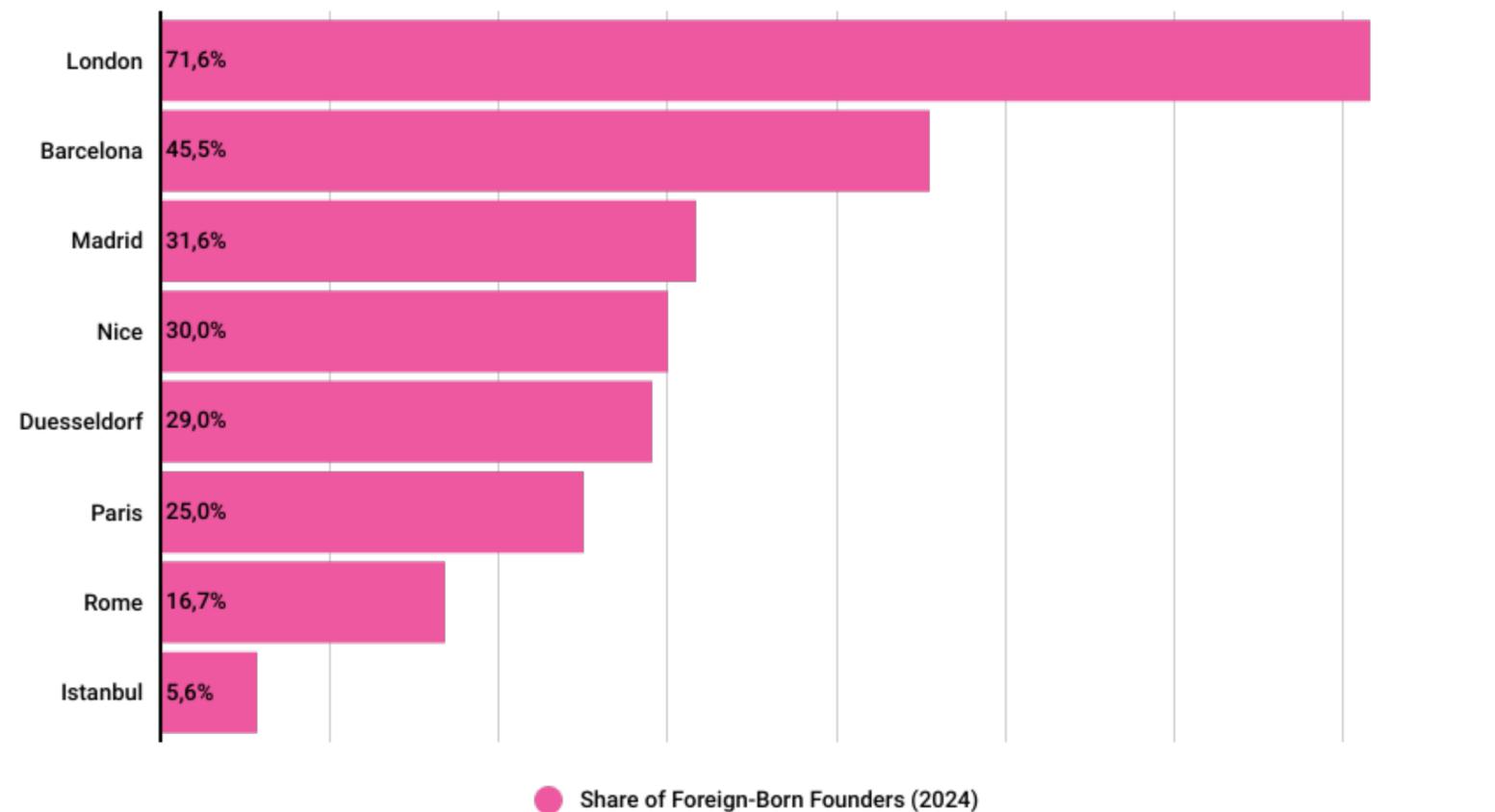
Source: Startup Heatmap Europe Survey 2024

# Top Big Hubs for Foreign-Born Founders

**London** leads the rankings, with approximately 70% of founders reported as foreign-born, reflecting the UK's strong international business environment. **Barcelona** also stands out as a major hub attracting global entrepreneurs.

**Spain** and **France** have a strong presence in the top 10, highlighting their growing appeal to international founders. Overall, the data underscores how Western and Northern European startup ecosystems benefit from openness to global talent, driving innovation and competitiveness.

Share of Foreign-Born Founders in Hubs > 5 Million Inhabitants



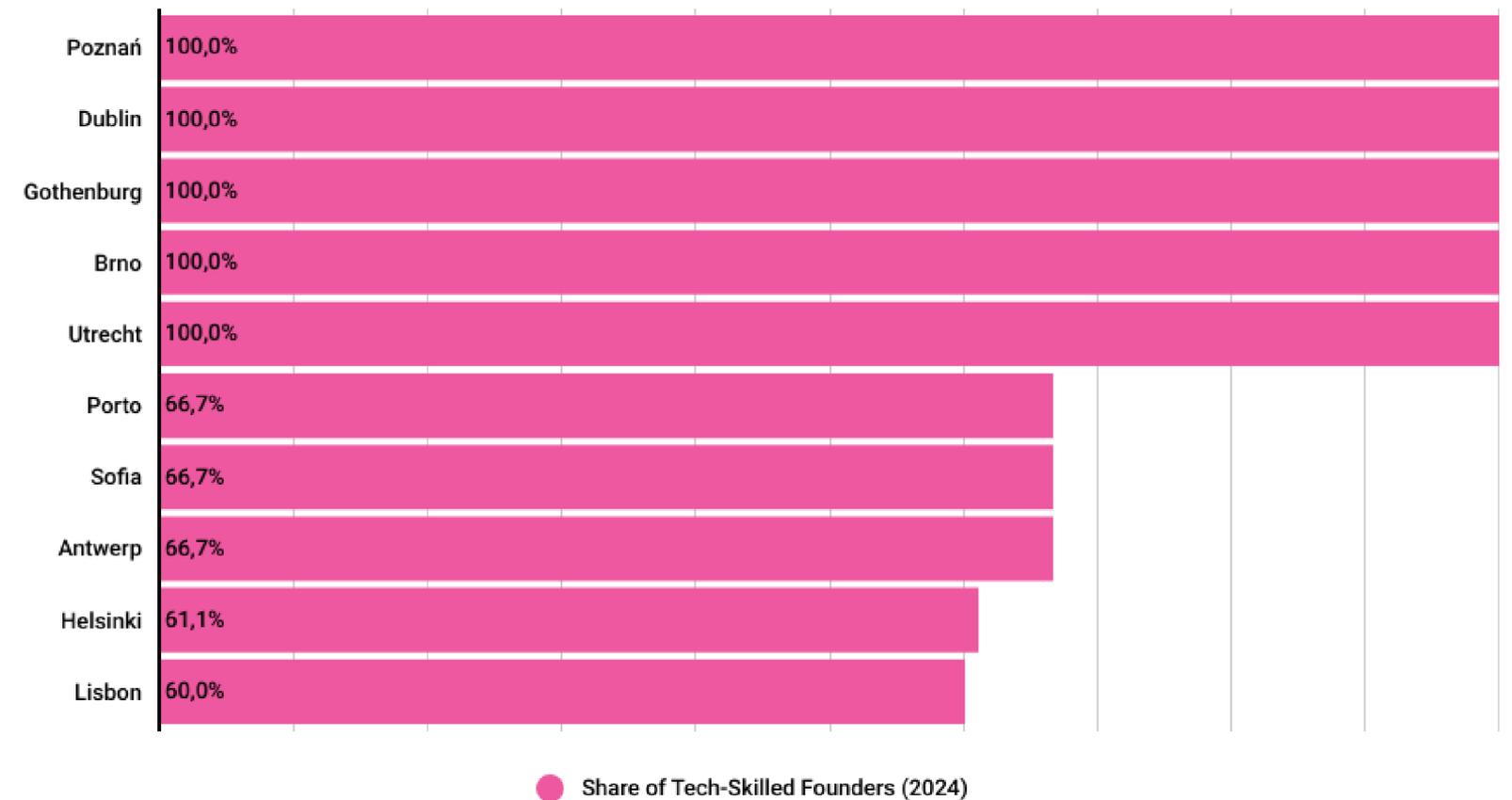
Source: Startup Heatmap Europe Survey 2024

# Small but Mighty: Europe's Leading Hubs for Tech-Skilled Founders

When it comes to tech talent, smaller cities are making a big impact. **Poznań** leads the pack with the highest share of tech-skilled founders, showcasing its strength as a thriving innovation hub. **Dublin** and **Gothenburg** follow closely, proving that smaller ecosystems can compete with larger metropolitan areas when it comes to entrepreneurial expertise.

**Brno** and **Utrecht** also stand out, highlighting their appeal for founders with technical backgrounds. Meanwhile, cities like **Lisbon**, **Helsinki**, and **Antwerp** demonstrate that a robust tech talent pool is not limited to traditional hotspots.

Share of Tech-Skilled Founders in Hubs < 5 Million Inhabitants



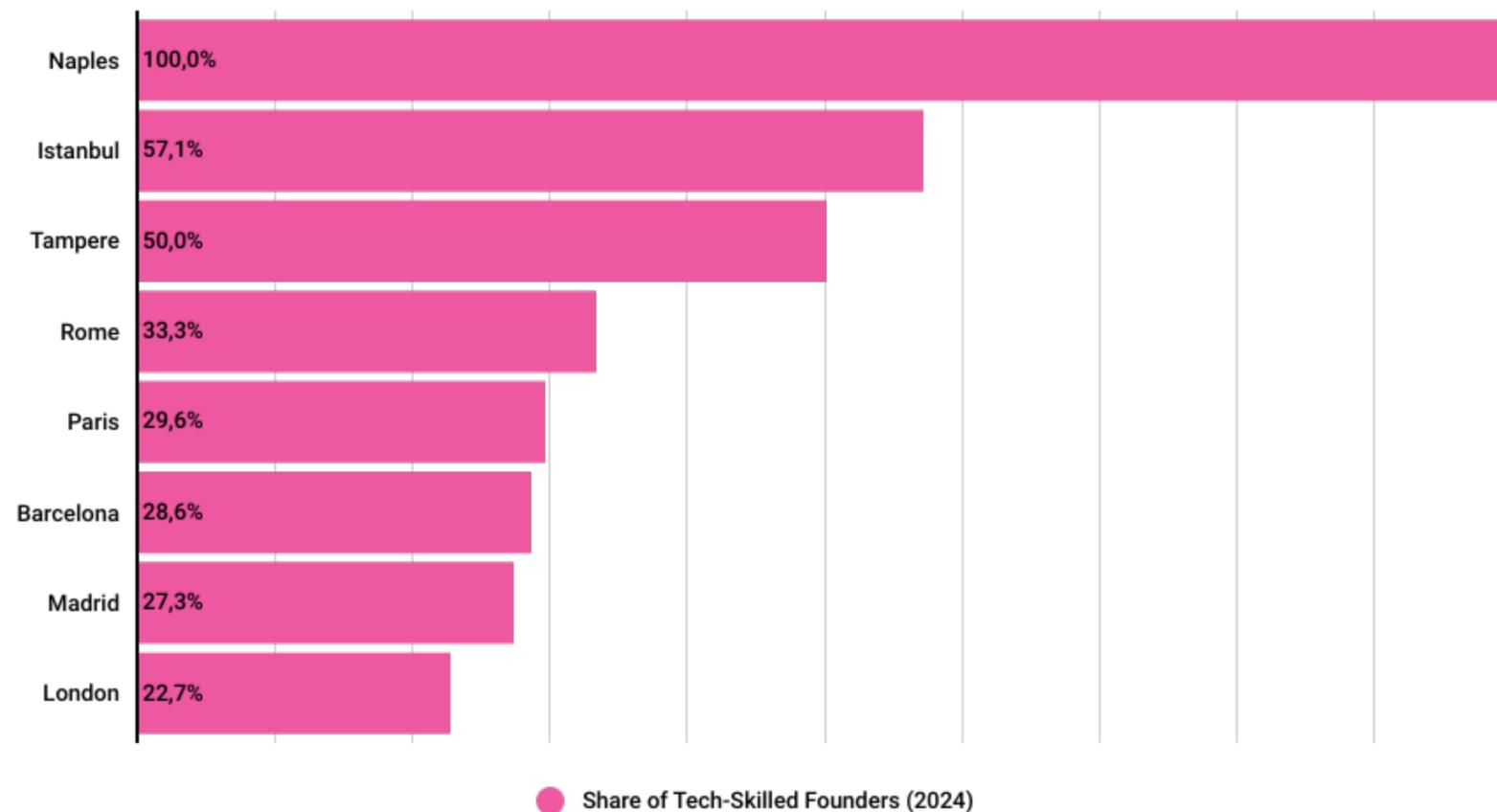
Source: Startup Heatmap Europe Survey 2024

# Big City Tech Leaders: Where Founders with Tech Skills Thrive

In major cities with over 5 million inhabitants, **Naples** stands out as a powerhouse of tech talent, leading the chart with the highest share of tech-skilled founders. **Istanbul** follows as a strong contender, showcasing its growing influence in the European tech scene.

While global hubs like **London**, **Paris**, and **Madrid** remain prominent, their comparatively lower share of tech-skilled founders highlights the vast and diverse entrepreneurial landscape within these megacities. Notably, cities like **Tampere** and **Rome** are carving out their space, proving that large population centres can foster significant innovation.

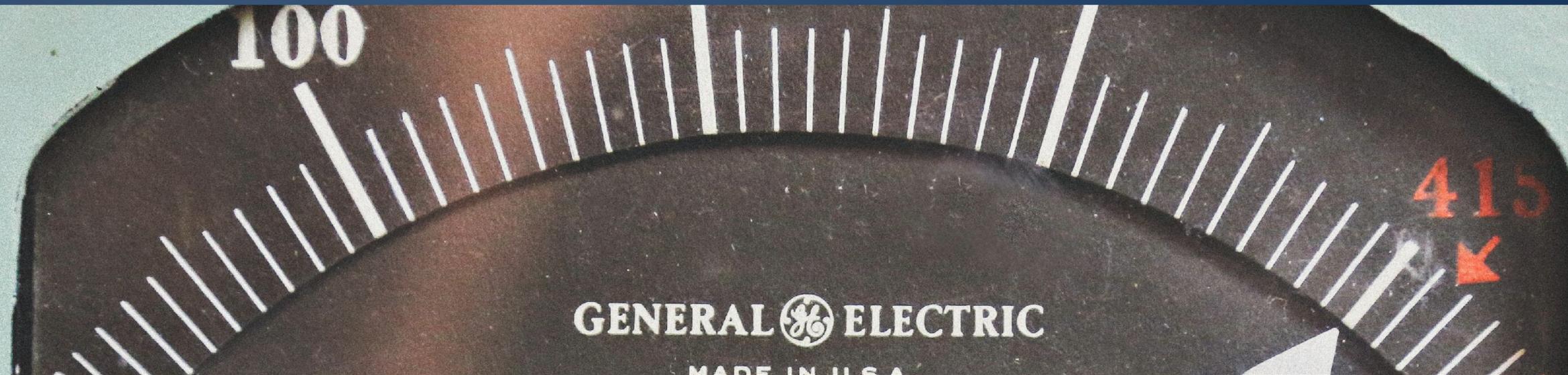
Share of Tech-Skilled Founders in Hubs > 5 Million Inhabitants



Source: Startup Heatmap Europe Survey 2024

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# Part II: Top Accelerator Cities



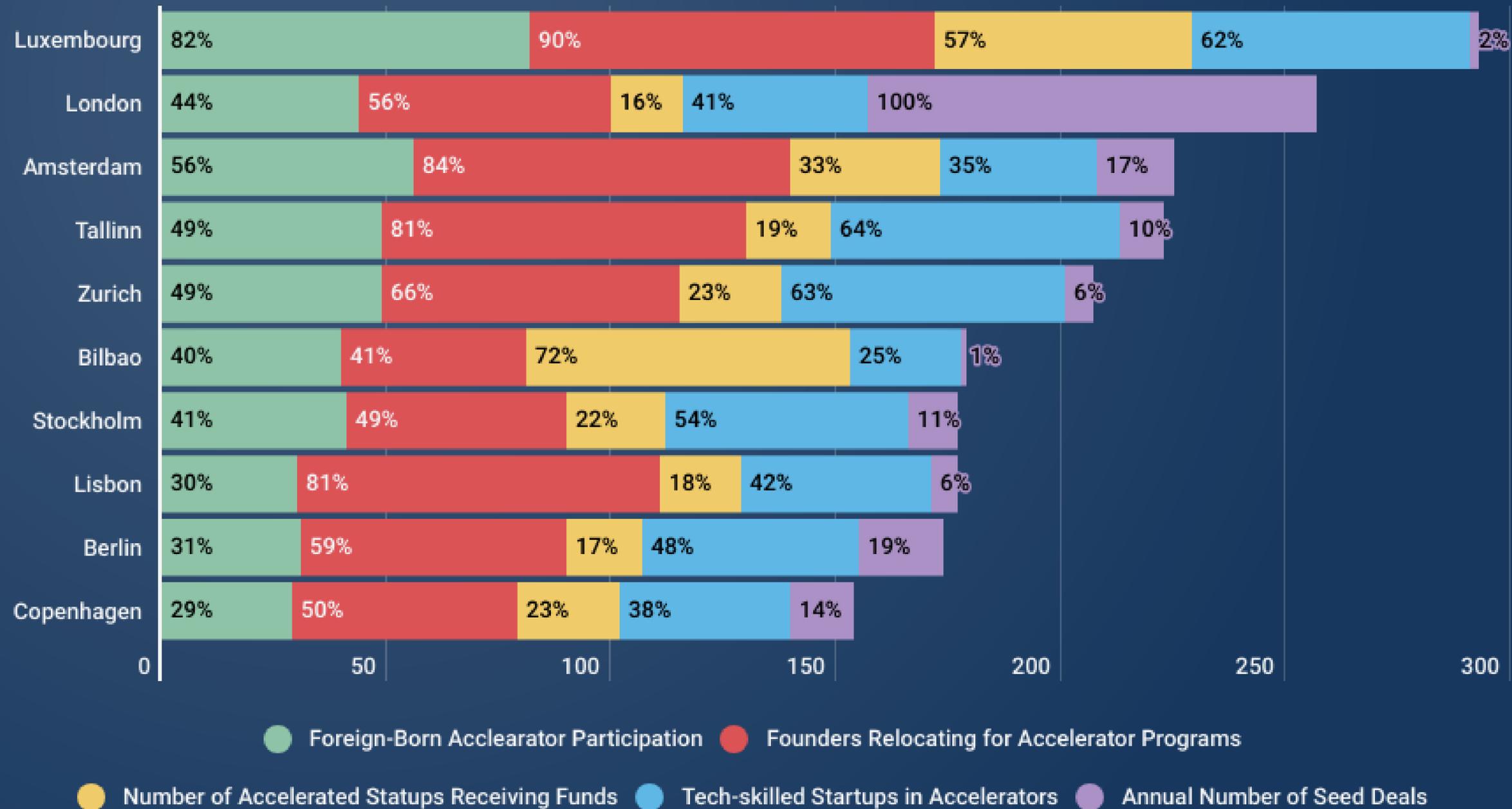
The strategy of accelerating startups is attractive to many ecosystems who position to lure international ventures with unique value propositions often along a vertical specialization or a focus on a particular growth stage.

Luxembourg leads the ranking, excelling in founder relocation and funding for accelerated startups. London dominates in seed deals, while Amsterdam stands out for its high participation of tech-skilled founders.

Emerging hubs like Tallinn and Zurich show strong potential, while Copenhagen and Lisbon lag behind, revealing opportunities to improve funding and tech integration.

The data underscores the importance of balanced strategies to attract talent, boost funding, and enhance accelerator programs across Europe.

# RANKING: Top Accelerator Cities



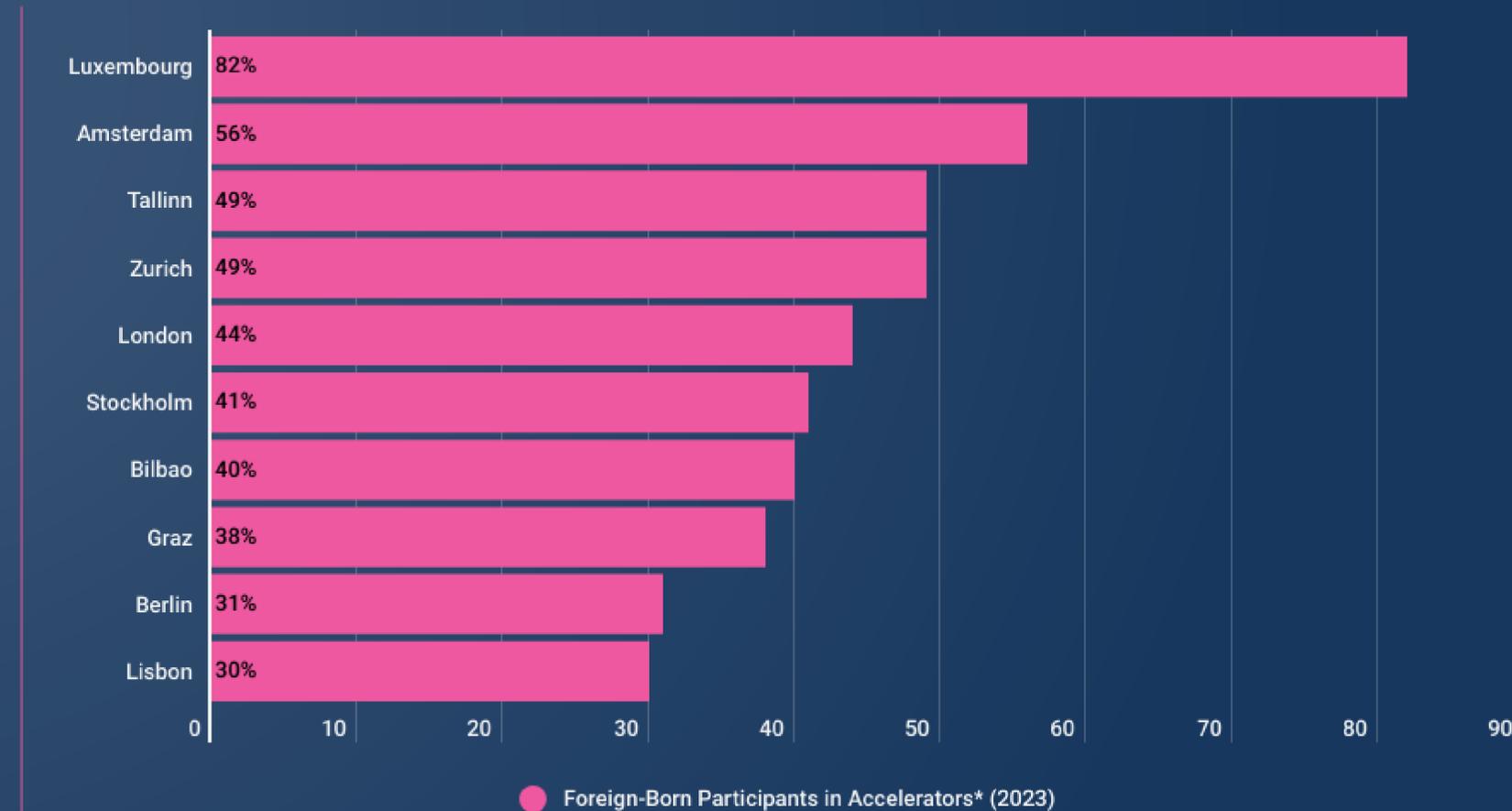
# Global Talent in European Startup Hubs

**Luxembourg** stands out with the highest percentage of foreign-born participants at **82%**. This suggests Luxembourg's accelerator program is attracting a truly international pool of talent.

The major European tech hubs like **Amsterdam**, **London**, and **Berlin** also have relatively high percentages of foreign participation, ranging from **31% to 56%**. This indicates these cities are able to draw talent from beyond their national borders.

Mid-sized cities like **Tallinn**, **Zurich**, **Bilbao**, and **Graz** still manage to achieve between **40-49% foreign participation**. This speaks to the ability of smaller ecosystems to cultivate diverse startup communities.

### Foreign-Born Participants in Accelerators



Source: Startup Heatmap Europe

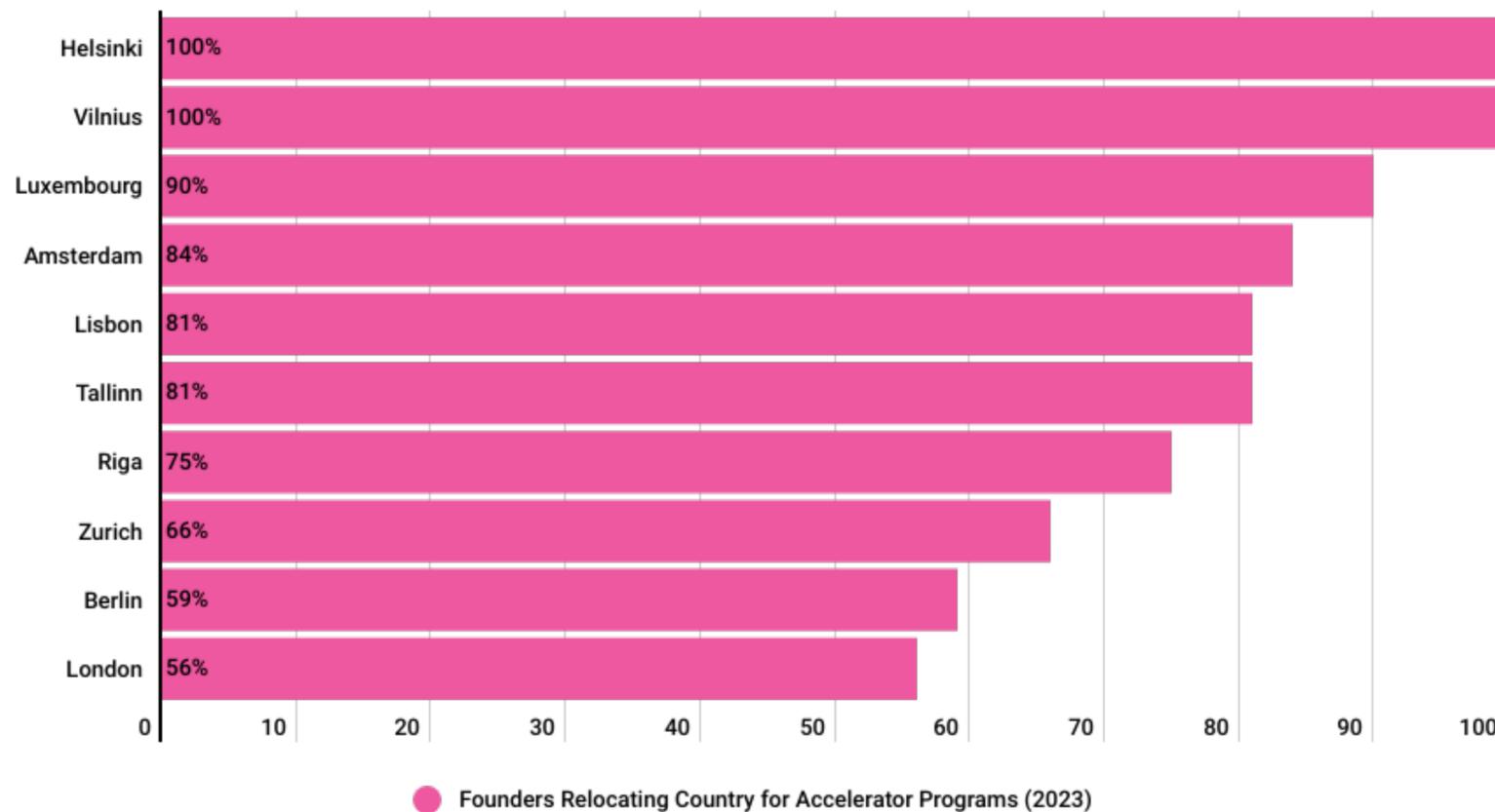
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*\*More than 5 accelerated startups per city.*

# Cities Attracting Founders to Accelerator Programs in 2023

The data highlights the percentage of founders from another country who relocated to various cities in 2023 to participate in accelerator programs. **Helsinki** and **Vilnius** lead with 100% of founders coming from abroad, suggesting these cities are particularly attractive for international entrepreneurs. **Luxembourg** follows closely at 90%, reinforcing its role as a global startup hub. **Amsterdam** (84%), **Lisbon**, and **Tallinn** (both 81%) also show high international appeal. **Riga** (75%), **Zurich** (66%), **Berlin** (59%), and **London** (56%) demonstrate solid, but comparatively lower, relocation rates. Overall, these cities are key destinations for founders seeking international accelerator opportunities.

Founders Relocating Country for Accelerator Programs



Source: Startup Heatmap Europe

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*\*More than 5 accelerated startups per city.*

# Tech Titans: Mapping the Hotbeds of Startup Brilliance

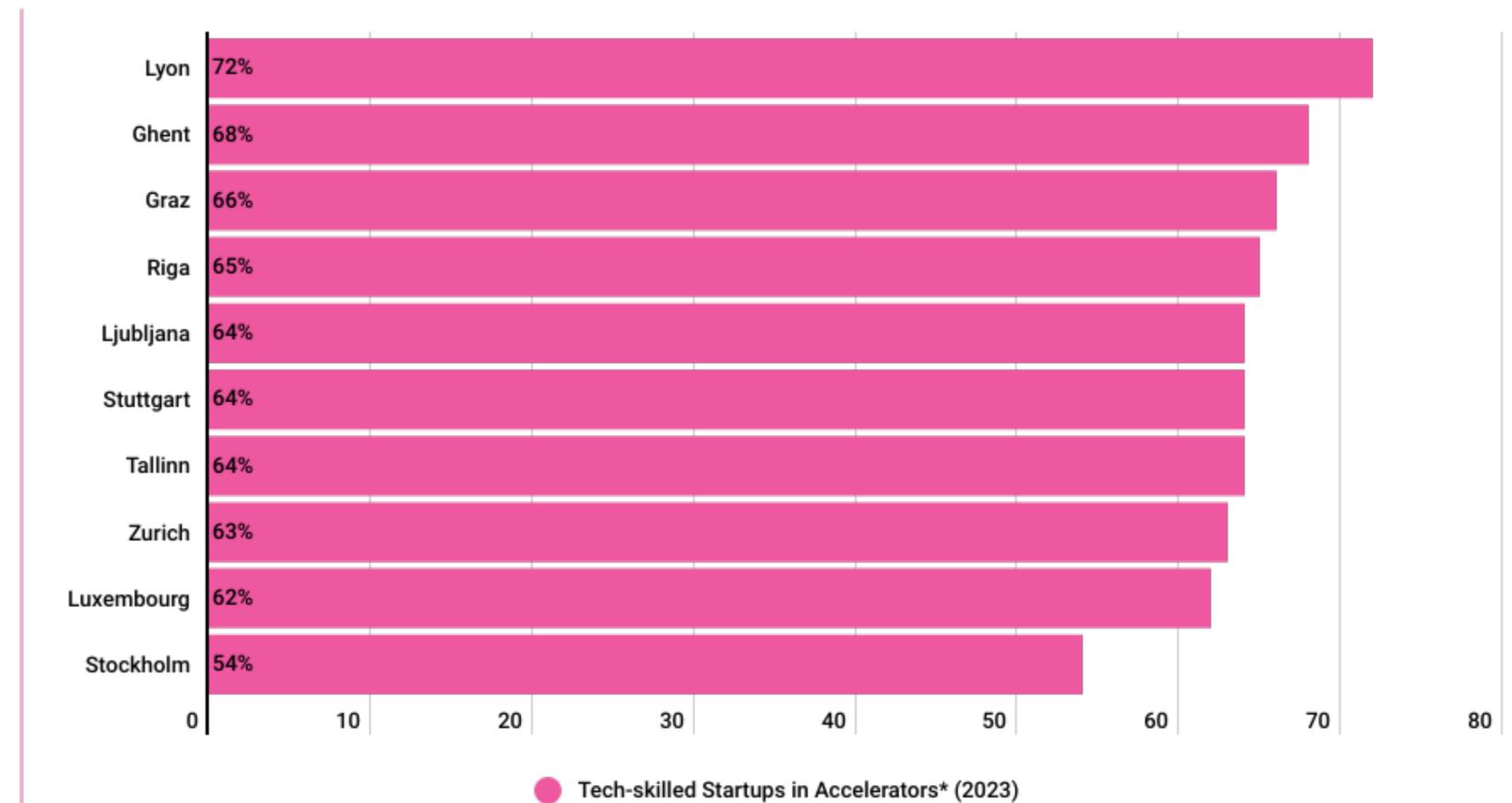
**Lyon** has the highest percentage of tech-skilled startups at **72%**, indicating a strong presence of technically proficient founders in its accelerator ecosystem.

**Ghent** and **Graz** follow close behind with **68%** and **66%** tech-skilled startups in their accelerators, while **Riga** and **Ljubljana** both have over **60%**.

**Zurich** and **Luxembourg** have **63%** and **62%** tech-skilled startups, respectively, suggesting these cities are able to attract a good mix of technical and non-technical founders.

**Stockholm** has the lowest percentage shown at **54%**, which may indicate a broader diversity of startup backgrounds in its accelerator programs compared to the other cities.

Tech-skilled Startups in Accelerators (2023)



Source: Startup Heatmap Europe

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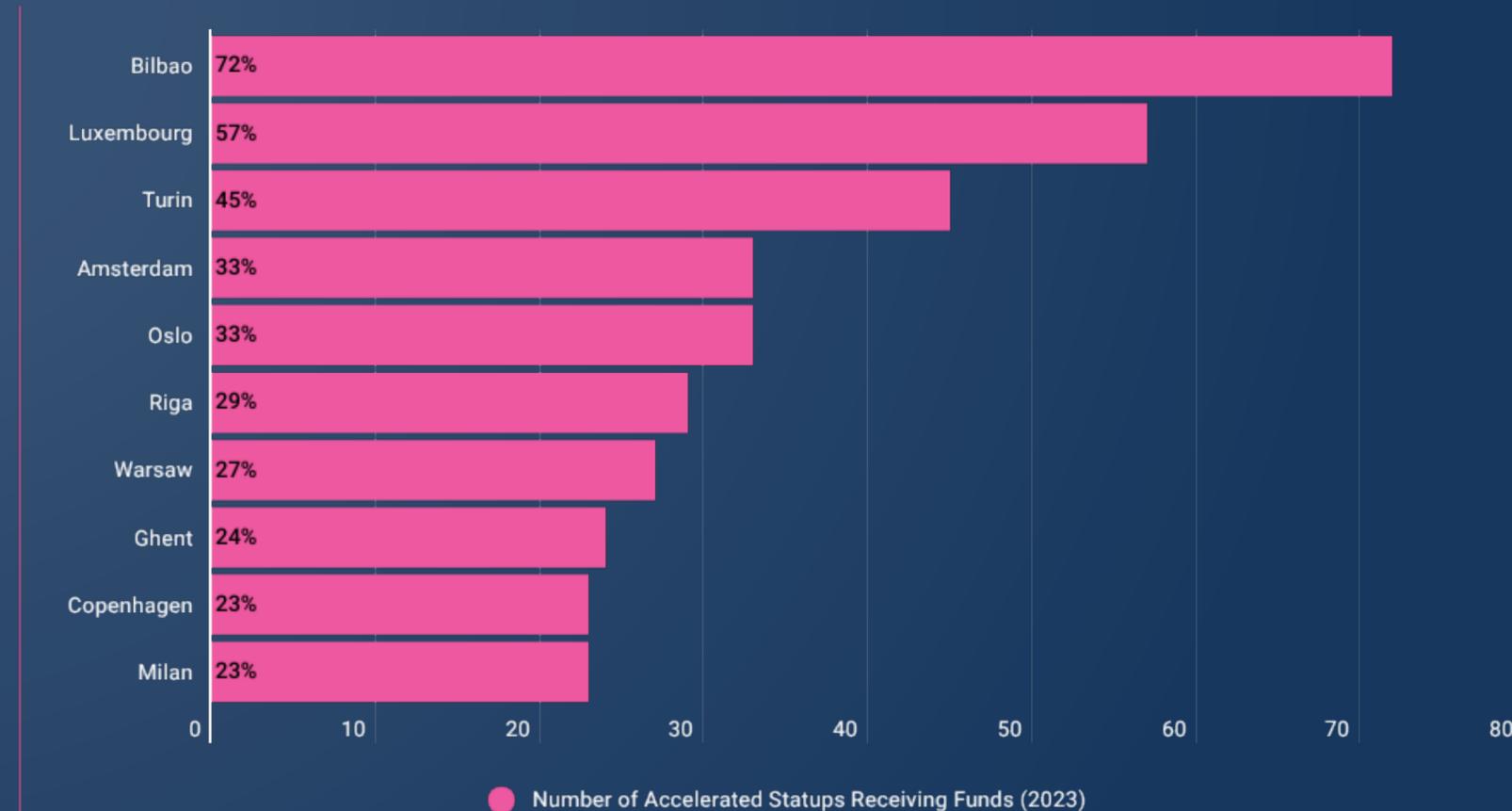
\*More than 5 accelerated startups per city.

# Which Cities Are Supercharging Startup Success?

The latest data from Startup Heatmap Europe highlights **Bilbao's** impressive dominance, with 72% of its accelerated startups securing funding in 2023. Following closely are **Luxembourg** (57%) and **Turin** (45%), solidifying their positions as thriving hubs for emerging ventures. Notably, **Amsterdam** and **Oslo** also made strong showings, with 33% of their accelerated startups receiving investment.

This trend reflects the growing appeal of these cities as entrepreneurial hotspots, attracting both innovators and investors. Meanwhile, cities like **Milan** and **Copenhagen**, while further down the list, continue to foster dynamic startup environments with promising growth potential.

### Number of Accelerated Statups Receiving Funds



Source: Startup Heatmap Europe

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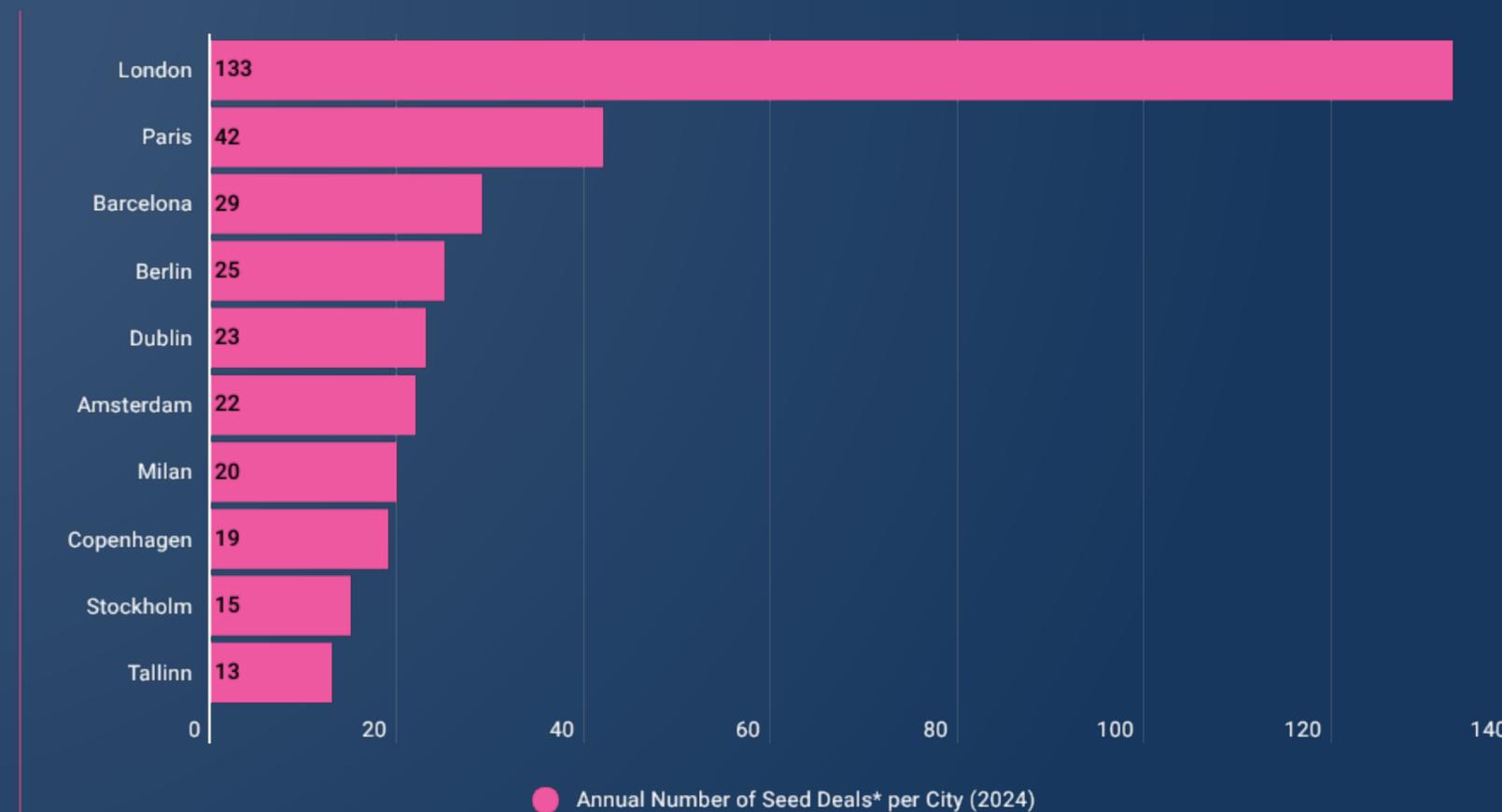
# Startup Seed Showdown:

## Where Europe's Early-Stage Funding Races Ahead

**London** has once again proven its dominance in the European startup ecosystem, securing a remarkable 133 seed deals in 2024 — more than three times the number of its nearest competitor, **Paris**, which saw 42 deals. **Barcelona**, **Berlin**, and **Dublin** also demonstrated strong activity, cementing their status as vibrant startup hubs.

This surge in early-stage investments reflects investor confidence in these cities' innovation potential and entrepreneurial talent. Notably, **Amsterdam**, **Milan**, and **Copenhagen** continue to attract significant deal flow, while **Stockholm** and **Tallinn** show promising growth, reinforcing their positions as emerging tech centres.

Annual Number of Seed Deals per City



Source: Startup Heatmap Europe

[WWW.STARTUPHEATMAP.EU](http://WWW.STARTUPHEATMAP.EU)

\*Investment rounds between \$450K and \$2.5M

# Part III: Top Scale-Up Cities



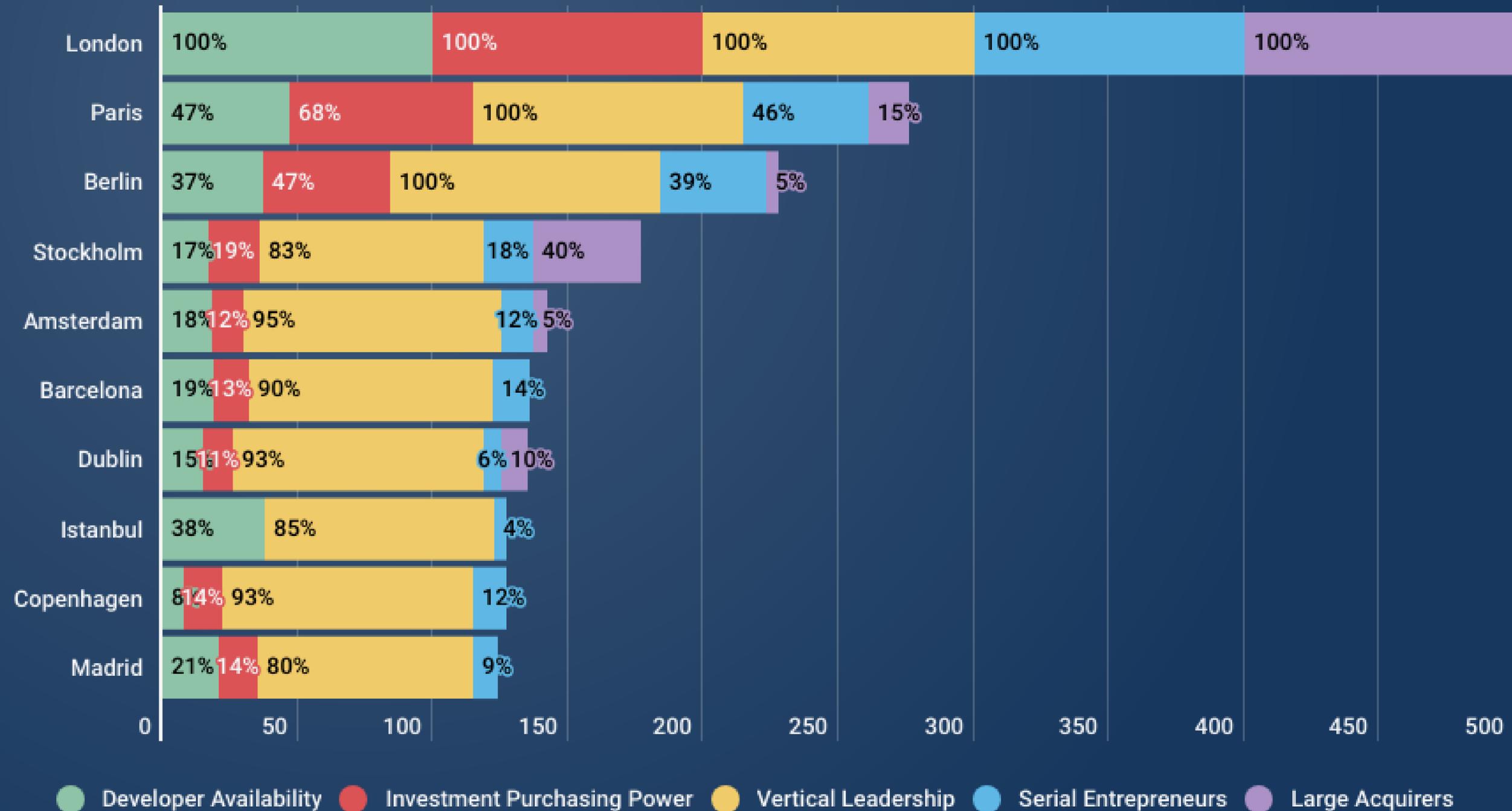
The traditional approach to an ambitious startup ecosystem strategy is to create and scale unicorns. The expectation is that these tech champions will generate high tax revenue and thousands of jobs within the city. However, this assumption may be misleading, as the actual economic impact of unicorns does not always align with local job creation and tax contributions.

The high connectedness of startup ecosystems reveals two key insights:

- a) The cities where startups raise capital to scale are not necessarily the ones where they create most of their jobs.
- b) An overemphasis on capital markets may hinder early-stage support, as resources such as spaces, political backing, and funding for support structures are limited.

Despite this, a relatively small and stable group of European cities continues to compete actively to scale startups in their final growth stage before IPO or acquisition.

# RANKING: Top Scale-Up Cities



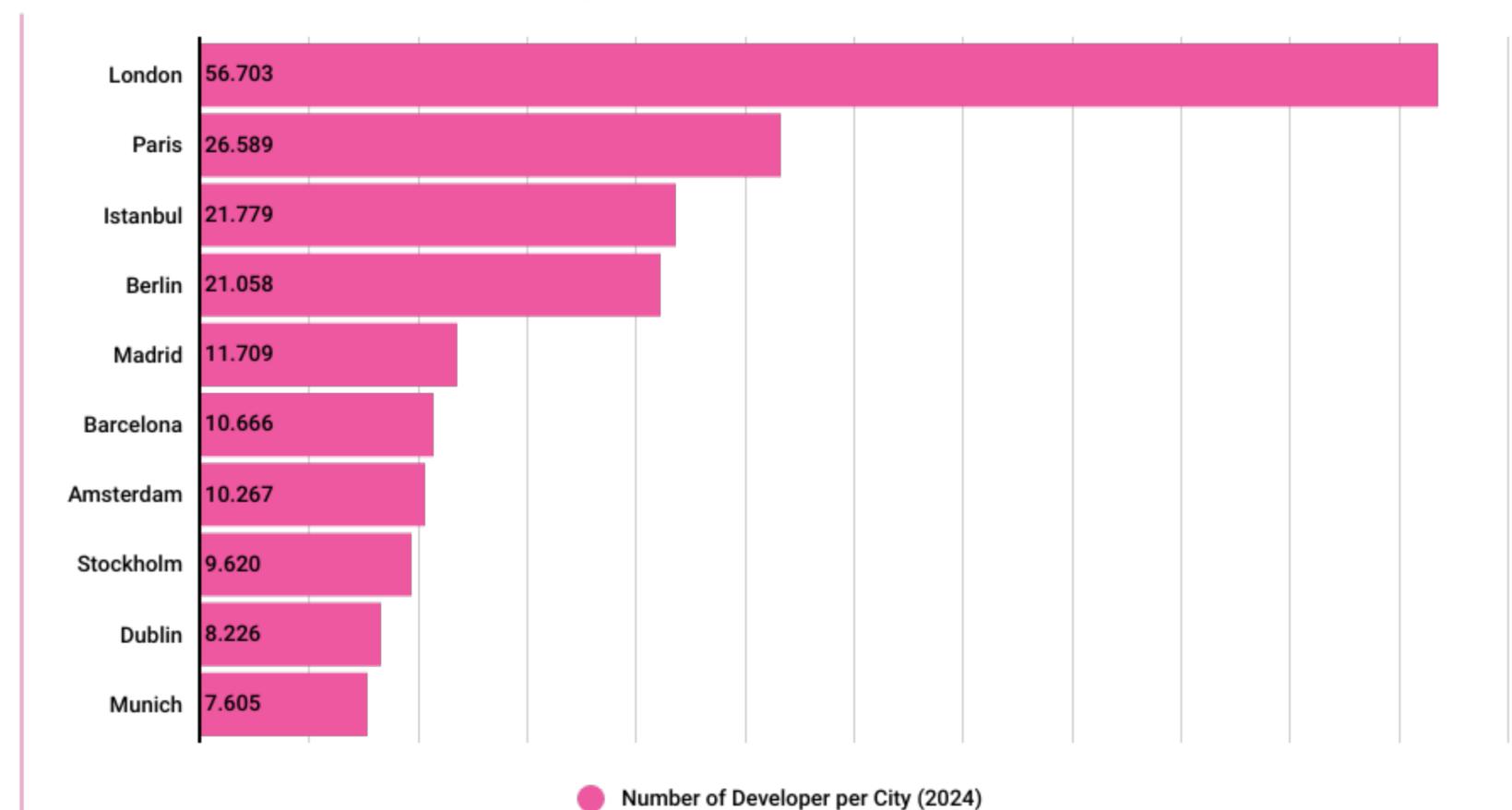
# Developer Capitals: The Cities Powering Scale-Up Growth

Developer availability represents a critical indicator for scale-up strategy success. As companies grow, their ability to recruit technical talent becomes as crucial as access to capital.

The data show **London** substantially leading with **56,703 developers**, more than double the number in second-placed **Paris (26,589)**, while cities like **Istanbul (21,779)** and **Berlin (21,058)** maintain strong talent pools.

Since developers represent one of the most important job types scale-ups create alongside sales roles, this distribution of tech talent significantly influences where scale-ups can effectively establish and grow their operations.

Developers Availability per City



Source: Startup Heatmap Europe / Stackoverflow

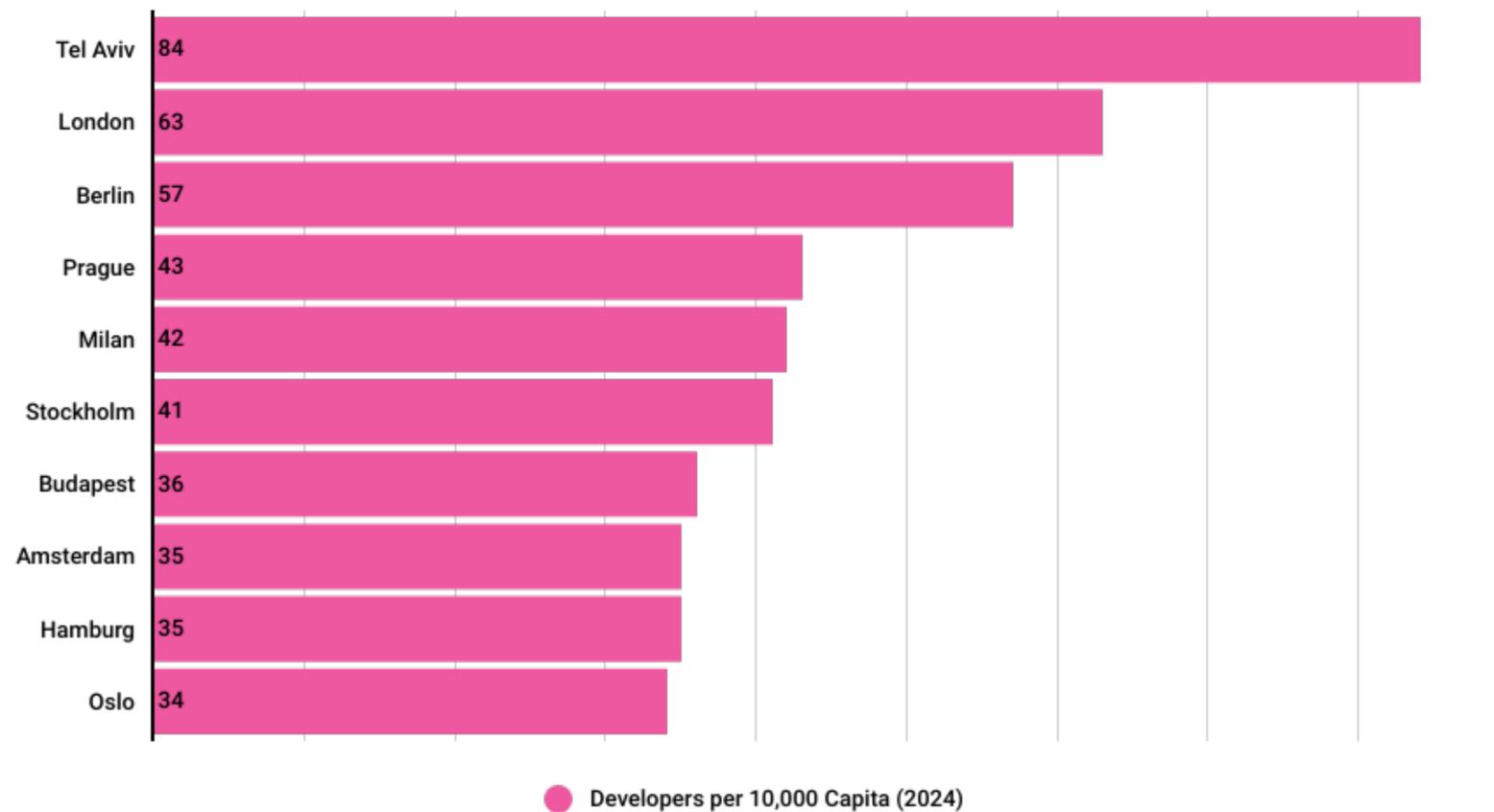
# Developer Hotspots: Cities Leading in Tech Talent Per Capita

This analysis offers a different perspective on tech talent distribution by measuring developer availability relative to city population.

**Tel Aviv** leads with **84 developers per 10,000 inhabitants**, followed by **London (63)** and **Berlin (58)**, reinforcing their status as highly concentrated tech hubs.

While some cities with large absolute developer numbers don't appear in this ranking, mid-sized tech centers like Prague and Stockholm demonstrate strong density figures, suggesting they maintain robust tech ecosystems relative to their size.

Developers Availability per City per 10,000 Inhabitants



Source: Startup Heatmap Europe / Stackoverflow

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# Developer Numbers Dip:

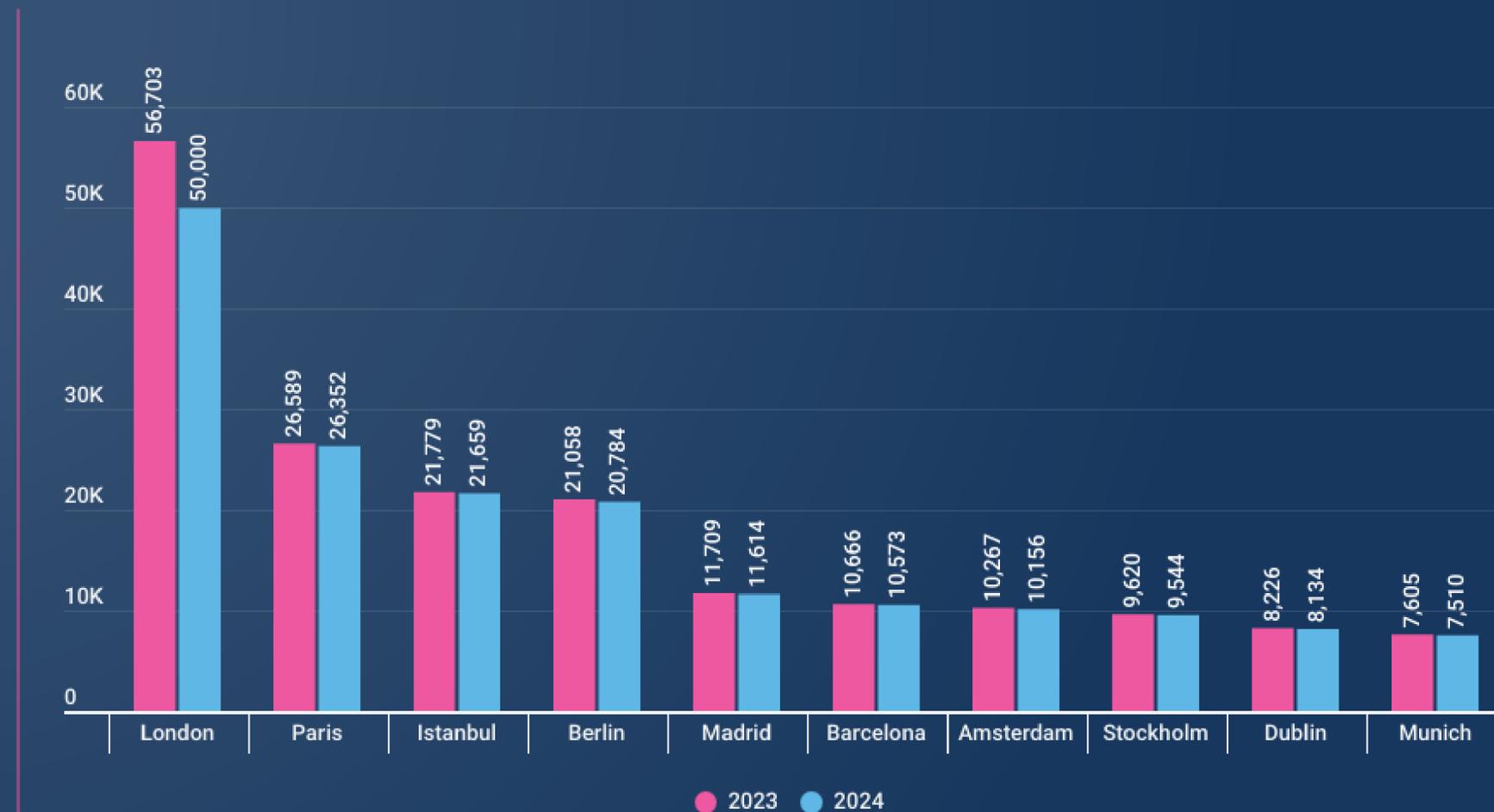
## A Subtle Shift in Tech Talent Landscape

Between 2023 and 2024 the number of developers has slightly declined in each of the top 10 cities hosting the most developers in absolute numbers.

London experienced the most noticeable decline from nearly 57,000 to about 50,000 developers. Other major tech hubs like Paris, Istanbul, and Berlin show similar but more modest decreases. Smaller tech cities such as Amsterdam, Stockholm, Dublin, and Munich demonstrate more stability in their developer numbers, with minimal changes between the two years.

This pattern might suggest that larger tech hubs are more sensitive to broader industry fluctuations, while smaller markets maintain more stable tech workforces.

Number of Developers per City over Time



Source: Startup Heatmap Europe / Stackoverflow

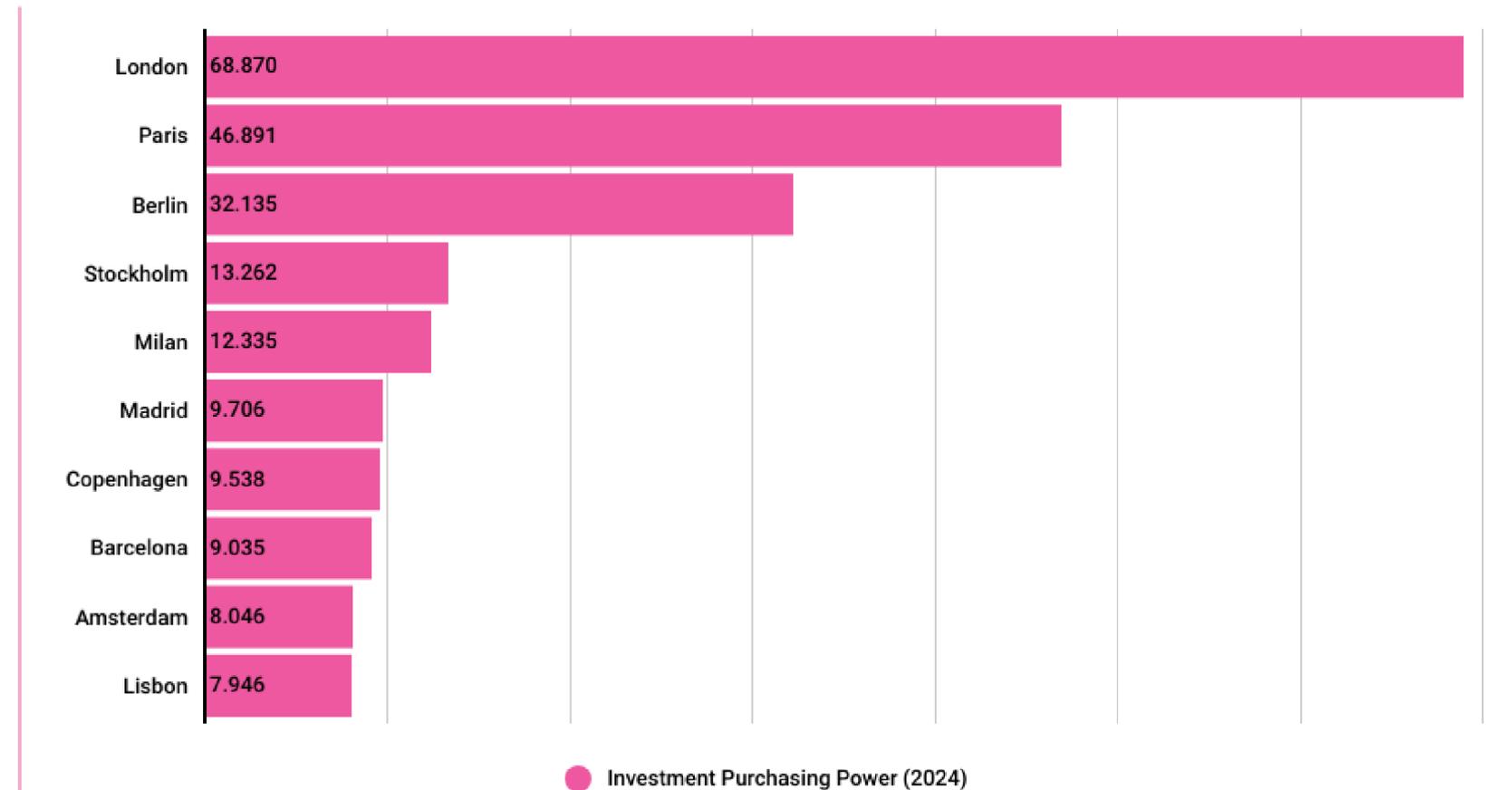
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# Developer Investment Power: How Far Funding Goes in Scale-Up Hubs

It is a simple thought: The value of an investment is only worth as much as you can buy from it. To understand competitive advantages of scale-up hubs, we look at the relative purchasing power the past investments had. In London, startups could have hired a collective 68,870 developer with the money they raised in 2024.

Investment Purchasing Power: Annual Investments over Local Salary of a Senior Developer



Source: Startup Heatmap Europe / Stackoverflow

\* Investment Purchasing Power: Investment divided by developer salary cost

# Specializations: Number of Top 20 Positions in Vertical Fundraising

A clear sign for a boosting scale-up strategy is the ability to support the growth of a multitude of sectors. Successful ecosystems in this strategy show that they reach the Top 20 in terms of VC fundings in a list of 40 verticals.

**Berlin, London** and **Paris** are in the Top 20 over all verticals, while **Amsterdam, Copenhagen, Dublin** and **Zurich** share a close second rank.

Number of Top 20 positions in Verticals by Investment Sum



Source: Startup Heatmap Europe

[WWW.STARTUPHEATMAP.EU](http://WWW.STARTUPHEATMAP.EU)

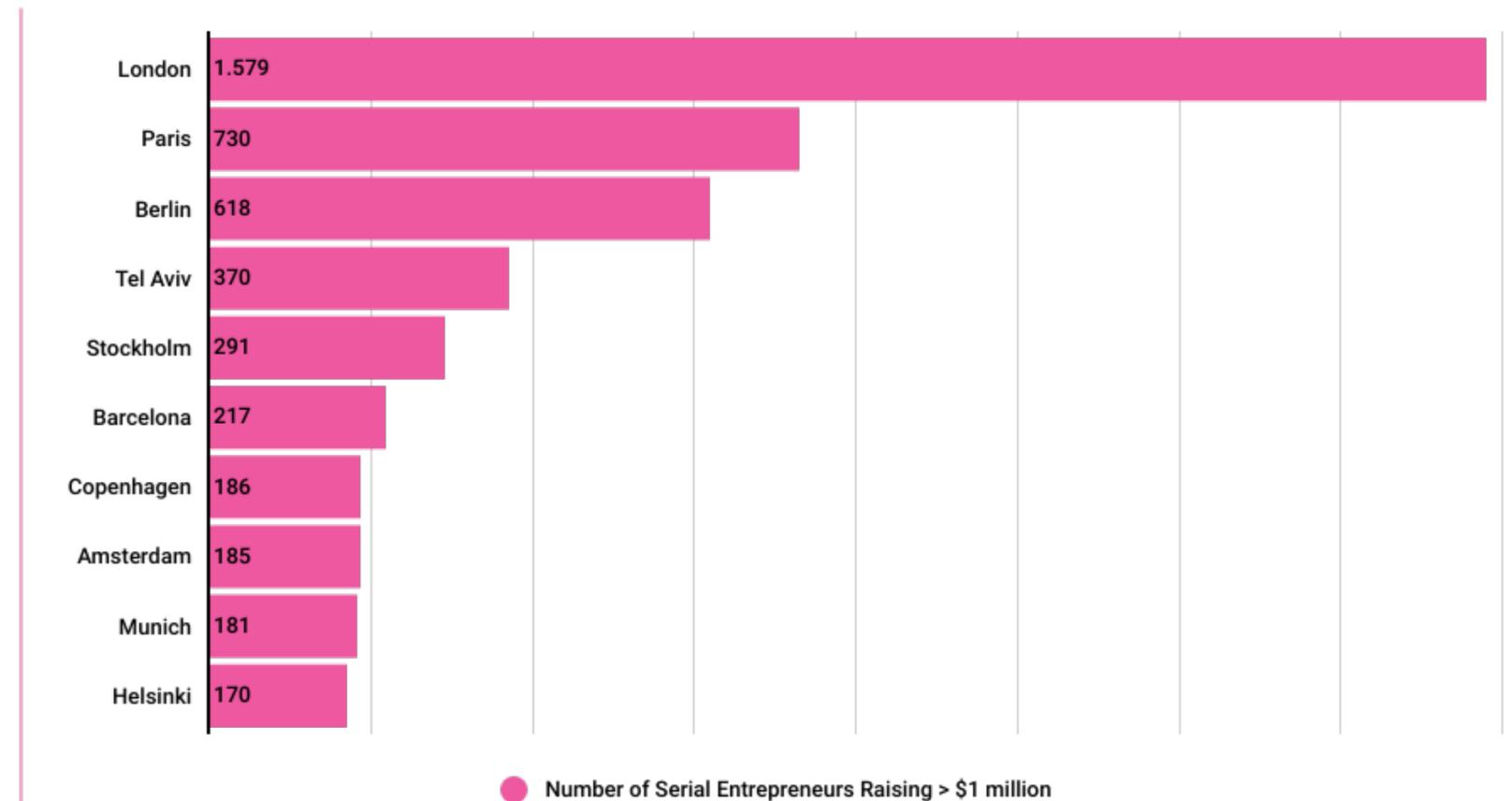
# Serial Success: Europe's Top Hubs for Seasoned Entrepreneurs

This analysis highlights the distribution of serial entrepreneurs who have successfully raised over \$1 million across major European tech hubs.

**London** leads by a wide margin with **1,579 experienced founders**, more than double the number in second-placed **Paris (730)**. **Berlin** holds a strong third position with **618 serial entrepreneurs**.

The concentration of proven entrepreneurial talent plays a crucial role in ecosystem development, as these experienced founders often become investors and mentors, further strengthening their local startup communities.

Number of Serial Entrepreneurs with Experience Raising >\$1 Million



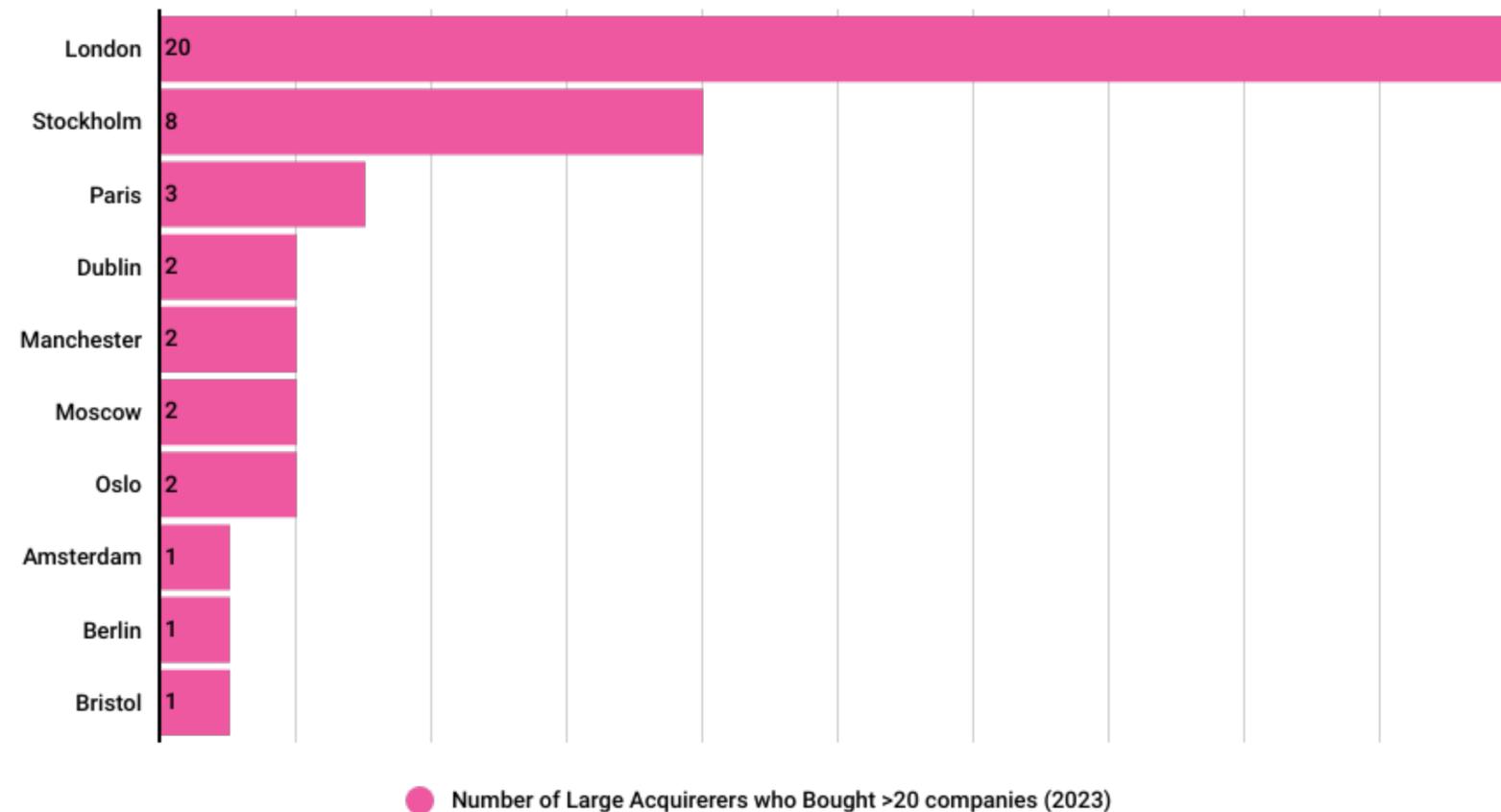
Source: Startup Heatmap Europe

# Scaling Through Exits: Europe's Leading Hubs for Serial Acquirers

For scale-up success, ecosystems must cultivate a robust exit market. Serial acquirers (companies that have acquired more than 20 firms) play a crucial role by leading the way and sharing valuable experience with other market players.

**London** ranks first, with **20** serial acquirers in 2023. **Stockholm** (**8**) follows as the second-largest player. Notably, only three hubs in Europe have more than two serial acquirers, highlighting the limited presence of strong exit markets across the continent.

Number of Corporates who Bought >20 Companies per City



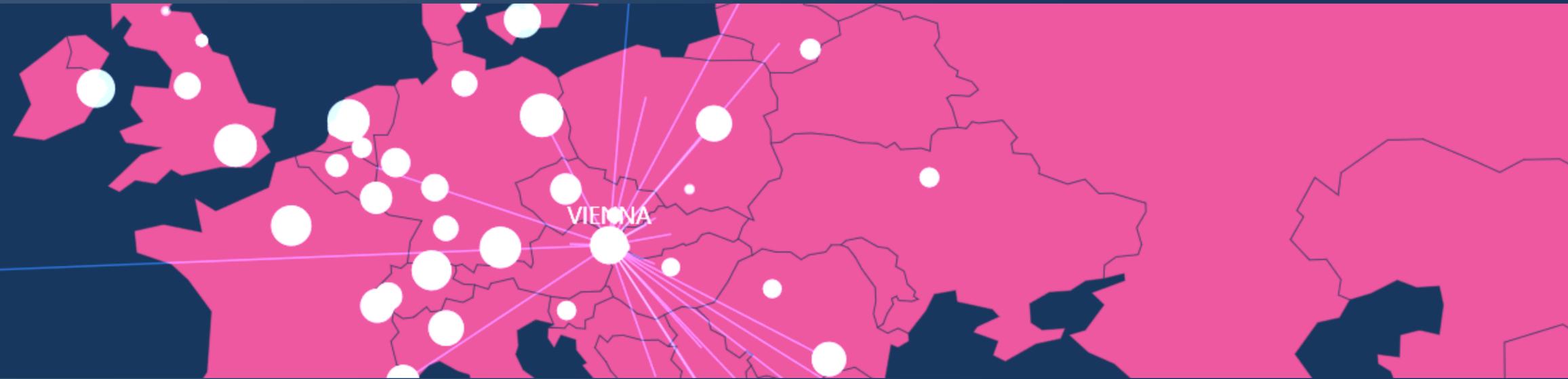
Source: Crunchbase / Startup Heatmap Europe

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# CHAPTER IV: INNOVATING FOR TOMORROW

**How Will Sustainability and AI Shape the Future of European Startup Ecosystems?**

# PART I: TOP GREEN HUBS

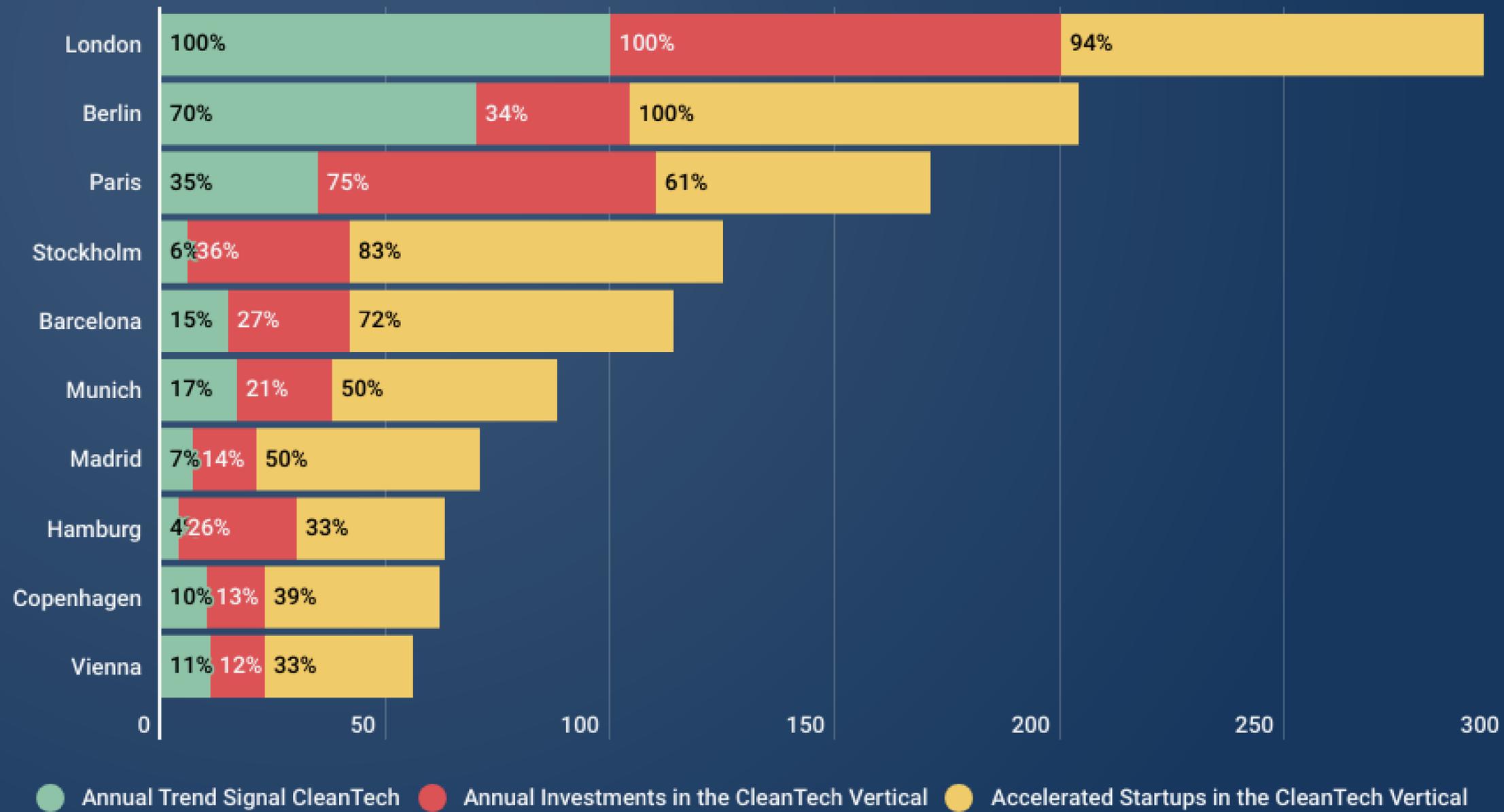


European cities are emerging as **key green hubs** within startup ecosystems, driven by a growing focus on **sustainability and innovation**. The **CleanTech sector** leads this transformation, with **Berlin, London, and Stockholm** excelling in **accelerating startups and driving industry trends**.

Nordic cities such as **Stockholm, Copenhagen, and Oslo** leverage their **sustainability-first cultures**, while Southern European hubs, including **Barcelona and Madrid**, are gaining momentum as **rising players**.

Despite differences in scale and maturity, these green hubs are propelling Europe's transition toward sustainable innovation, positioning the region as a global leader in CleanTech and green entrepreneurship.

# RANKING: Top Green Hubs



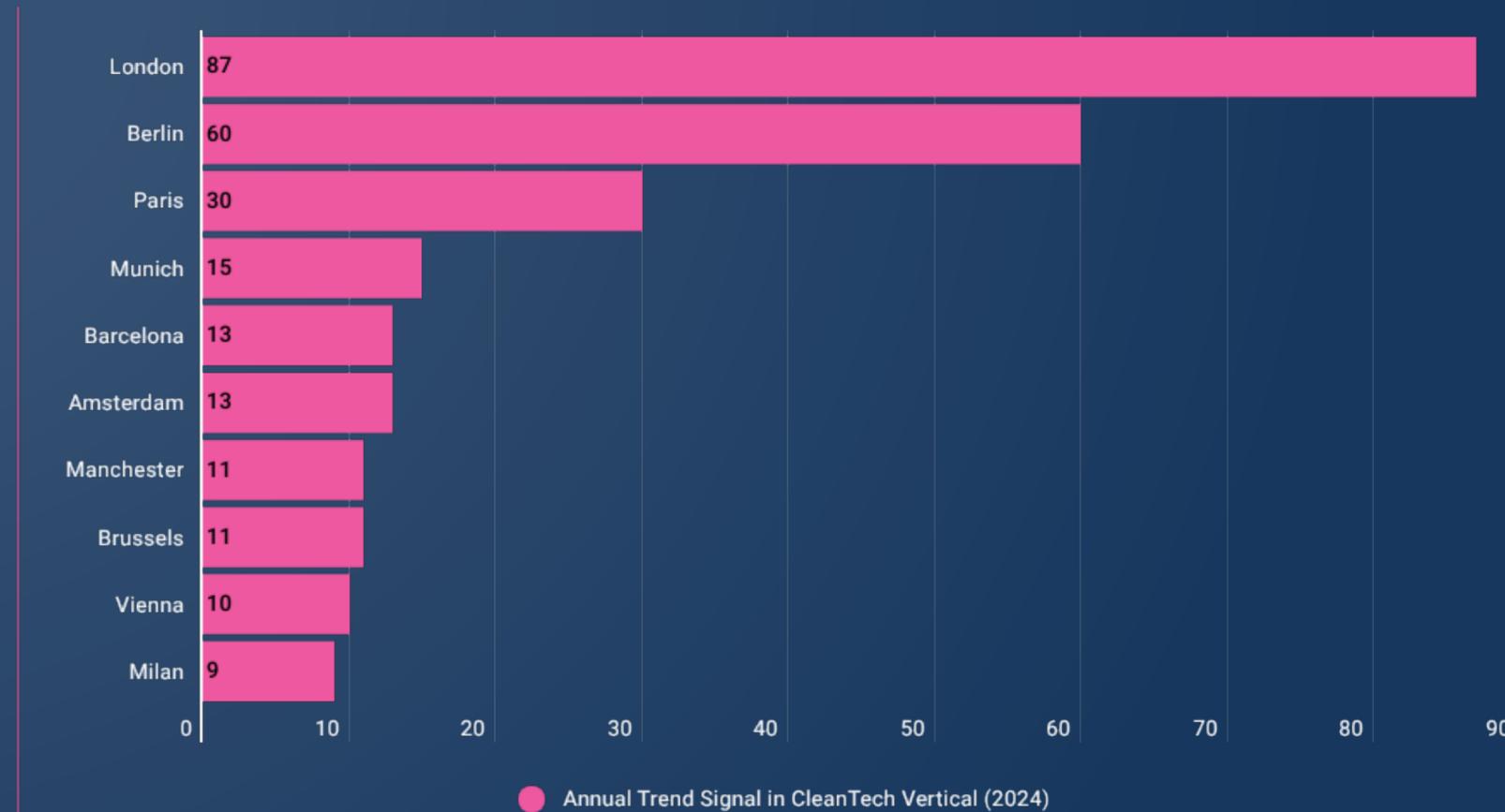
## London Tops European Trend Signals in 2024

**London** leads decisively with a commanding score of **87**, far ahead of **Berlin (60)** in second place. **Paris** follows in third with a moderate **30**, while **Munich, Barcelona, and Amsterdam** are closely clustered in the **13-15** range.

At the lower end, Manchester, Brussels, Vienna, and Milan register single-digit scores, indicating relatively lower activity or visibility in this sector.

The data underscores London's dominance as a CleanTech innovation hub, supported by a dynamic ecosystem of events, media attention, and professional engagement. Berlin's strong performance further highlights its growing reputation in sustainability and technology. Meanwhile, lower scores in cities like Milan may reflect emerging efforts or a more niche focus within the CleanTech sector.

Annual Trend Signal in CleanTech Vertical



Source: Startup Heatmap Europe

[WWW.STARTUPHEATMAP.EU](http://WWW.STARTUPHEATMAP.EU)

Annual trend signal values are aggregated per city and vertical across multiple sources, including meetups, Eventbrite events, LinkedIn mentions, and articles. The average trend signal is calculated to reflect overall activity in each sector.

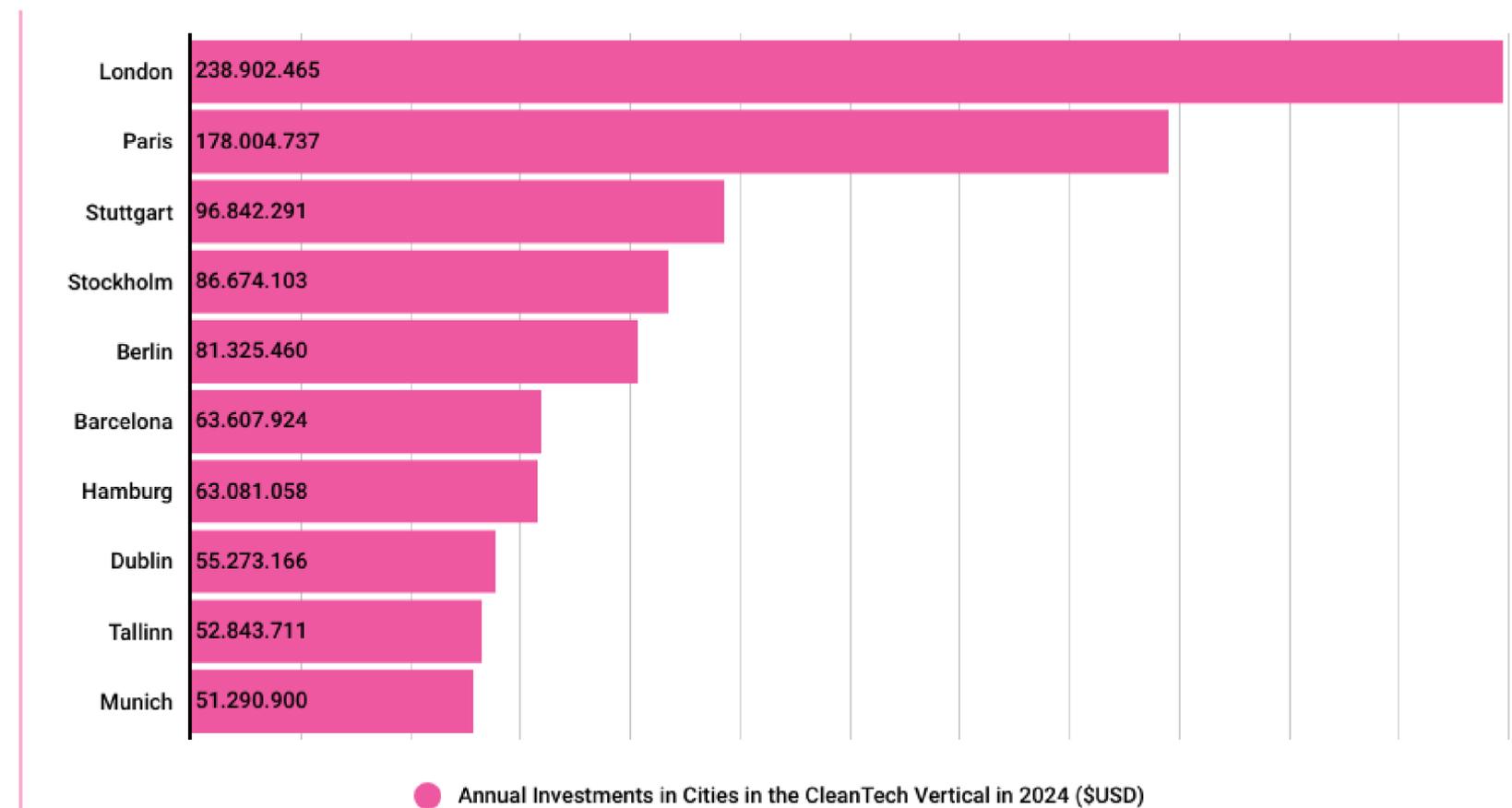
For example, London scores 100% for FinTech mentions on Eventbrite and 60% in social media discussions, resulting in an 80% average trend score for FinTech in London in 2024.

# CleanTech Powerhouses: Top Investment Hubs in 2024

London emerges as the top city with \$238.9 million in funding, followed by Paris at \$178 million. Stuttgart, Stockholm, and Berlin also attract substantial amounts, ranging from \$81 to \$96 million.

Other cities, including Barcelona, Hamburg, Dublin, Tallinn, and Munich, show moderate investment levels, each securing between \$51 million and \$63 million.

Annual Investments in Cities in the CleanTech Vertical (\$)



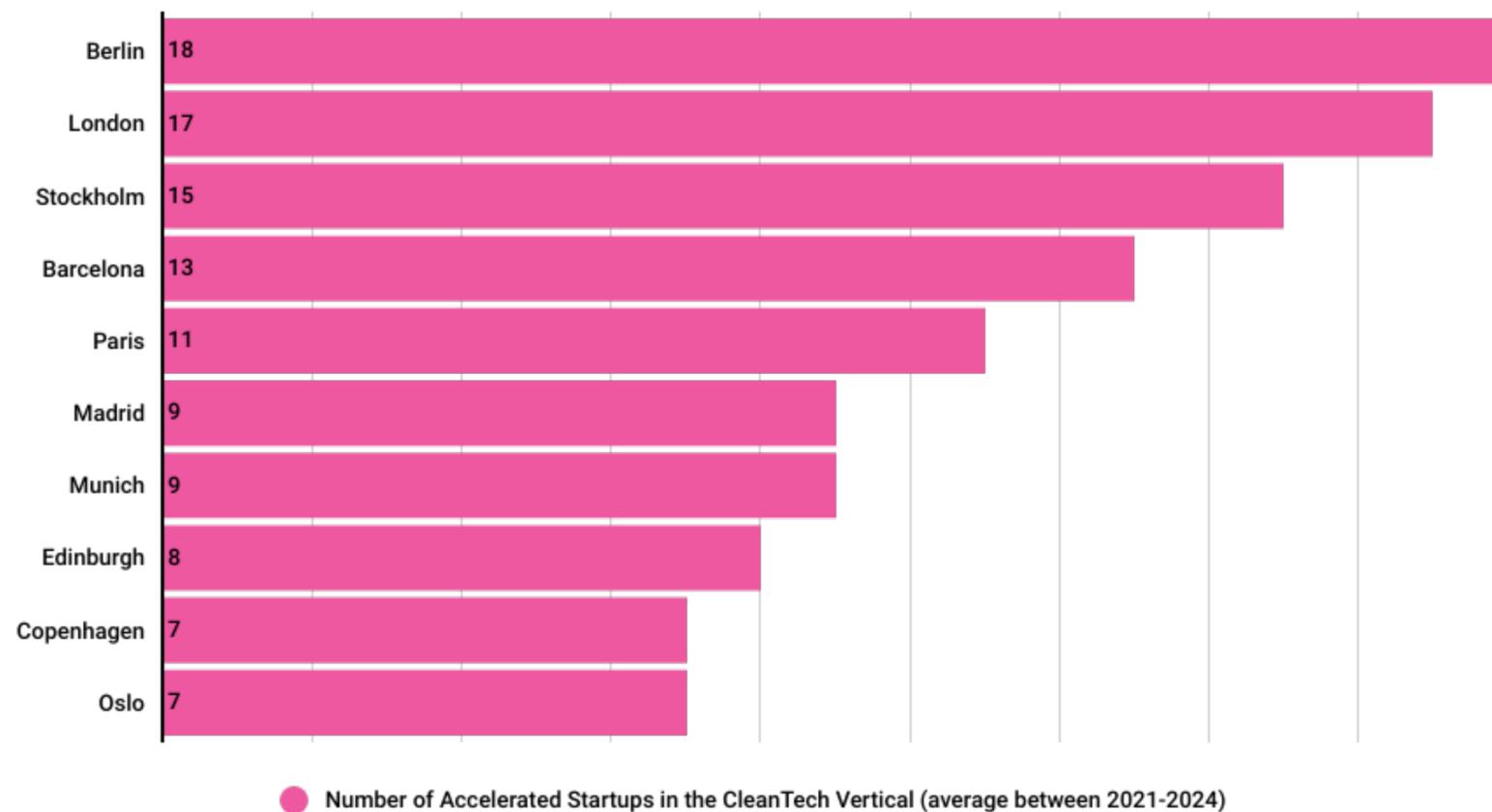
Source: Crunchbase

# Berlin Leads CleanTech Acceleration: 2021-2024 Insights

Berlin leads the way, fostering 18 accelerated CleanTech startups, followed closely by London (17). Stockholm secures third place (15 startups), reinforcing its strong support for clean technology. Barcelona (13) and Paris (11) also demonstrate solid performance in the sector.

The mid-tier includes Madrid and Munich (9 startups each), while Edinburgh contributes 8. Nordic capitals Copenhagen and Oslo round out the list with 7 startups each, reflecting their commitment to sustainability despite their smaller size.

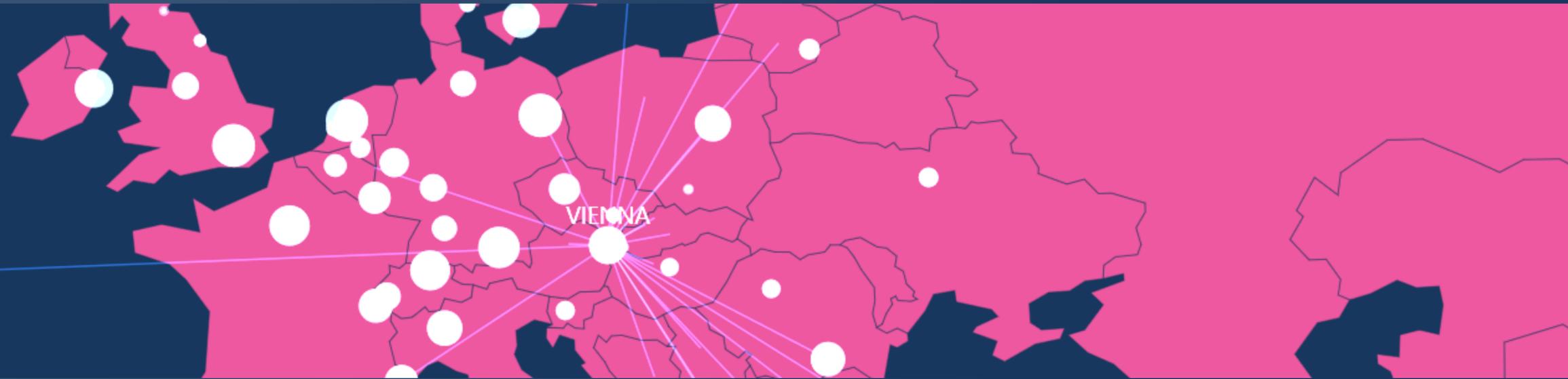
Number of Accelerated Startups in Cities in the CleanTech Vertical



Source: Startup Heatmap Europe

[WWW.STARTUPHEATMAP.EU](http://WWW.STARTUPHEATMAP.EU)

# PART II: SUPER-COMPUTING AND AI HUBS



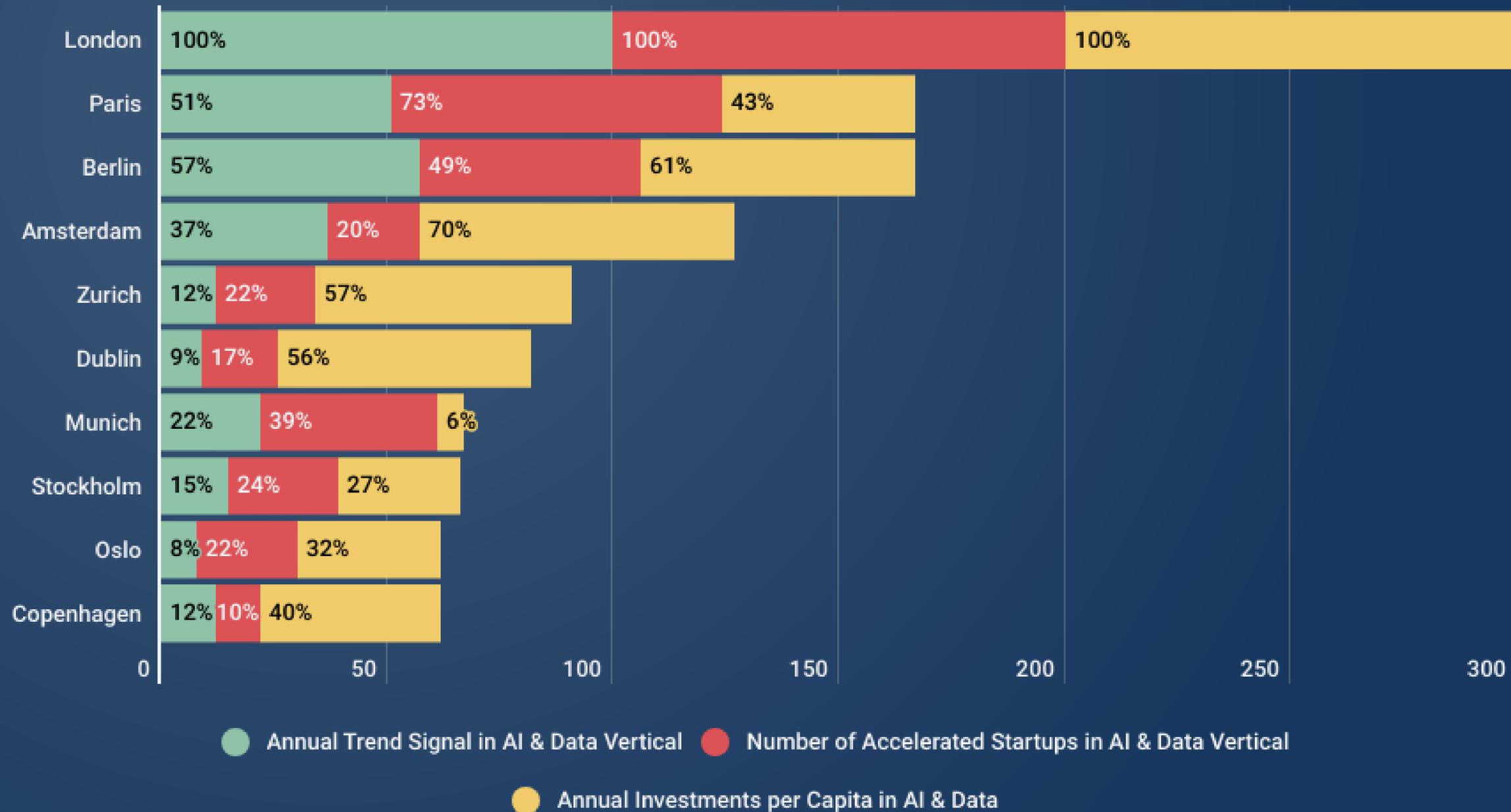
## Europe's Growing but Uneven AI and Computing Ecosystem

This section highlights **Europe's expanding yet uneven innovation landscape** in AI, data, and computing. **London** leads the way, dominating both **AI startup numbers (41)** and **per capita investments (\$87.44)**, reinforcing its position as a mature tech hub. Meanwhile, emerging cities like **Amsterdam, Berlin, and Zurich** are gaining traction, while others show potential for further growth.

In **supercomputing, Germany** leads Europe with **40 systems**, followed by France (24) and the UK/Italy (14 each). However, Europe still **trails behind global leaders like the United States and China**, highlighting the need for **greater investment** to remain competitive.

These findings call for **stronger collaboration, increased funding, and infrastructure advancements** to solidify Europe's position in the global tech race.

# RANKING: Super-computing and AI Hubs

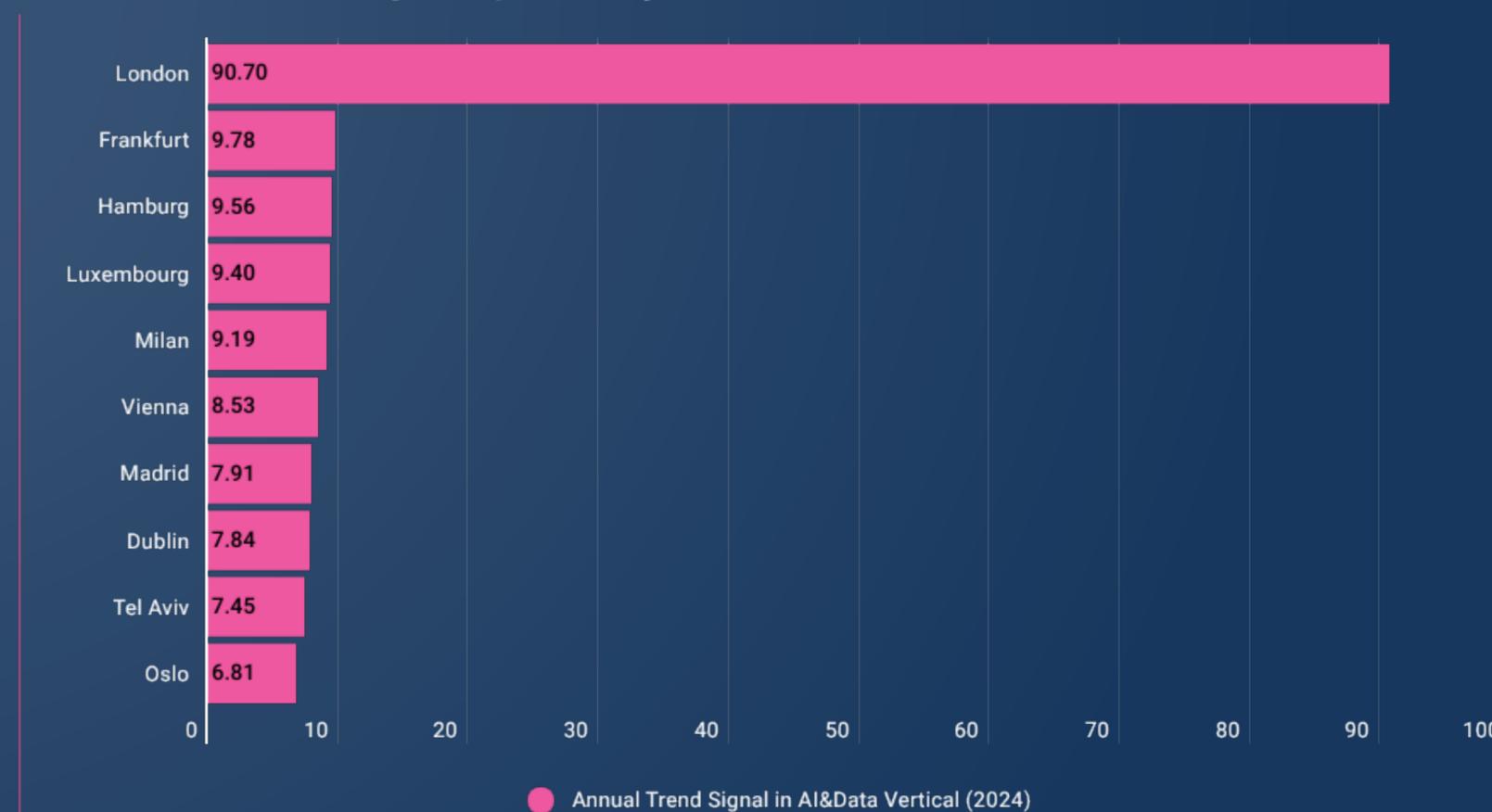


# London Leads the AI & Data Scene by a Wide Margin

**London's robust ecosystem** is reflected in its high number of mentions across diverse platforms, including meetups, LinkedIn, Eventbrite events, and articles. This prominence suggests a well-established network of industry players, frequent events, and strong media coverage, positioning London as a prime hub for innovation and collaboration in this sector.

Other cities, while notable, exhibit closer scores ranging from **9.78 (Frankfurt)** to **6.81 (Oslo)**. While these cities remain active in AI and data, they lack the concentrated prominence of London, possibly due to smaller ecosystems or less global visibility.

Annual Trend Signal per City in AI & Data Vertical



Source: Startup Heatmap Europe

[WWW.STARTUPHEATMAP.EU](http://WWW.STARTUPHEATMAP.EU)

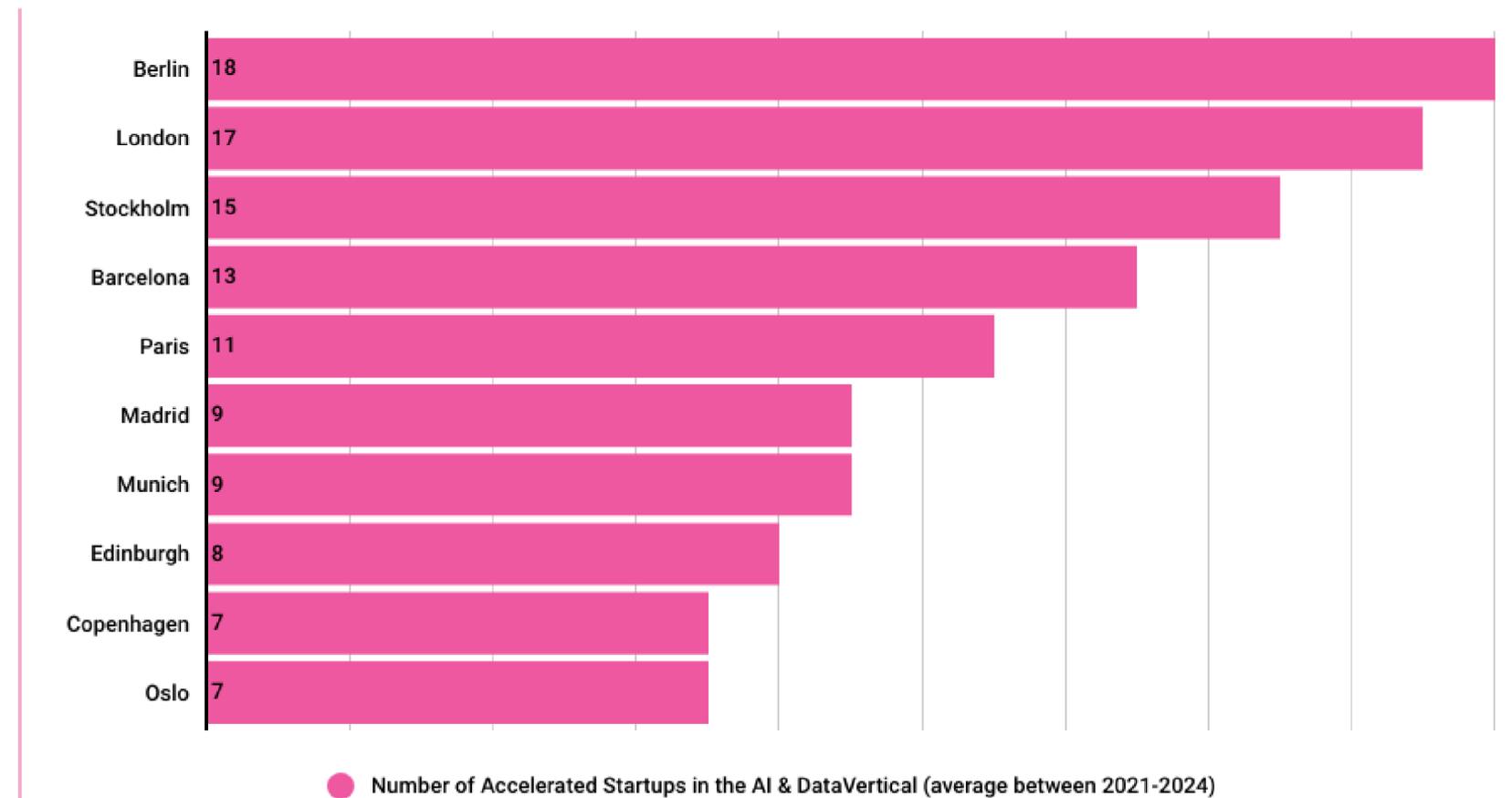
Annual trend signal values are aggregated per city and vertical across multiple sources, including meetups, Eventbrite events, LinkedIn mentions, and articles. The average trend signal is calculated to reflect overall activity in each sector.

For example, London scores 100% for FinTech mentions on Eventbrite and 60% in social media discussions, resulting in an 80% average trend score for FinTech in London in 2024.

# London's Startup Boom: Leading the AI Revolution

London dominates the AI and data startup landscape with **41 accelerated startups**, significantly ahead of **Paris (30)** and **Berlin (20)**. Other cities, like **Barcelona** and **Munich (16 each)**, show notable but smaller activity, while **Madrid, Stockholm, Oslo, Zurich,** and **Amsterdam** lag behind with **fewer than 12** startups each.

Number of Accelerated Startups in Cities in the AI & Data Vertical



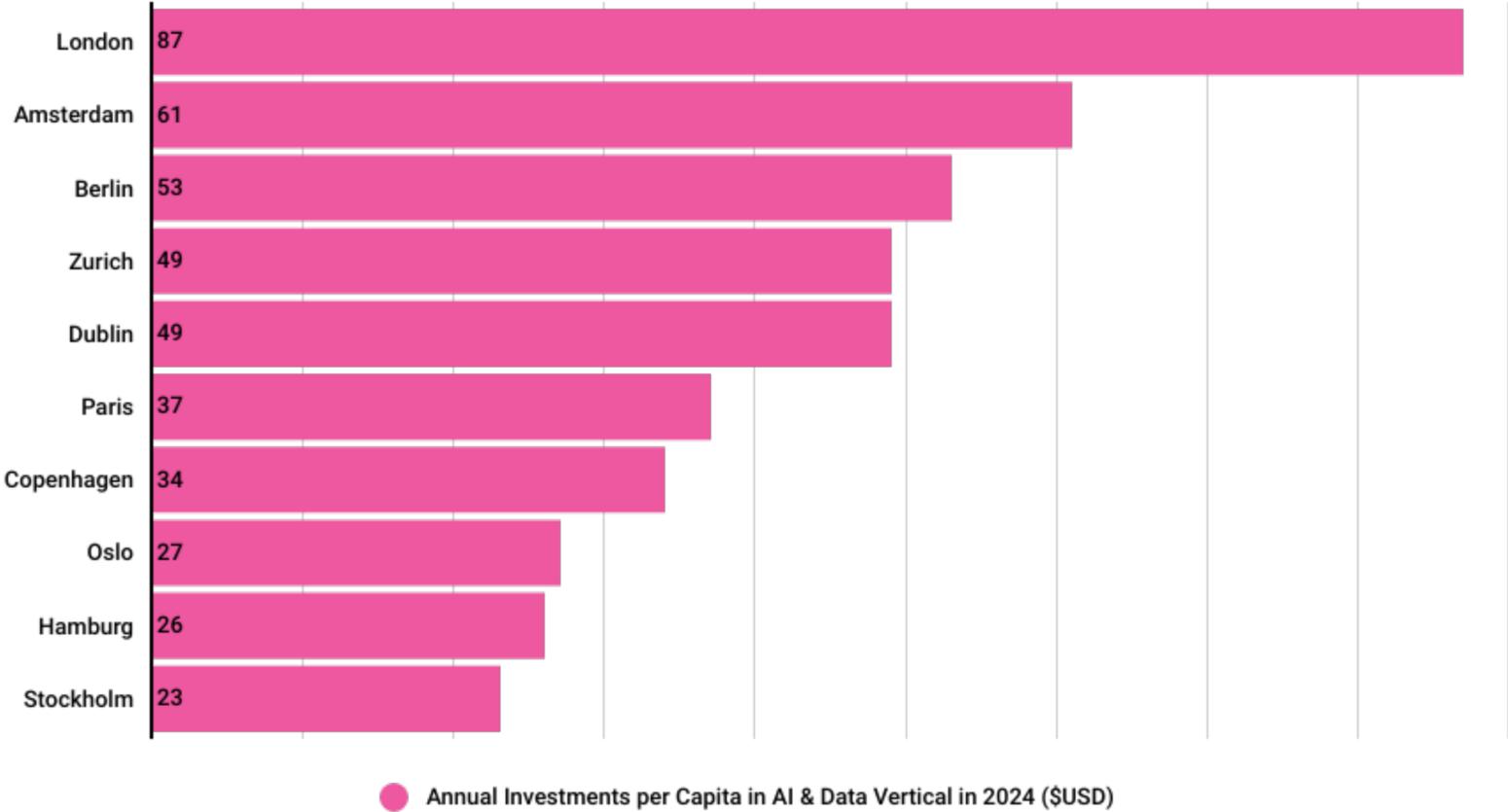
Source: Startup Heatmap Europe

# London Ranks #1 in AI & Data Investments Per Capita in 2024

**London** tops the ranking for annual per capita investments in the AI and data sector, reaching **\$87.44**, far ahead of **Amsterdam (\$61.49)** and **Berlin (\$53.51)**. **Zurich** and **Dublin** follow closely at approximately **\$50** each, while **Paris (\$37.32)**, **Copenhagen (\$34.82)**, and **Oslo (\$27.94)** show moderate investment levels. **Hamburg (\$26.99)** and **Stockholm (\$23.82)** complete the list with the lowest per capita investments.

London's dominance reflects strong investor confidence and a mature AI ecosystem. The higher per capita investments in Amsterdam and Berlin signal their rise as emerging AI hubs, while lower figures in other cities highlight opportunities for further growth in AI and data-driven innovation.

Annual Investments per Capita in AI & Data Vertical



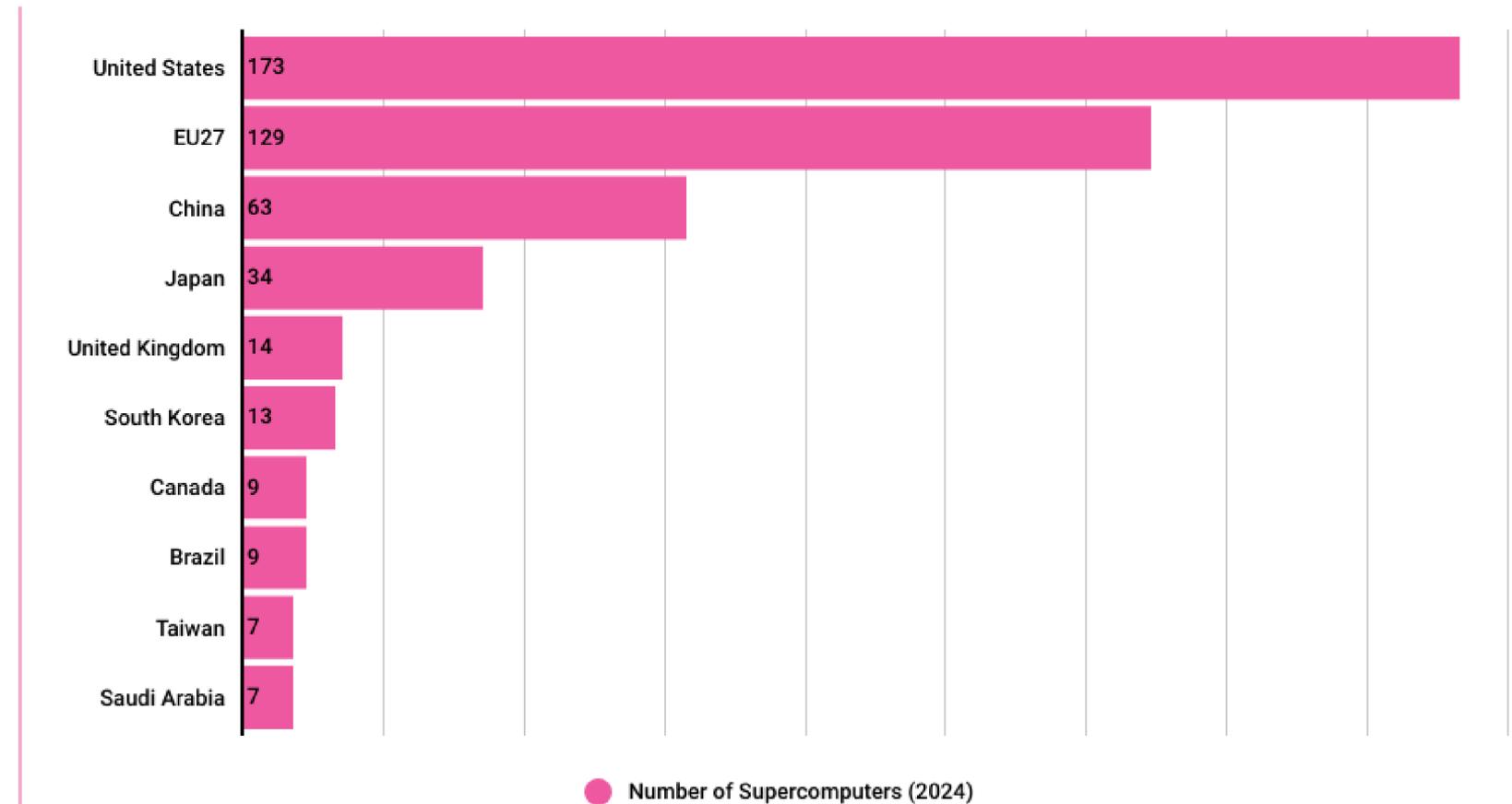
Source: Crunchbase

# Global Powerhouses in Supercomputing: A 2024 Snapshot

The United States solidifies its dominance in the supercomputing landscape with a staggering 173 installations, showcasing its technological leadership. The EU27 follows closely with 129 supercomputers, a testament to the region's collaborative innovation. Meanwhile, China, with 63 installations, remains a key player in this critical tech sector.

Japan's 34 supercomputers highlight its steady progress in advanced computing, while the United Kingdom (14) and South Korea (13) underline their emerging influence in the field. Countries like Canada and Brazil, with 9 each, and Taiwan and Saudi Arabia, with 7 each, demonstrate that global competition is expanding.

Number of Supercomputers



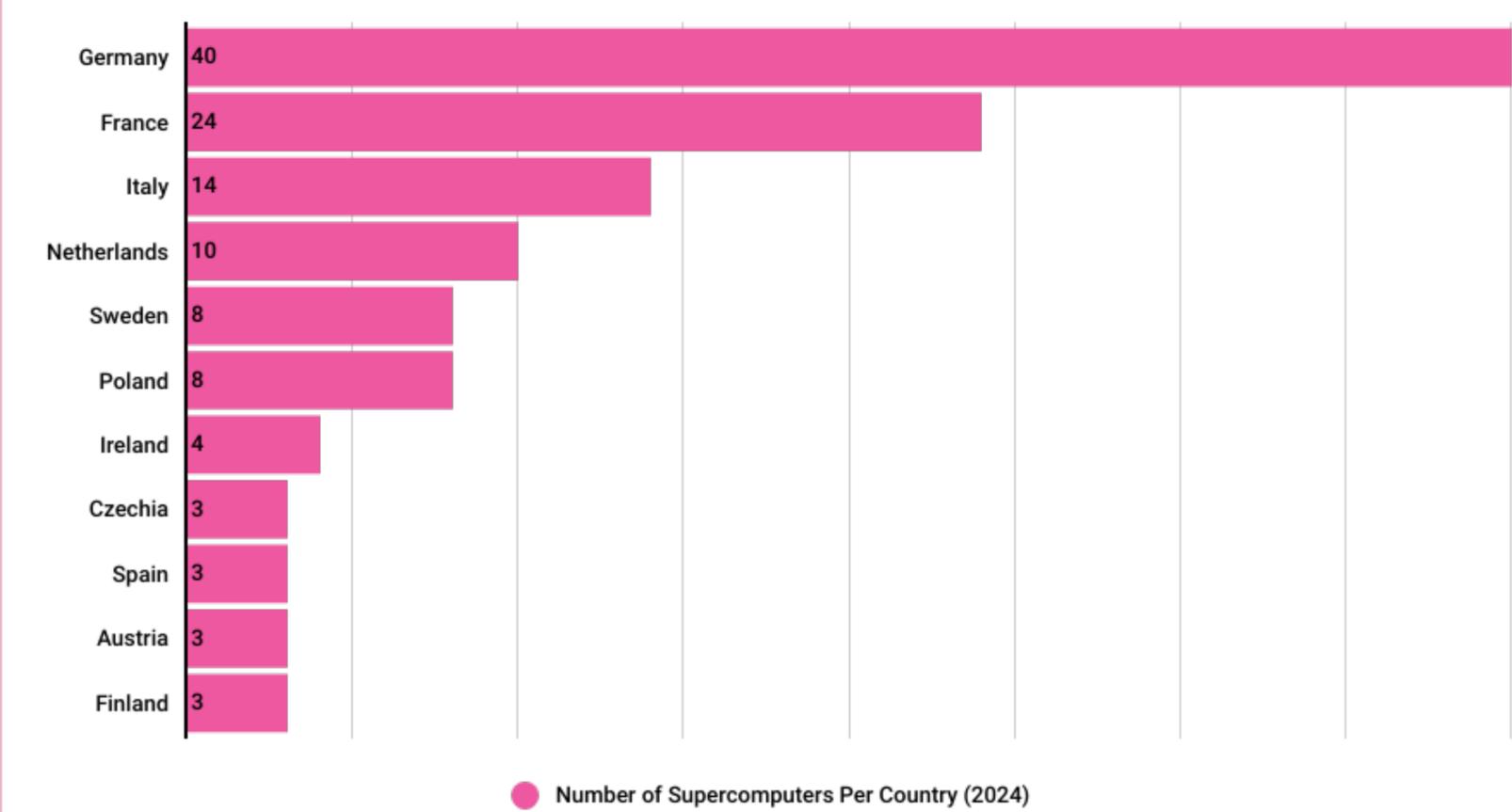
Source: Top500 List

# The EU27 Supercomputing Landscape: Leaders and Innovators

Germany reigns as the undisputed leader in the EU27, boasting 40 supercomputers and reinforcing its status as the innovation hub of Europe. France follows with 24 installations, showcasing its strategic investments in cutting-edge technologies. Italy's 14 supercomputers highlight its growing commitment to computational power.

The Netherlands (10), Sweden (8), and Poland (8) represent dynamic contributors to the EU's technological edge, while smaller nations like Ireland (4), Czechia (3), and Spain (3) are steadily carving their niches in the supercomputing ecosystem. Austria and Finland, each with 3 installations, emphasize the widespread distribution of advanced computing capabilities across the region.

Number of Supercomputers in EU27 Per Country



Source: Top500 List

# METHODOLOGY

How We Reach Our Results

# Methodology

The Startup Heatmap tracks the development of startup ecosystems over time. We map ecosystems along 5 dimensions: **International connectivity, strength of the entrepreneurial community, their perception and trust among founders, performance** as well as **long-term impact on job and business creation**.

Our research is driven by an annual survey as well as the collection of a range of indicators measuring ecosystem dynamics. We guide founders, investors, and ecosystem builders in their search for startup destinations as well as in making strategic choices.

A particular interest lies in the exploration of success factors for cities that aim to grow their startup community by attracting international founders, investors, and collaborators.

The exploration of businesses' competitive resources relies on the ability of the ecosystem to attract a differentiated set of resources and to enable sustainable synergies between them. The canonical indexes are still not able to capture the magnitude (\*) of entrepreneurial ecosystems in which companies grow and develop their business. Renewed cross-sectoral and spatial relations are constantly redefining this magnitude. In this regard, single metrics, related for example to innovation and business performances, but also infrastructure availability, are not able to outline a consistent picture about the most favourable conditions triggering entrepreneurial development and featuring virtuous entrepreneurial ecosystems.

Focusing on startups, our approach combines different data sources and investigates entrepreneurial ecosystems at two different levels: the accelerators and the cities. These are our unit of analysis, whereas our unit of observation is multilevel.

*\* Magnitude refers to the environment's attractiveness for new players, such as foreigners in a city, new creative talents in a co-working space, new members in a social association etc.*

# Methodology

Our dataset is based on primary and secondary data collected by a tracking system and an annual survey. These elementary variables, at different levels, are at the core of the composite variables explored by the touched upon metrics.

## **The tracking system**

Primary and secondary data is collected since 2015. At the core of our tracking system there is a composite data team that collects the qualitative data by monitoring social media, forums, blogs, and websites. The data collection results from double-checked processes implemented by different data analysts at the same time. Data is updated at least quarterly.

## **For Accelerators:**

Tracking system maps more than 155 European accelerators since 2015.

Elementary variables are: Total funds raised by Alumni; follow-on funding, defined as the number of startups having participated in an accelerator who have closed more than one funding round and having reached a total equity funding amount higher than 100.000 USD; number of employees of startups having participated since 2015.

## **For Cities:**

Tracking system maps startups, startup founders and CEOs, events, and related topics.

Elementary variables are: number of tweets mentioning at the same time the name of the city and the word “startup” (and variations thereof); number of startup related meetups per city; sum of VC (Venture Capital) funding; sum of realized exits; median salary of a senior software developer; directional data of investments between 100.000 EUR and 5.000.000 EUR from 2015-2018; sum of offices of leading startup companies in the city.

# Methodology

## The SHM Annual Survey

The main goal of the survey is to measure the intangible resources of an environment, the so called “atmosphere” (Marshall, 1919). The survey focuses on understanding founder mobility and the perception of the quality of startup communities in the eyes of founders as a proxy for their future development potential. The survey is mainly based on categorical variables covering the recognition of startup places in Europe, their rating in the main categories (access to capital, access to talent, ease of doing business, industry connections and quality of the ecosystem) as well as the qualitative assessment of the brand image via associative questions (“What do you think of when you hear “Berlin startup scene”?). Further questions cover the actual mobility and transnational connectivity of startup founders in Europe, asking for the movement history as well as connections their startup has built, including opening international branches, attracting foreign investors, hiring international talent or also just frequent business trips.

These questions are paired with impartial variables measuring the number and topical focus of startup community events, investment activities or visibility of a startup hub in startup media.

The survey’s units of observation are: the tech founders, ecosystem experts, startup team members, employees or persons interested to join a startup, investors, startup community builders or service providers. It has run annually since 2015.

The *next pages* present the **SHM Dataset Structure** with tables.

# Methodology - SHM Dataset Structure, Part 1

Theme	Variable	Description	Source of Data
Perception & Outlook	City Popularity	% of founders naming the city as a possible startup location for a hypothetical startup. Variable can be broken down by year, origin and the field of the startup	Representative annual survey of startup founders in Europe since 2015
Perception & Outlook	Popularity Score	Formula is $N - (r-1) / N$ (r = rank)	Representative annual survey of startup founders in Europe since 2015
Perception & Outlook	City Popularity, Growth of Popularity	Percentage point increase in the % of the vote YoY	Representative annual survey of startup founders in Europe since 2015
Perception & Outlook	City Popularity, Growth of Popularity	Percentage point increase, rolling 3 year average, e.g. avg. % founder vote 2017-19 vs. 2020-22	Representative annual survey of startup founders in Europe since 2015
Perception & Outlook	City Popularity among High-Tech startups	% of founders naming the city as a possible startup location among founders of startups in the category "High-tech"	Representative annual survey of startup founders in Europe since 2015
Perception & Outlook	City Popularity by startup sector	% of founders naming the city as a possible startup location among founders of startups in the categories: -Consumer & Platforms – Tech/Hardware -SaaS & Enterprise Software – Health & Biotech - Fintech – Big Data - eCommerce – Other	Representative annual survey of startup founders in Europe since 2015. Data is accumulated over years to calculate the sector popularity.
Perception & Outlook	City Popularity, sectors in which city ranks high	List of sectors in which the city has higher share of vote than the median of cities in the sector	Representative annual survey of startup founders in Europe since 2015. Data is accumulated over years to calculate the sector popularity.
Perception & Outlook	City Popularity by Origin Region	% of founders naming the city as a possible startup location based on founder origin from: West , Nord.Balt, Med, CEE, Benelux, UK.Ire, Non-EU	Representative annual survey of startup founders in Europe since 2015
Perception & Outlook	City Popularity by Current Region	% of founders naming the city as a possible startup location based on founder current location from: West , Nord.Balt, Med, CEE, Benelux, UK.Ire, Non-EU	Representative annual survey of startup founders in Europe since 2015
Perception & Outlook	City Ratings	% of founders voting for a city and giving a high or very high rating (>6 out of 10) in the categories: Funding Availability, Business Regulations , Talent Availability , Industry Connections , Quality of Startup Support System , Value for Money	Representative annual survey of startup founders in Europe since 2015

# Methodology - SHM Dataset Structure, Part 2

Theme	Variable	Description	Source of Data
Perception & Outlook	City Future Outlook	% of founders based in a city rating its future outlook positive or very positive (>6 out of 10).	Representative annual survey of startup founders in Europe since 2015
Perception & Outlook	City Visibility, Twitter	Sum of followers of tweets mentioning the city in connections with startups	Primary data collection from twitter (since 2018)
Perception & Outlook	City Visibility, LinkedIn	Sum of followers of posts mentioning the city in connections with startups	Primary data collection from LinkedIn (since 2023)
Perception & Outlook	City Visibility, News	Number of mentions of the city in startup news per year	Tracking of all articles on dedicated European tech blogs (full text articles since 2019).
Connectivity	City Reach	Number of diverse countries reached based on founder votes	Representative annual survey of startup founders in Europe since 2015
Connectivity	Level of foreign born founders	Estimation of the % of foreign-born founders per city based on comparison of origin country and current location country of founders answering the survey	Representative annual survey of startup founders in Europe since 2015
Connectivity	Marketshare of international investments	% of total international early-stage deals available in Europe from 2015-2018 captured by city	Directional data of investments between 100.000 € and 5mn € from 2015-2018 based on Pitchbook investment database.
Connectivity	International Conferences	Number of international followers of large tech conferences in Europe	Primary data collection of facebook followers' origins of the 37 leading tech conferences in Europe.
Connectivity	International Accelerators	Number of international participants in tech accelerators per city by year of acceleration	Primary data collection of all participants of >100 leading tech accelerator programs in Europe since 2015
Connectivity	Establishment of 2nd branches of unicorns	Number of 2nd branches established by unicorns per city showing the attractiveness of the city for internationally successful tech companies	Primary data collection of offices of offices of unicorns
Startup Support	Number of accelerated startups per city	Number of startups participating in accelerator programs located in the city	Manual tracking by DEEP research team of all startups participating in a list of >120 top accelerator programs
Startup Support	Number of accelerated startups per vertical	Number of startups per vertical in the following categories: -Purpose -Fintech -Health -IoT -BigData -SaaS	Manual tracking by DEEP research team of all startups participating in a list of >120 top accelerator programs
Startup Support	Avg. number of employees of startups accelerated in city	Average of sum of the employees today based on year of acceleration, e.g. startups accelerated in 2020 in Berlin today have an average of 9 employees	Manual tracking by DEEP research team of all startups participating in a list of >120 top accelerator programs
Startup Support	Avg. sum of funding of startups accelerated in city	Average of sum of funding raised today based on year of acceleration, e.g. startups accelerated in 2020 in Berlin today have raised 2mn € on average	Manual tracking by DEEP research team of all startups participating in a list of >120 top accelerator programs
Startup Support	Share of follow-on funding success	% share of all startups participating in accelerators in a city that have total funds raised of more than 100,000 USD per acceleration year	Manual tracking by DEEP research team of all startups participating in a list of >120 top accelerator programs
Startup Support	Number of Opportunities	Number of opportunities for international startups listed on Startup Heatmap per city per year	Manual tracking of opportunities by DEEP Research team on weekly basis as well as partner submissions
Diversity	Share of Female Founders	Share of female founders per year based on annual sample of >10-20,000 founders	Identification of a sample of 10-20,000 founders as a basis for the Heatmap Survey
Diversity	Avg. funding for female-led startups	Avg. funding of female-led startups in accelerators based on accelerated year	Manual tracking by DEEP research team of all startups participating in a list of >120 top accelerator programs
Diversity	Share of founders with Tech Skills	Share of founders with skills in programming listed on LinkedIn profiles per city, based on sample >10-20,000 founders per year	Identification of a sample of 10-20,000 founders as a basis for the Heatmap Survey, only for about 2-5,000 per year we can identify skillsets

# Methodology - SHM Dataset Structure, Part 3

Theme	Variable	Description	Source of Data
Community	Meetups	Number of startup related meetup events per city	Primary data collection of tech related meetups, their title, date, description and street level location in European cities since 2020
Community	Meetup Group Members Growth	Growth of rolling average of 3 years of meetup group members per city, e.g. 2017-19 vs. 20-22	Meetup.com
Community	Availability Developers	Number of developers registered on the leading developer platform in Europe (stackoverflow) per city	Primary data collection of registered developers per city
Community	Availability Developers, Growth	Growth of rolling average of 3 years of developers per city, e.g. 2017-19 vs. 20-22	Dealroom.co
Community	Meetup Participant Growth	Growth of active participants of meetups since 2014	Secondary data provided by meetup.com
Investments	Sum of funds raised	Sum of VC funding raised per year per city since 2014	Secondary data provided by dealroom for 100 cities
Investments	Sum of funds, 3 yr average	Total sum of VC investments over the past 3 complete years divided by 3	Dealroom.co
Investments	Number of seed deals	Number of investment rounds between 450k – 2.5mn USD	Dealroom.co
Investments	Sum of funds, Growth of 3yr average	Growth of rolling average of 3 years of VC investments per city, e.g. 2017-19 vs. 20-22	Dealroom.co
Investments	Sum of exits realized	Sum of realized exits per year per city since 2014	Secondary data provided by dealroom for 100 cities
Investments	Number of deals per vertical	Last 3 years vs. last 12 months	Crunchbase
Costs	Salary Level Developers	Median salary of senior software developer per city	Secondary data provided by Teleport

# Methodology - SHM Dataset Structure, Part 4

Theme	Variable	Description	Source of Data
Tech Trends	Relative importance of tech trends (Sheet "VerticalFocus PercofMedian")	Number of mentions of a topic in relation to a city in relation to the median number of mentions of the topic across all cities Calculation is done across meetups, twitter (discontinued) and news data. Final score is the average of the three numbers Topics: -3D Printing - AgTech -AI & Data - CleanTech -Crowdfund - Cybersecurity -Drone -Female -FinTech - Gaming -Health & BioTech -High-Tech -Infrastructure - IoT -Logistics - Mobile -Mobility - SaaS -Sustainability -VR	
Job Creation	Jobs Openings	Number of jobs created per quarter, per year and per sector	Linkedin
GeoData	Population	Number of people living in the metropolitan area	Eurostat
Universities	Number of university founders	Number of founders identified on Crunchbase having studied at a university in that city per year	ETER
Talent	Number of STEM Students	Number of students studying Science, Technology, Engineering or Mathematics as share of total students per city based on ETER database	ETER
Talent	Share of STEM Students	Percentage of students studying Science, Technology, Engineering or Mathematics as share of total students per city based on ETER database	ETER
Universities	Spin-off rate	Number of avg. seed deals of last 3 years divided by number of STEM Students	Crunchbase / ETER
Investments	Investment Purchasing Power	Investments divided by median cost of software developer	Dealroom.co / Teleport
Investments	Number of Kickstarter campaigns	Number of kickstarter campaigns launched per city per year based on a kickstarter.com	Kickstarter.com
Innovation Culture	Total sum of EU Funding per city	Sum of Horizon Research Funding won by organizations headquartered in the city updated on quarterly basis	European Commission

# The Authors



**Dr. Valentina Forrer**

President at European Startup Initiative.

Research Associate at Nottingham University Business School.



**Dr. Erica Santini**

Head of Research at European Startup Initiative.

Co-Founder of DEEP Ecosystems.

Associate Professor at University of Trento.



**Dr. Andreas Kuebart**

Research Associate at Leibniz Institute for Research on Society & Space.

Lecturer at Brandenburg Technical University.



**Dr. Camilla Civardi**

Post-Doctoral Researcher at University of Milano-Bicocca.

Visiting Research Fellow at CIRCLE, Lund University.

# DEEP Ecosystems' Team



**Thomas Kösters**

Co-Founder and Managing  
Director at DEEP Ecosystem.



**Harald Eisenhauer**

Co-Founder and Head of  
Platform at DEEP  
Ecosystems.



**Dr. Serghei Glinca**

Co-Founder at DEEP  
Ecosystems.

Founder & CEO at  
CrystalsFirst GmbH.

# DEEP Ecosystems' Team



**Takhmina Lolakova**

Project Manager at DEEP  
Ecosystems.



**Paul Rößler**

Data Analyst at DEEP  
Ecosystems.



**Daniel Castillo**

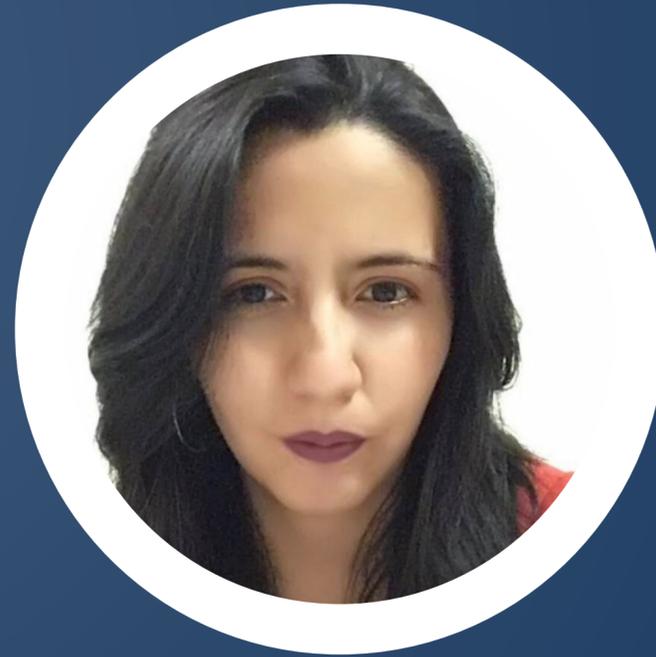
Platform & Partnerships  
Lead at DEEP Ecosystems.

# DEEP Ecosystems' Team



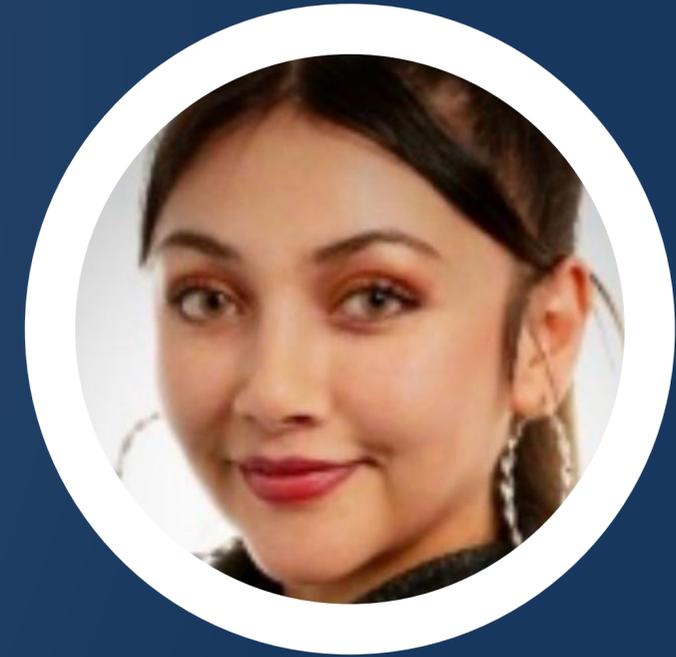
**Richard German**

Innovation Scouting and  
Community Relations Lead  
at DEEP Ecosystems.



**Karina Rosero**

Accelerator Project Manager  
at DEEP Ecosystems.



**Kathy Rosero**

Data Analyst at DEEP  
Ecosystems.

# MEASURE YOUR ECOSYSTEM'S HEALTH

You can't Grow What You can't Measure  
Build Your Ecosystem Strategy Based on DEEP's Toolkit for Mapping, Benchmarking and Project Development

[www.startupheatmap.eu/ecosystem-building](http://www.startupheatmap.eu/ecosystem-building)

## HEALTH CHECK

- Free self-service tool to be used by anyone
- Many case studies with example indicators and benchmark data
- Simplified visual toolkit to assist strategic team discussions
- Template to create a full-scale Ecosystem KPI dashboard

**FREE**

## 1:1 SUPPORT

- Work with our team of experienced experts to identify the right proxies for your ecosystem
- Multiple 1:1 sessions over 3-4 weeks to support your data gathering and analysis efforts
- Finalization of the findings by our team in a presentation for internal or external purposes.

**Speak to us**

## ECOSYSTEM HACK

- Develop a joint vision for your ecosystem with a series of stakeholder workshops in hybrid format
- Inspiring guest speakers from international ecosystems
- Hands-on workshops to develop a vision and concrete action plans
- Proven methodology based on the Ecosystem Canvas by DEEP

**Speak to us**

*Get the latest ecosystem insights and opportunities with our newsletter!*



**SIGN UP NOW!**



# Contact

DEEP Ecosystems is the world's most active accelerator for ecosystem projects helping entrepreneurs to build up their local startup community rather than moving away. With the Startup Heatmap Europe, DEEP in collaboration with the non-profit European Startup Initiative is measuring the growth dynamics of startup hubs since 2016 and successfully turned these insights into guidelines and strategic insights for policy makers and practitioners alike. You can join the movement to build better, data-driven ecosystems and start accelerating your growth too. Visit our website and get in touch

## WEBSITE

<https://www.startupheatmap.eu>

<https://www.europeanstartupinitiative.eu/>

<https://community.deep-ecosystems.com>

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