How much financing does the world need?

Artificial intelligence (AI) and new technologies, population ageing, energy transition and national security: all these megatrends will require increasing financing over the next years. Our preliminary estimates for 2026–2030 suggest that the world needs to invest around 50 trillion euros over 2026–2030 and, given the financing sources currently available and their expected growth rate, the financing gap would be around 30 trillion euros. This is the equivalent of more than half of global pension fund assets or more than two times the total deposits held by households and firms in the Eurozone.

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50 trillion euros – Gross investment needs in 2026–2030

30 trillion euros– financing gap to be mobilised

More than half of global pension fund assets

Over the next five years, the global economy will simultaneously have to finance the energy and climate transition, digitalisation and artificial intelligence, the effects of population ageing and, very likely, a more costly response to global geofragmentation. Estimates of investment needs and increased expenditure derived from the main global reports on these four issues[1] point to a requirement of around 50 trillion euros accumulated over 2026–2030, that is, around 10 trillion euros per year. To cover this, the financing gap or additional financing mobilisation required would stand at around 30 trillion euros over five years. That is the equivalent of almost two years of the Eurozone's gross domestic product (GDP), more than half of global pension fund assets or more than two times the total deposits held by households and firms in the Eurozone. The main message is simple: it is not enough to find more money; existing savings need to be channelled more effectively, risks reduced and projects made more financeable.

The million-dollar question

We often focus on the substance, when in reality the form requires equal or greater attention. Almost everyone could name four or five global challenges facing humanity over the coming decades. How many could name a source or form of financing? Should the way in which an adequate response to these challenges is delivered not attract the same attention as the challenges themselves? After all, the solution requires action rather than the accumulation of diagnoses.

50 trillion euros. That is the central figure. Or, more precisely, the order of magnitude estimated to be necessary to address four overlapping transformations: the climate transition, digitalisation and AI, ageing and strategic security.

[1] Climate Policy Initiative, 'Global Landscape of Climate Finance 2026' and 'Assessing Top-down Climate Finance Needs: Methodology, 2025'; International Energy Agency, 'World Energy Investment 2026', 'Energy and AI' and 'Global Critical Minerals Outlook 2025'; United Nations, 'Financing for Sustainable Development Report 2026'; McKinsey & Company (2025), 'The cost of compute: A 7 trillion dollars race to scale data centres'; OECD, 'Global Outlook on Financing for Sustainable Development 2025', 'Ageing populations, their fiscal implications and policy responses', No. 1844, 'Pensions at a Glance 2025' and 'Health at a Glance 2025'; SIPRI, 'Trends in World Military Expenditure, 2025'.

The figure of 50 trillion euros should not be read as a single public-sector bill. It includes profitable private investment, public expenditure, concessional financing, debt, equity and the reallocation of existing resources. The effective gap to be mobilised is smaller, but still enormous: around 30 trillion euros over five years. The real challenge is how to mobilise that capital and where to allocate it.

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The energy transition requires grids, renewables, storage, electrification and adaptation. Artificial intelligence requires data centres, chips, energy, connectivity, data and talent. Ageing pushes up healthcare expenditure, long-term care and pressure on pensions and budgets. And more fragmented geopolitics adds the need for greater spending to bolster defence, cybersecurity, critical mineral markets and redundancies in supply chains.

Estimated global financing needs and financing gap by area, 2026–2030

Area	Gross financing need (2026–2030)	Financing gap / additional mobilisation
Energy transition	€ 35 tn	€ 22-26 tn
Digitalisation and AI	€ 10 tn	€ 2.5-4 tn
Population ageing	€ 3.2 tn	€ 1.3-3.0 tn
Geofragmentation and defence	€ 4.7 tn	€ 2.5-4 tn
Adjustment for overlaps	€ -1.7 tn	€ -1/-2 tn
Net total	**€ 50 tn**	**€ 30 tn**

Methodological note: the figures in this article are an estimate constructed on the basis of the main studies published by multilateral agencies, public authorities, multilateral banks and leading consultancies, including the Organisation for Economic Co-operation and Development (OECD), the United Nations (UN), the International Monetary Fund (IMF), the United Nations Environment Programme (UNEP), the International Energy Agency (IEA), the European Central Bank (ECB), the European Commission, the World Bank, the Stockholm International Peace Research Institute (SIPRI), Climate Policy Initiative (CPI) and McKinsey. To standardise the figures, amounts originally published in dollars have been converted into euros using a rounded exchange rate of USD 1 = EUR 0.86, consistent with exchange rates at the end of August 2026. Given that these are order-of-magnitude estimates, the conversion is not intended to provide exchange-rate precision.

1. Energy transition: the largest bill and the greatest opportunity

Energy transition accounts for the largest financing need. Climate Policy Initiative's (CPI) new Global Landscape of Climate Finance 2026 confirms that flows continue to grow, but too slowly: global climate finance exceeded around 1.7 trillion euros, and the preliminary estimate for 2025 is around 1.8 trillion euros. Against this, CPI estimates that mitigation alone requires an average of 6.7 trillion euros per year between 2025 and 2030. For 2026–2030, this implies around 33.5 trillion euros for mitigation alone.

Adaptation must also be added. The United Nations Environment Programme (UNEP)[2] estimates that developing countries will need between 267 billion euros and 314 billion euros per year by 2035, while CPI identifies only around 55 billion euros in adaptation flows in 2024. Combining mitigation and adaptation, our estimate for the amount of climate financing needed for 2026-2030 rises to around 35 trillion euros in investment needs, with a gap of 22–26 trillion euros. With regard to the broader transition financing landscape, the International Energy Agency (IEA) notes that global energy investment will reach around 2.9 trillion euros in 2026, of which around 1.9 trillion euros will go to clean energy and related infrastructure. Ultimately, financing

[2] UNEP, 'Adaptation Gap Report 2025: Running on empty'.

the climate is not about financing a separate agenda, but rather the basic infrastructure of the twenty-first-century economy.

2. Digitalisation and AI: the new critical infrastructure

AI is not just software: it requires energy, chips and data centres

Artificial intelligence is often presented as software, but in reality it rests on highly capital-intensive physical infrastructure: data centres, chips, electricity grids, fibre, cooling and storage. McKinsey estimates that data centres will require around 5.8 trillion euros in global investment by 2030, of which approximately 4.5 trillion euros will correspond to AI workloads. Adding models, applications, connectivity, data and digital capabilities, our central estimate for digitalisation and AI financing requirements stands at around 10 trillion euros in 2026–2030, with a gap of around 2.5–4 trillion euros.

The IEA adds that electricity consumption by data centres could more than double to around 945 TWh by 2030. The risk is that the gap between countries will widen if investment is concentrated in only a few technology hubs. The response should not be to duplicate everything, but to invest strategically, ensure interoperability and combine national capabilities with partnerships.

3. Ageing: a silent pressure on budgets

Ageing does not usually appear as a large one-off investment; instead, it represents a persistent fiscal pressure. The Organisation for Economic Co-operation and Development (OECD) notes that population ageing leads to increasing expenditure on pensions, healthcare and long-term care, and affects potential growth and public revenues. Our estimate does not add up all existing expenditure; it is based solely on the incremental pressure associated with demographic change: around 3.2 trillion euros accumulated over 2026–2030, with an additional gap of between 1.3 trillion euros and 3.0 trillion euros.

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4. Geofragmentation, defence and strategic autonomy

Globalisation has not disappeared, but it is becoming more defensive. The Stockholm International Peace Research Institute (SIPRI) estimates that global military expenditure reached around 2.5 trillion euros in 2025, a historic high equivalent to 2.5% of global GDP. If the new geopolitical environment pushes the effort towards 3.0%–3.5% of GDP, approximately 0.5–1.0 trillion euros in additional expenditure per year would be required. Our estimate for global military investment needs does not add the baseline military expenditure for each year; it accounts only for the incremental effort in rearmament, modernisation and strategic resilience, which, together with strategic autonomy, places the financing requirements for this area at around 4.7 trillion euros for 2026–2030.

Added to this are non-military investment needs in semiconductors, critical minerals, batteries, cybersecurity, critical infrastructure, strategic reserves and redundancies in supply chains.

The IEA warns that concentration in critical minerals markets and their refining chains creates significant vulnerabilities. However, diversifying supply comes at a cost: mining and refining projects outside the dominant producers have capital costs of around 50% higher on average. The priority should be selective resilience: investing in the bottlenecks that protect productive and defence capacity, without falling into indiscriminate duplication.

Europe is overdiagnosed but underexecuted. There is growing consensus on how to restore competitiveness and move towards greater strategic autonomy. But the pace needs to accelerate

The situation is compounded by the fact that fragmentation has a potentially enormous macroeconomic cost. The International Monetary Fund (IMF) has calculated permanent losses of 2.3% of global GDP in a scenario of trade blocs, while the World Economic Forum (WEF) estimates output losses of up to 4.9 trillion euros in one year in a scenario of severe financial fragmentation.

5. Europe in focus: financing needs and the financing gap

Europe is overdiagnosed but underexecuted. There is growing consensus on how to restore competitiveness and move towards greater strategic autonomy. But the pace needs to accelerate.

The continent has important advantages, including savings, institutions and financial coordination experience, among others. However, it also has a twofold central problem to overcome: how to mobilise resources and how to convert savings into investment rapidly and across borders. The OECD's Global Outlook on Financing for Sustainable Development 2025 stresses that the main bottlenecks lie in the channelling, coordination and execution of financing.

The European gap is particularly visible in innovation and venture capital.

The European Central Bank (ECB) estimates that around 1.2 trillion euros[3] per year in additional investment is needed in Europe between 2025 and 2031 to jointly finance the green, digital and defence transitions, a figure obtained by updating the European Commission's needs for climate and digitalisation and adding the greater defence effort following the North Atlantic Treaty Organization (NATO) summit in June 2025. The ECB itself presents this as an upward revision from the 800 billion euros estimated by Mario Draghi one year earlier.

In addition, ageing will weigh heavily on public expenditure: the European Commission's 2024 Ageing Report[4] projects that the total cost of ageing in the EU will rise from 24.4% of GDP in 2022 to 25.6% by 2070. This figure can be broken down into: pensions +0.4 percentatge points (pp), healthcare +0.4 pp, long-term care +0.8 pp and education −0.5 pp.

[3] ECB (2025), 'Time to be strategic: how public money could power Europe's green, digital and defence transitions'.
[4] European Commission, '2024 Ageing Report: Economic and budgetary projections for the EU Member State'.

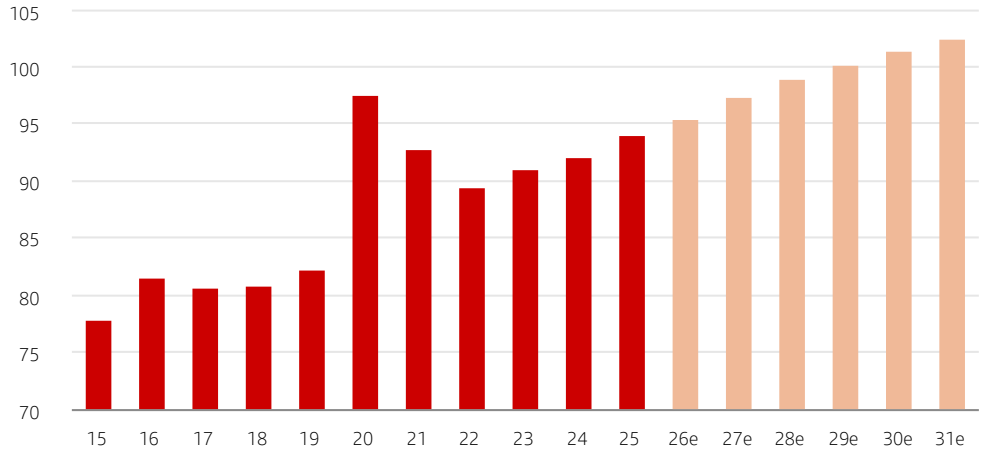
6. Fiscal constraints and public-private collaboration

The scale of the needs exceeds the capacity of public budgets to respond on their own. In a context of high debt, higher financing costs and greater simultaneous pressure from pensions, healthcare, defence and the energy transition, the public sector will have to prioritise, sequence and use its balance sheet selectively. Financing these transitions will require public-private collaboration, with private capital acting as a multiplier of public capital through guarantees, blended finance and risk-sharing mechanisms to mobilise private savings towards projects of general interest.

Banks must play a key role. Not only by lending money, but also by structuring projects, distributing risks, mobilising deposits and supporting companies

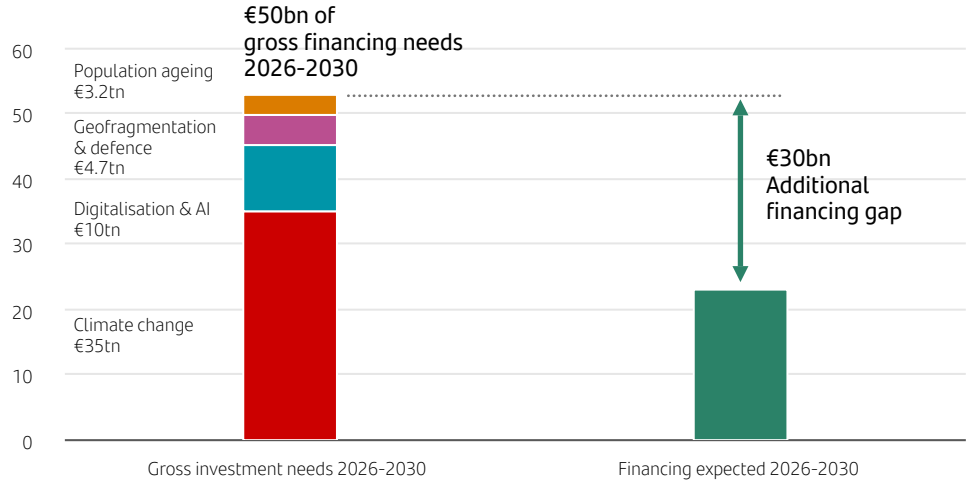
Banks must play a key role. Not only by lending, but also by structuring projects, distributing risks, mobilising deposits, supporting companies and combining private financing with public guarantees and support from multilateral banks. In an environment of simultaneous transitions, this intermediation function is as important as the volume of credit. Of course, growth in global capital markets is also essential. As is the healthy development of non-bank financial players.

Global public debt
(% of GDP)



Source: IMF.

Global investment needs are raising
Estimated gross financing need, 2026-2030



Source: Banco Santander. Methodological note: see table above.

Conclusions

The next decade will be defined not by one single transition, but by the concurrence of several. The energy transition, AI, population ageing and strategic security will compete for resources, but they can also reinforce one another if managed well. The central figure of around 50 trillion euros in gross needs and around 30 trillion euros in the effective financing gap over five years, with a range of 28–33 trillion euros, is not an exact prediction, but an indication of scale and a call to move from diagnosis to execution.

The world has the savings, technology and institutional capacity to finance these transformations. What is lacking is the alignment of incentives, the reduction of risks and prioritisation. The real challenge will not only be how much to invest, but the ability to invest in time, invest better and prevent a lack of financing from turning inevitable transitions into postponed challenges.