
THE HIDDEN BILL

AI is buying up your memory

What the AI boom is doing to the price of your laptop, your phone — and to the planet

Figures: Gartner, TrendForce, IEA, UN University, Cornell · 2025-2026

Let's be honest: this is going to cost you

WHAT THIS IS ABOUT

You have probably never seen AI buy anything. Yet it is first in line – at exactly the same factories that make the memory for your laptop and your phone.

Data centres buy those chips by the truckload. You buy a single device. Guess who wins.

The result? Pricier devices and a hefty environmental bill. So you pay twice.



How AI gets hold of your memory

THE CHAIN IN THREE STEPS

01

AI wants memory

Every AI chip needs stacks of ultra-fast memory (HBM). Far more than an ordinary PC.

02

Factories shift over

Samsung, SK hynix and Micron are converting their lines to HBM and server memory. More profit.

03

You miss out

What is left for PCs and phones becomes scarce. And scarce means expensive.

New factories will not really come on stream until late 2027. Until then: be patient or pay up.

Memory prices have exploded

WHAT THE CHIPS THEMSELVES ARE DOING

+172%

DRAM year on year, end of Q3 2025 (TrendForce)

+90-95%

DRAM contract prices in a single quarter, Q1 2026

+246%

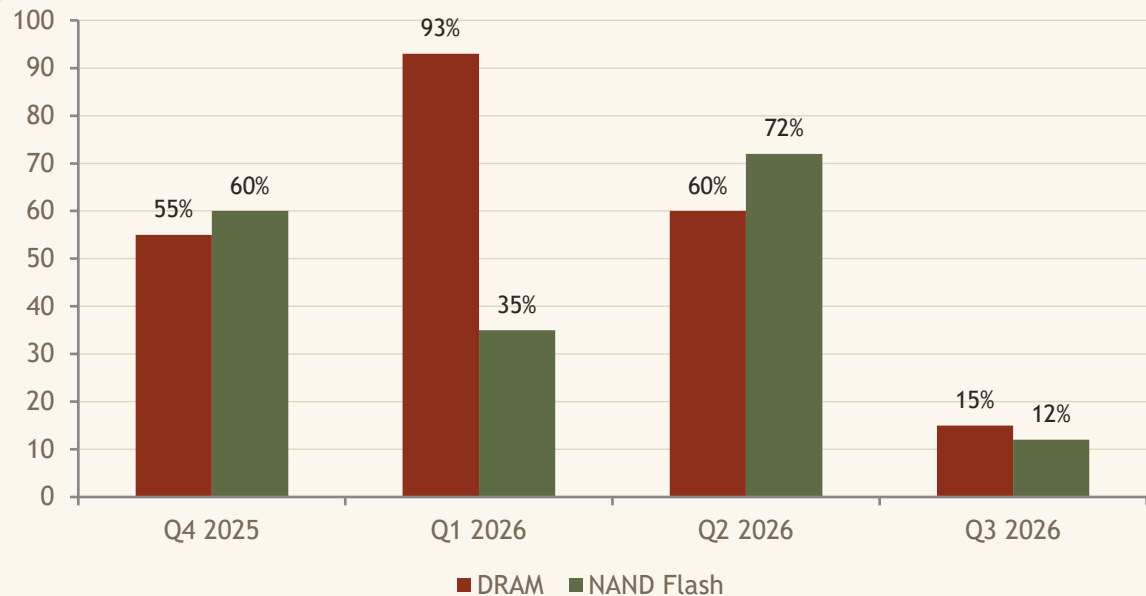
NAND wafers versus early 2025 (Kingston)

A simple 1TB SSD went from about \$45 to nearly \$90. Doubled. In a matter of months.

In 2026 memory accounts for more than half of all chip revenue worldwide. The sector has not seen such a distortion in fifteen years.

The chart nobody wanted to see

RISE IN CONTRACT PRICES PER QUARTER



Four quarters in a row of double-digit increases.

The peak looks to be behind us, but that is deceptive: the increases stack on top of each other. What has become expensive once does not simply get cheap again.

Your next laptop will cost you more

WHAT YOU NOTICE IN THE SHOP

- PC prices will rise about 17% in 2026 compared with 2025, says Gartner. For laptops, analysts expect as much as 20 to 30%.
- Memory now accounts for 23% of the build cost of a PC — last year it was 16%. No manufacturer can absorb that blow any more.
- Dell raised its list prices by 17% in March 2026. And it did not stop there.
- Apple raised the prices of MacBooks and iPads and simply passed the bill on.

The affordable laptop under \$500 will disappear by 2028.

+17%

PC prices in 2026 versus 2025
(Gartner)

-10.4%

fewer PCs sold: the steepest drop in
more than a decade

And your phone? Same story

SMARTPHONES



+13%

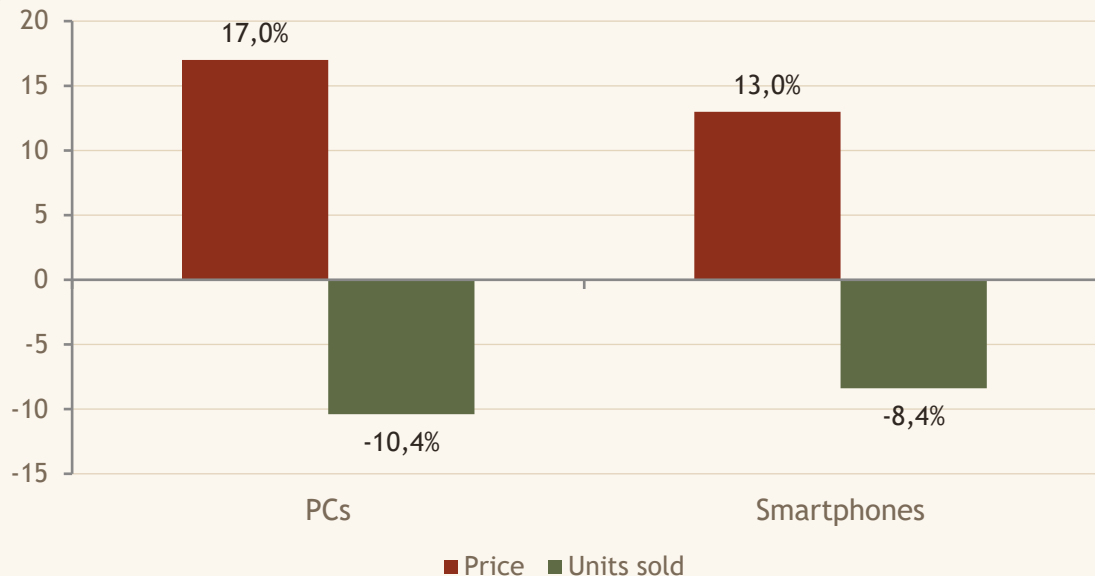
on the price of smartphones in 2026, versus 2025.

8.4% fewer devices will be sold this year. Not because we don't want them — because we can no longer afford them.

Expect less storage for the same money: manufacturers would rather cut the specs than their margin.

More expensive and fewer sold

FORECAST 2026 VERSUS 2025



**Same budget,
less device.**

The market is shifting
towards pricier devices.
Anyone on a small budget is
simply left behind.

Even gamers feel it

GRAPHICS CARDS

An RTX 5090 went from about \$2,000 list price to more than \$4,000 on the second-hand market. Nvidia cut 30 to 40% of production in the first half of 2026.

2026 is the first year since the late 1990s without a new generation of consumer GeForce cards. All capacity goes to AI accelerators.

~2X

the price of a consumer
flagship card

36-52

weeks of waiting for AI
servers in the data centre



What that actually means for you

FROM FIGURES TO THE KITCHEN TABLE

You keep your device longer

Gartner expects 20% longer lifespans for consumers, 15% for businesses. Your old laptop gets another year.

Old means vulnerable

Devices kept too long eventually stop getting updates. That is a security risk, not a detail.

Less choice in the shop

Manufacturers are focusing on expensive, high-margin devices. The entry-level segment is quietly being cleared out.

The digital divide grows

Anyone without €1,000 for a laptop is shut out of school, work and services that have gone digital.



PART TWO

And then the bill for the planet

Power, water, emissions and waste — the side of AI that never shows up on the invoice

Data centres guzzle power

ENERGY

448 TWh

electricity consumed by data centres worldwide in a single year (UN University)

+12%

growth per year since 2017 — and it is accelerating

60%

of that power still comes from fossil fuels today

By 2028 AI is expected to claim more than half of all data centre power.

Data centre consumption is expected to double within four years. Meanwhile tech companies are knocking on the doors of nuclear plants and gas turbines to feed that hunger.

A city nobody ever visited

CO₂ EMISSIONS

- In 2025 AI systems emitted an estimated 80 million tonnes of CO₂. That is the footprint of New York City. Or of a small European country.
- Cornell researchers calculated that by 2030 AI will add 24 to 44 million tonnes of CO₂ a year in the US alone – like putting 5 to 10 million extra cars on the road.
- And that excludes construction: a single 150 MW data centre costs some 300,000 tonnes of CO₂ before it answers a single question.

We count the data centres. They count the gigawatts.



And then there's the water

COOLING

AI servers get hot. Very hot. You cool them with water — and that water comes from the same sources as your tap water.

765 bn

litres of water used by AI in 2025
— more than the entire global
bottled water market

1.2 trillion

litres a year for data centres by
2030, up from 560 billion now

6-10 m

US households: that is how much
water AI would swallow each
year by 2030

One data centre building in Texas is estimated to need 3.8 million litres of water. Per building. And they are building several.

The mountain left behind

ELECTRONIC WASTE AND RAW MATERIALS



AI hardware moves fast. Servers and accelerators are replaced every few years, because a new generation is simply more efficient.

What remains is a growing mountain of electronic waste, full of rare metals we barely recover.

Then there is the land: one AI campus in Indiana covers around 1,000 hectares, mostly former farmland. In Loudoun County alone there is already 2.8 million square metres of data centre.

The double blow

WHAT IT COMES DOWN TO

In your wallet

- PCs +17%, laptops up to +30%
- Smartphones +13%
- Affordable devices are disappearing
- No relief before 2027

On the planet

- 448 TWh of power, 60% fossil
- 80 million tonnes of CO₂ in 2025
- 765 billion litres of water
- A growing mountain of waste

Two bills, one cause. And you pay both of them.

So... what do we do about it?

NOT DOOM, BUT CHOICES



Stretch out your device

Replace the battery, add memory, clean up the system. A five-year-old laptop still holds its own.

Buy second-hand or refurbished

No new chips needed, and a lot cheaper too. The best chip is the one that already exists.

Use AI sensibly

Not every question needs the heaviest model. Small models often do a fine job for a fraction of the cost.

Demand transparency

Tech companies are still far from fully reporting their power and water use. That should be tightened up.

AI is not free. We pay for it.

Not in subscriptions, but in pricier devices, in power, in water and in waste.
That is no reason to write AI off — but it is a reason to know what it costs.

Sources: Gartner (Feb. 2026) · TrendForce (2025-2026) · IEA · UN University · Cornell University · Carbon Brief · CNBC