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Policy brief | European Chips Diversity Alliance

The Next Talent Crisis: Retention Risk in the European Semiconductor Sector

Key messages

- 26% of technical workers plan to leave their employer within three years, and almost two thirds of them are not committed to staying in the industry.
- A third of Gen Z and Millennial workers plan to leave, close to double the rate among Gen X.
- Eight in ten technical workers have no clear picture of how to progress in their organisation, and 29% consider progression in their organisation decided unfairly.
- Workers who stay and workers who leave report similar levels of workload and pressure. What separates them is everyday support, and belonging most reliably separates the two groups.

The problem

The EU semiconductor sector employs 382,200 people, 283,000 of them in technical roles.¹ Three in ten of the European semiconductor sector’s workforce, some 114,000 people, will retire by 2030. Graduates entering the sector increase by only 1% a year. The European Chips Skills Academy projects a shortfall of 65,000 skilled workers by 2030,² against Chips Act targets that depend on that workforce.³ **That shortfall counts retirements and graduates. It does not count the workers already in the sector who intend to leave.**

Findings

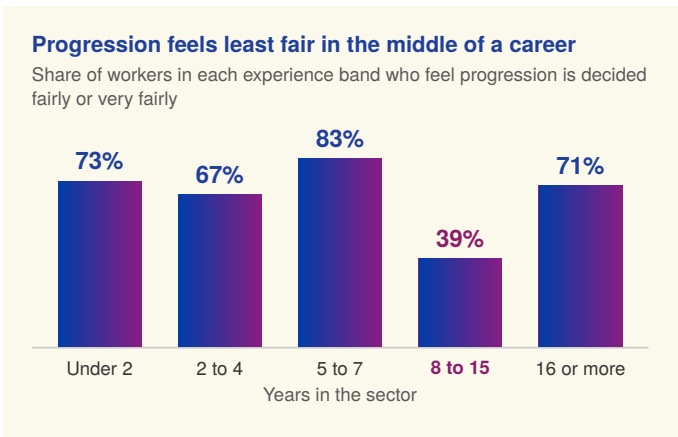
1. The scale of the risk

26% of technical workers plan to leave their employer within three years. Of those, 46% have not decided whether their next role is in the sector and 19% have ruled it out. If this sample reflects the sector’s 283,000 technical workers, 14,000 would leave for another industry over those three years, and a further 34,000 would be undecided about staying in it.



2. Progression fairness

Eight in ten technical workers have no clear picture of how they would progress in their organisation. 29% consider progression decided unfairly where they work, and those workers are around **2.3 times as likely** to plan to leave. Fairness is lowest among mid-career workers, at 39%.



¹ European Chips Skills Academy. (2024). Skills Strategy 2024: Addressing the talent gap in the EU semiconductor ecosystem. DECISION Études et Conseil. <https://chipsacademy.eu/wp-content/uploads/2025/05/ECSA-Skills-Strategy-2024-rev-20052025.pdf> Technical workforce figure is the sum of the four technical occupation categories reported: technicians 97,200, hardware engineers 164,400, software engineers 13,900, data specialists 7,300.

² European Chips Skills Academy. (2025). Skills Strategy 2025: Update on the talent gap in the EU semiconductor ecosystem. DECISION Études et Conseil. <https://chipsacademy.eu/news/ecsa-skills-strategy-2025/>

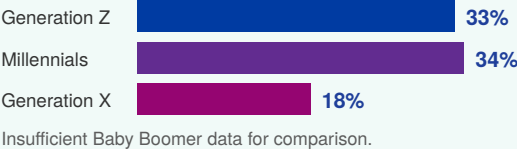
³ European Commission. (2023). European Chips Act. <https://digital-strategy.ec.europa.eu/en/policies/european-chips-act>; European Commission. (2026). Proposal for the Chips Act 2.0. <https://digital-strategy.ec.europa.eu/en/library/proposal-chips-act-20>

3. Younger workers

Millennials and Gen Z plan to leave at similar rates, a third of each against 18% of Gen X. Conditions do not explain the difference, since Gen Z report the strongest support and the lightest workload. Millennials name pay more often than any other group, while Gen Z more often define progression as growing their technical skills.

Younger workers plan to leave at almost double the rate

Share planning to leave their employer within three years



4. Support and belonging

Workers who stay and workers who leave carry the same workload. What separates them is the support they receive, and the widest gap is on whether workers get useful feedback. Beyond support, belonging is what most reliably separates those who stay from those who leave.



Recommendations

For policymakers and sector bodies

1. Extend pay transparency guidance to career progression

National sector bodies, supported at European level, should publish best practice guidance on career progression frameworks for technical talent: the levels, the criteria for moving between them, and who decides. From June 2026, the EU Pay Transparency Directive requires employers to publish the objective criteria behind pay, pay levels and pay progression.⁴ Guidance should be sector specific: in this study, technical workers described progression more as deepening expertise than titles or seniority, and clarity about progression was the strongest marker of who stays. Evidence from countries with longer-running transparency rules shows the gains come when published criteria are used in real pay and promotion decisions, rather than filed as compliance.⁵

2. Sustain EU-level technical skills programmes

Treat technical skills programmes as retention infrastructure: EU skills funding is aimed mainly at bringing new people into the sector, but the same programmes help keep the people already in it. The workers most likely to leave are the youngest, and what they leave for is technical growth. Specialist technical training is not available off the shelf: employers can send staff to vendor courses and conferences, but little exists beyond that, a gap interviewees flagged the European Chips Skills Academy as filling. Programmes should therefore be designed and evaluated against retention as well as new entrants.

3. Build sector visibility in education

Member States and sector bodies should sustain and expand visibility work in schools and universities: this includes careers guidance, site visits and industry-education partnerships. This report did not set out to address the talent pipeline, but one finding bears on it and is flagged here given the urgency of the sector’s supply gap: qualifications and training are the largest single route into the sector, accounting for 27% of those surveyed.

For organisations

Most of what drives people to leave can be addressed by employers. The full report sets out **six actions for employers.**

About this study

A survey of 220 technical workers across 15 European countries, conducted March to May 2026, with interviews with HR professionals in Germany and France and national sector bodies in Spain and Ireland. It is the largest study to date on retention of technical talent in the European semiconductor sector. Findings and recommendations are based on this sample rather than the sector as a whole. Full findings are set out in the full report, *The Next Talent Crisis: Retention Risk in the European Semiconductor Sector*, available at www.diversityinchips.eu. All figures are from the ECDA survey, 2026 (n=220), unless otherwise referenced.

⁴ European Parliament and Council of the European Union. (2023). *Directive (EU) 2023/970 to strengthen the application of the principle of equal pay for equal work or work of equal value between men and women through pay transparency and enforcement mechanisms*. Official Journal of the European Union, L 132. <https://eur-lex.europa.eu/eli/dir/2023/970/oj>

⁵ OECD. (2026). *Pay transparency in progress: Valuing jobs, closing gender pay gaps*. OECD Publishing. <https://doi.org/10.1787/121f268d-en>

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