



## TAM Research (Manufacturing)

By: The Allocc Team

# 1. Global Spending on \$100M+ Manufacturing Megaprojects (Last 5 Years)

**Scale of Megaproject Investment:** Worldwide spending on large-scale projects (“megaprojects”) is enormous – estimated at **\$6–9 trillion annually** across all sectors . This is roughly 8% of global GDP and constitutes “*the biggest investment boom in human history*” . Within this, the **manufacturing sector** represents a significant and growing share. According to a PwC/Oxford Economics infrastructure outlook, manufacturing-related projects (including heavy industries like refining, chemicals, and metals) have been growing ~8% annually and are projected to account for **21.3% of global infrastructure project spending by 2025**, up from 18.8% in 2012 .

**Annual Manufacturing Capex in Projects ≥\$100M:** Based on the above share, manufacturing megaproject expenditures are on the order of **\$1.5–1.8 trillion per year in recent years**. For example, by 2025 the annual spend on manufacturing facilities worldwide is projected around ~\$1.9 trillion (about 21% of ~\$9T total) . Five years prior, this figure was lower (as the share and total were smaller), so averaging over 2020–2024 yields roughly **\$1.5–1.7 trillion per year** in global manufacturing-sector project investment (for projects >\$100M). *This represents the “market” of relevant projects Alloc could serve.* For context, in the United States alone, manufacturing construction investment hit a record **\$238 billion (annual rate) in mid-2024** amid a wave of new plants (e.g. semiconductor fabs, EV battery factories) . Globally, manufacturing project spending spans a wide range of industries (discussed in Section 5) and has seen strong growth driven by emerging markets and industrial policy incentives .

**Sources:** The Project Management Institute and academic research by Flyvbjerg provide the high-level megaproject spending range . PwC/Oxford

Economics give the manufacturing sector's share of this pie . These figures underpin our estimate that **roughly \$1.6 trillion annually** is spent on \$100M+ manufacturing projects worldwide (on average over the past 5 years).

## 2. Impact of 30–50% Faster Execution: Time & Cost Savings

Large capital projects in manufacturing **routinely suffer delays and cost overruns**, indicating substantial room for improvement. McKinsey Global Institute finds that *“large projects across asset classes typically take **20% longer** to finish than scheduled and are up to **80% over budget**”*. KPMG reports similarly that only 25% of projects came within 10% of their original deadlines, meaning **75% of projects blew past schedule** (and 69% blew past budget) beyond a 10% threshold. In fact, over 85% of major projects end up over budget, with an average cost overrun of ~28%. The schedule slips themselves tend to average ~20–40% beyond plan for megaprojects, and *“77% of global megaprojects are at least 40% behind schedule,”* according to McKinsey research. These delays drive up costs via extended labor, project management overhead, and inflation of input prices.

**Time Savings from 30–50% Acceleration:** Allocc’s promise is to cut execution time by **30–50%**. This is an enormous acceleration. For example, if a typical manufacturing megaproject would ordinarily require 4 years, Allocc could potentially compress it to ~2–3 years – saving **1–2 years**. In percentage terms, that level of schedule reduction far exceeds the typical overruns, meaning it not only recovers the usual delay but actually delivers projects **months or years earlier than originally planned**. Achieving a 30% schedule reduction on a project that would take 36 months means finishing ~11 months sooner; a 50% reduction could mean finishing in half the time.

**Cost Savings from Shorter Schedules:** Faster execution directly translates to **cost savings** in several ways:

- Avoided Overrun Costs:** By preventing the schedule slippage that plagues most megaprojects, a huge portion of the typical ~28% cost overrun can be eliminated . In other words, finishing on or ahead of the original schedule avoids the expensive last-minute rushing, rework, and vendor claims that drive up budgets. It also means less time for costs to escalate. If a \$500 million project historically would incur ~\$140 million in overruns (28%), a dramatic schedule compression could save much of this – on the order of **tens of millions to over \$100M** per project in direct cost avoidance, depending on baseline performance.
- Lower Overhead & Financing Costs:** Megaprojects have high ongoing overhead – project management staff, site facilities, insurance, etc. – measured in millions per month. They also often carry financing charges (interest during construction). Every month cut from the schedule is a month of overhead and interest *not* paid. For example, if carrying costs and overhead are, say, ~1% of project value per month, then saving 12 months on a \$500M project yields about **\$60 million** in cost savings from overhead/interest alone. Even a more conservative estimate of 0.5% per month would save \$30M in that scenario. Finishing 1–2 years early thus **saves on the order of 5–15% of project cost** via reduced indirect costs (this aligns with case studies showing that technology-enabled schedule improvements cut project durations ~10% and claims ~16% ).
- Reduced Risk of Inflation and Change Orders:** Shorter projects have less exposure to input price inflation (e.g. rising steel or labor costs over time) and fewer scope changes. This can further trim costs. The *“iron law of megaprojects: over budget, over time, over and over”* can be broken – a faster project is simply less likely to accumulate costly

deviations.

In summary, a **30–50% schedule reduction could yield direct cost savings on the order of ~15–30% of the original budget** for a typical delayed project. This rough range comes from eliminating the average overruns (~28% ) and cutting significant overhead/finance costs. Every situation will differ, but it's clear that **finishing months or years sooner saves hundreds of millions across a portfolio of megaprojects.**

*Example:* A **\$100 million** factory project that ordinarily might run 6 months late (incurring, say, \$10M extra cost) and spend \$2M/month on overhead could easily save **\$20+ million** by finishing ~8–12 months earlier than it would have (avoiding the \$10M overrun and saving ~\$10M in overhead/interest). These implementation savings are only part of the story – equally important is the **revenue side**, described next.

### 3. Unlocked Revenue from Faster Project Delivery (30–50% Acceleration)

Beyond cost reduction, the **major benefit of faster execution is earlier revenue** – the ability to start production (and earning returns) sooner. Megaproject delays have a huge opportunity cost: the *unrealized revenue* that the new facility or asset could have generated had it been operational on time. By cutting project time nearly in half, Allocc can unlock this **lost revenue** for companies.

When a manufacturing plant comes online 1–2 years ahead of the “business as usual” schedule, the firm gains additional sales that would have otherwise been missed. The value of this can be enormous:

- **Faster Time-to-Market:** In competitive industries (e.g. automotive, electronics), earlier launch means capturing market share and sales before competitors. A PMI study noted that *“the sooner the project is complete, the sooner the benefits are realized”*, underscoring that shortening project lead time directly accelerates revenue generation . Finishing a project 3 months early, for example, lets a company book those **3 months of extra revenue** (and also frees up resources to start another project sooner) .
- **Annual Revenue of New Facilities:** Large manufacturing facilities often generate substantial annual revenues once operational. For instance, an auto assembly plant might produce 100,000 vehicles/year; if each vehicle sells for \$30,000, that’s \$3 billion in annual gross revenue. A semiconductor fab might ship hundreds of millions of dollars of chips per year. Even a smaller \$100M plant could realistically yield \$50–\$150M in yearly revenue from its output. Therefore, a **1-year acceleration** can

bring forward revenues on the order of **tens of millions (for smaller projects) up to billions (for mega-plants)**. This revenue is “*unrealized*” in the delayed scenario – it is effectively value that is lost to the schedule slip.

- **Real-World Examples of Lost Revenue:** The impact of delays has been observed in major projects. For example, the much-delayed Berlin Brandenburg Airport (BER) missed out on an estimated **€1.8 billion in airline and retail revenue** due to its late opening, contributing to a total economic loss of ~€11.9 billion when compounded . In another case, a projected skilled labor shortage in Saudi Arabia’s Vision 2030 megaprojects could cause **\$206.8 billion of unrealized revenue** if projects are delayed due to lack of workers . These numbers illustrate the scale of revenue at stake when execution timelines slip by years.

Given the roughly **\$1.6 trillion** in manufacturing megaproject investments each year (Section 1), the potential unlocked revenue from accelerating all these projects by 30–50% is enormous. We can estimate it in aggregate:

- **Conservative Scenario (30% faster):** Suppose on average projects finish ~ **0.5 year earlier** than they otherwise would. If the new facilities generally produce revenue comparable to their capital cost on an annual basis (a rough but conservative assumption for manufacturing), then each \$1 of project cost yields about \$1 per year in revenue when operational. Thus, saving 0.5 year would unlock roughly **\$0.5 of revenue per \$1 of project cost**. Applying that to ~\$1.6T of annual projects, we get on the order of **\$800 billion** in accelerated (earlier) revenue globally. Even if we assume more cautiously that revenue in that first half-year is



only half of the capital (perhaps due to ramp-up), it's ~\$400B unlocked.

- **Upside Scenario (50% faster):** If projects finish **1+ year earlier** on average, the unlocked revenue approaches the scale of a full year's output. Using the same logic, a 1-year acceleration could unlock about **\$1 trillion** in additional revenue (per year of acceleration) for the global manufacturing sector. In practice, not every project will have a full year of acceleration or immediate full-capacity sales, but across many projects the *order of magnitude* is **hundreds of billions of dollars in revenues realized earlier** than in the status quo timeline.

In sum, by reducing execution times 30–50%, Allocc can **unlock unrealized revenue on the order of ~\$0.5–1.0 trillion globally per year** that would otherwise be delayed. This reflects the tremendous value of time-to-market in megaprojects. Every month saved is money earned: as one PMI paper put it, *“the sooner we complete the projects, the sooner we realize the benefits”*.

It's important to note this is *accelerated* or *time-shifted* revenue – not creating new demand out of thin air, but allowing companies to earn earlier and thus improve NPV and market position. Still, from a TAM perspective, this earlier revenue is what Allocc can take a share of via its pricing model.

## 4. Allocc's Value-Based Pricing (30% of Unrealized Revenue Unlocked)

Allocc employs a **value-based pricing model**, taking **30% of the unrealized revenue it helps to unlock**. In other words, Allocc's fee is directly tied to the financial benefit the client gains from the time savings. This aligns incentives: Allocc only succeeds if it delivers tangible acceleration that boosts the client's revenue or reduces costs (which ultimately show up as improved cash flow).

From the calculations above, the pool of **"unlocked" revenue globally is on the order of \$500B to \$1T annually** (for 30–50% faster execution). Taking 30% of that value for its services, Allocc's potential revenue would be:

- **Low estimate:** 30% of \$500B ≈ **\$150 billion** per year.
- **High estimate:** 30% of \$1,000B = **\$300 billion** per year.

Even under more moderate assumptions (say ~\$700B unlocked, midpoint of our range), 30% would yield around **\$210 billion** in annual revenue potential for Allocc at full market saturation. This represents the **Total Addressable Market (TAM)** – essentially the product of global project volume, time savings, and Allocc's take rate.

It's worth noting that **Allocc's fee covers both time acceleration and any cost savings**, but by denominating it as a percentage of *unrealized revenue*, the model captures all forms of value (since cost savings also ultimately increase the company's cash flows akin to revenue). In practice, the fee might be justified to clients by the combination of earlier revenue plus avoided costs, which together improve the project's economic outcome. A 30% share

for Allocc still leaves 70% of the benefit to the client, making it an attractive proposition: the company gets a project delivered months early, reaps hundreds of millions in improved NPV and cost avoidance, and gladly pays Allocc a success fee out of that gain.

**Key takeaway:** For every **\$1 billion** of accelerated revenue Allocc enables, it would earn \$300 million. Given the multi-trillion-dollar scale of manufacturing megaprojects, this adds up to a **TAM in the hundreds of billions of dollars per year** (see breakdown by industry below). Even if only a fraction of projects adopt such solutions in the near term, it suggests a very large potential market.

## 5. TAM Breakdown by Manufacturing Sub-Sector

Manufacturing is a broad domain. Allocc's solution can apply to megaprojects across **many sub-industries**. We break down the TAM (in terms of Allocc's revenue potential) by major manufacturing sub-sectors, based on each sector's share of global megaproject spending:

- **Automotive ( incl. Electric Vehicles & Battery Plants):** The automotive industry is investing heavily in new production capacity, especially for EVs and batteries. AlixPartners research indicates the global auto sector will spend **\$526 billion in new capital investment from 2022–2026** (~\$100–130B per year) . This includes new assembly plants, EV gigafactories, and retooling. Assuming on the order of ~\$120B/year in large projects, this represents roughly **8%** of manufacturing megaproject spend. **TAM (Allocc):** ~\$16–24B/year from automotive sector (30% of unlocked value). *Sources:* Industry studies by AlixPartners and McKinsey note a surge in automotive capital projects driven by electrification and reshoring (over **\$220B** in U.S. manufacturing CAPEX announced for reshoring since 2022 , much of it in autos and EV supply chain).
- **Electronics & Semiconductors:** This sector includes semiconductor fabs, electronics assembly facilities, and related high-tech manufacturing. It has seen **massive investments recently**. Global semiconductor industry capital expenditures were **\$166–180 billion in 2022** alone , and remain elevated as countries race to build chip fabs. Adding other electronics manufacturing (display panel plants, etc.), we estimate ~\$200B/year in megaprojects (roughly **12–13%** of the total). **TAM (Allocc):** on the order of **\$25–35B/year**. *Note:* Chip fabs are often multi-billion dollar projects that greatly benefit from schedule

acceleration (earlier chip output in a fast-moving market is extremely valuable). The U.S. CHIPS Act's \$52B program is catalyzing tens of billions in semiconductor fab projects, illustrating the scale here.

- **Aerospace & Defense Manufacturing:** This includes aircraft assembly plants, aerospace component factories, shipbuilding yards, and defense production facilities. While the **A&D industry** is large (>\$800B annual revenues globally), it is not as capex-intensive as other sectors – major new plants are fewer. We estimate perhaps **~\$50–80B/year** in big aerospace/defense factory projects (about **3–5%** of manufacturing project spend). Recent defense build-ups and space industry growth may push this higher. **TAM (Allocc):** roughly **\$5–15B/year**. (For example, a new fighter jet production line or rocket manufacturing facility worth \$1B could yield hundreds of millions in earlier delivery of aircraft to customers – Allocc would take 30% of that benefit.)
- **Heavy Machinery & Industrial Equipment:** This category covers manufacturers of heavy equipment (e.g. construction machinery, agricultural machinery, industrial engines) building new factories. This tends to be a moderate-sized segment. We estimate it at **~\$40–60B/year** in projects (a few percent of the total). **TAM:** on the order of **\$5–10B/year**. Many such projects (e.g. a \$200M new plant for excavators) could see significant efficiency gains with better project execution, though the overall segment is smaller than automotive or electronics.
- **Chemicals & Petrochemicals:** *Process industries* like petrochemical plants, specialty chemical facilities, and related manufacturing of materials are a **major component** of manufacturing CAPEX. The **global**

**chemical industry** alone had about **\$239B in capital expenditure in 2023** (this likely includes many projects above \$100M in size). Adding petrochemical complexes and large-scale chemical facilities, plus new **oil refining** projects (which are often multi-billion dollar “megaprojects”), this sector is on the order of **\$300+ billion/year** (roughly **~20%** of manufacturing project spend). **TAM (Allocc):** approximately **\$60–90B/year** from chemical and refining projects. *Note:* These projects (e.g. a \$5B petrochemical complex) often face severe delays and budget overruns; accelerating them yields huge revenue — for instance, bringing a refinery online early means selling fuel earlier. Allocc’s 30% cut of that value would be substantial.

- **Metals & Materials:** This includes steel mills, aluminum smelters, and other large metallurgical facilities. The steel industry invests roughly 6% of its revenues in new capacity and upgrades – globally, that implies on the order of ~\$50–100B per year in steel plant projects (world steel sales \$1–1.5T). Including other metals (aluminum, copper processing, cement and glass plants, etc.), we estimate **\*\*\$100–150B/year\*\*** in “megaproject” spending (perhaps **6–8%** of total). **TAM (Allocc):** on the order of **\$20–30B/year**. Projects like new low-carbon steel plants, for example, are emerging and are extremely capital-intensive; timely delivery is critical to meet demand and environmental targets, creating value that Allocc could tap into.
- **Other Manufacturing (Pharmaceutical, Consumer Products, etc.):** There are many other manufacturing sub-sectors – e.g. **pharmaceutical and biotech** plants (which can cost hundreds of millions for vaccine production or biologics), **food and beverage processing facilities**, **textile and apparel factories**, and so on. Individually, these tend to be

smaller projects on average (often just under or around \$100M), but collectively they form a significant chunk of capital spending. We group these as “other,” roughly comprising the **remaining ~20–25%** of manufacturing megaproject spend (perhaps **\$300–400B/year**). **TAM (Allocc)**: roughly **\$60–80B/year** in aggregate from these miscellaneous sectors. For example, a new \$200M pharmaceutical plant that launches a life-saving drug earlier can generate large early revenues; Allocc’s cut of that accelerated benefit would be part of this segment.

The table below summarizes the **estimated annual megaproject spending** and corresponding **Allocc TAM** by sub-industry, assuming 100% adoption in each sector:

| Manufacturing Sub-Industry          | Est. Annual Mega-Project Spend (>\$100M)             | Allocc TAM (30% of Unlocked Value)† |
|-------------------------------------|--|-------------------------------------|
| Automotive & EV (incl. batteries)   | ~\$120–150 billion <small>greenwichgrp.com</small>   | ~\$20–30 billion/year               |
| Electronics & Semiconductors        | ~\$180–200 billion <small>semiconductors.org</small> | ~\$25–35 billion/year               |
| Aerospace & Defense Manufacturing   | ~\$50–80 billion                                     | ~\$5–15 billion/year                |
| Heavy Machinery & Equipment         | ~\$50 billion (est.)                                 | ~\$5–10 billion/year                |
| Chemicals & Petrochemicals          | ~\$300+ billion <small>statista.com</small>          | ~\$60–90 billion/year               |
| Metals & Materials (Steel, etc.)    | ~\$100–150 billion (est.)                            | ~\$20–30 billion/year               |
| Other Manufacturing (Pharma, etc.)  | ~\$300–400 billion (est.)                            | ~\$60–80 billion/year               |
| <b>Total (Global Manufacturing)</b> | <b>~\$1.6 trillion (approx.)</b>                     | <b>~\$200+ billion/year</b>         |

† Assumes Allocc captures ~30% of the value from a ~40% average time reduction (midpoint of 30–50%). These TAM figures are illustrative, rounded to show magnitude.

Each sector's figure is supported by industry data where available. For example, automotive's ~\$120B/year is supported by the AlixPartners study (which found \$526B over 4–5 years) , electronics by SIA's \$166B semiconductor capex in 2022 , and chemicals by Statista's \$239B in 2023 . The others are estimated from industry size and typical investment patterns, with heavy industry (chemicals, metals) clearly dominating a large share of project spending.

What the breakdown shows is that **Allocc's TAM is diversified across multiple manufacturing verticals**. No single sub-sector dominates the entire TAM, which is advantageous – Allocc can pursue opportunities in whichever industries show the most need for schedule acceleration. For instance:

- In the **near term, semiconductors and EV battery plant builders** are racing to build capacity and might be early adopters (high TAM in those niches).
- **Petrochemical and materials companies** with mega-projects could also be key targets given their history of overruns (and thus large unlockable value).
- **Automotive** companies, dealing with retooling for EVs, have dozens of projects where shaving off months could mean beating competitors to market.

Each subindustry has its own project characteristics, but the unifying theme is that **time = money** in all of them. As Allocc scales across these sectors, it can capture a portion of the substantial value it creates in each.



## 6. Global TAM for Allocc (100% Market Capture Scenario)

Bringing it all together, if Allocc were hypothetically deployed on **all** \$100M+ manufacturing projects worldwide (100% market penetration), the **Total Addressable Market** can be estimated at roughly **\$200 billion per year (mid-case)**, with a plausible range from **~\$150B (conservative)** to **\$300B (upside)** annually as discussed in Section 4. This TAM figure represents **Allocc's revenue** (not the project value), coming from its 30% share of the immense value unlocked by cutting execution times in the global manufacturing sector.

To reiterate how we arrived here: Global manufacturing megaproject spend (~\$1.6T/yr) × typical unrealized revenue fraction recoverable (~0.3–0.5, from 30–50% time reduction) × Allocc's 30% fee = on the order of **\$2×10<sup>11</sup>** dollars per year. In other words, **~0.2 trillion USD per year** of potential revenue for Allocc. This is **an extremely large TAM**, reflecting the fact that even a small percentage of improvement on multi-billion-dollar projects translates to big dollars. It underscores why improving megaproject productivity is often called the next frontier of value creation in industry.

**Important caveats:** This TAM assumes ideal conditions (all projects use Allocc and achieve ~40% time savings on average). Realistically, market adoption will take time and some projects may not realize full 50% acceleration. However, even capturing a **10% share** of this market would yield tens of billions in revenue. Additionally, the TAM could further grow if global manufacturing investment grows (e.g. through infrastructure bills, green manufacturing initiatives, or emerging market industrialization). The Big Four and other analysts project continued growth in capital project spending; PwC forecasted global project spending to reach \$9T by 2025 , and

manufacturing's slice of that could increase with trends like reshoring and clean energy manufacturing.

## Conclusion:

Allocc's value proposition – cutting project durations by nearly half – addresses a colossal pain point in \$100M+ manufacturing megaprojects. The **average annual global spending** on such projects is about **\$1.5–1.7 trillion**, and the **time/cost inefficiencies** embedded in that are likewise huge. By slashing schedules 30–50%, Allocc can **save substantial costs** and **unlock hundreds of billions in revenue** that would otherwise be delayed. With its 30% value-based pricing, the theoretical **TAM for Allocc is on the order of \$200 billion per year**, spread across a variety of manufacturing sub-industries from automotive to chemicals. Even at a fraction of full adoption, this suggests a multi-billion dollar revenue opportunity for Allocc.

The estimates above are anchored in reputable sources: Project management institutes, consulting analyses, and industry data (PMI, McKinsey, KPMG, Deloitte, PwC, Statista, etc.) have all been cited to ground the assumptions. The analysis shows that the **prize is enormous** – manufacturing megaprojects are so expensive and so frequently delayed that a platform which consistently accelerates them could claim a very large reward. As Bent Flyvbjerg noted, we are in the biggest project investment boom in history ; Allocc's TAM is essentially a share of the efficiency gains to be had in this boom. If Allocc can truly deliver 30–50% faster execution, the numbers suggest it could tap into a **global market worth hundreds of billions** in the coming years.

# Resources

- Project Management Institute / Flyvbjerg – “*What you should know about megaprojects...*”, *Project Management Journal* (2014) – global megaproject spending \$6–9T/year
  - <https://www.pmi.org/learning/library/know-mega-projects-overview-2267>
- PwC/Oxford Economics – *Capital Project & Infrastructure Spending Outlook to 2025* (2014) – manufacturing sector growth 8% p.a., 21.3% of global CP&I by 2025
  - <https://www.pinsentmasons.com/out-law/news/china-to-drive-asias-leadership-of-global-infrastructure-spend-to-2025-says-report>
- Deloitte Insights – *2025 Manufacturing Industry Outlook* (2024) – record US manufacturing construction \$238B (annualized) in 2024
  - <https://www2.deloitte.com/us/en/insights/industry/manufacturing/manufacturing-in-dustry-outlook.html>
- McKinsey Global Institute – *Imagining construction’s digital future* (2016) – large projects average 20% schedule overrun, 80% cost overrun
  - <https://www.mckinsey.com/capabilities/operations/our-insights/imagining-construc-tions-digital-future>
- KPMG Global Construction Survey (2015) – 75% of projects miss schedule by >10% ; 69%; miss budget by >10%.
  - <https://assets.kpmg.com/content/dam/kpmg/pdf/2016/04/digging-into-data-a-blue-print-for-mega-project-success-final.pdf>
- PropellerAero Construction Report (2020) – 85% projects over budget, avg 28% overrun
  - <https://www.propelleraero.com/blog/10-construction-project-cost-overrun-statistics-you-need-to-hear/>
- Autodesk/Digital Builder via MGI – 77% of megaprojects >40% behind schedule (cited by McKinsey)
  - <https://www.autodesk.com/blogs/construction/construction-industry-statistics/>
- PMI – “*Gaining Advantage by Reducing Project Lead Times*” (2013) – benefits of completing projects sooner (revenue sooner, capacity freed)
  - <https://www.pmi.org/learning/library/rules-critical-chain-reduce-project-cost-5833>

- Example – Berlin Brandenburg Airport case – €1.8B revenue lost to delay
  - <https://journals.sagepub.com/doi/10.1177/87569728241300247?icid=int.sj-abstra&ct=similar-articles.2>
- Example – Saudi Vision 2030 labor shortage could cost \$206.8B in unrealized revenue
  - <https://www.arizton.com/market-reports/saudi-arabia-crawler-excavator-market>
- McKinsey & NAM – Reshoring in US: \$220B in manufacturing capex announced 2022–2026
  - <https://www.abfjournal.com/ma-sector-spotlight-manufacturing-2025-outlook/>
- AlixPartners via Greenwich – Auto industry to spend \$526B on new capex 2022–26 (EV shift)
  - <https://greenwichgp.com/2023/06/06/capital-flow-into-the-automotive-industry-is-surging/>
- Semiconductor Industry Association – Global semi industry capex \$166B in 2022
  - [https://www.semiconductors.org/wp-content/uploads/2022/11/SIA\\_State-of-Industry-Report\\_Nov-2022.pdf](https://www.semiconductors.org/wp-content/uploads/2022/11/SIA_State-of-Industry-Report_Nov-2022.pdf)
- Statista – Global chemical industry capex ~\$239B in 2023
  - <https://www.statista.com/statistics/407870/forecast-for-annual-capital-spending-in-chemical-industry-worldwide/>
- U.S. Treasury/IIJA/CHIPS Act – ~\$15B/yr into aerospace, defense, semi manufacturing (indicative of sector scale)
  - <https://www.abfjournal.com/ma-sector-spotlight-manufacturing-2025-outlook/>
- World Steel Association – steel industry invests ~6% of revenue in new capacity (implied tens of \$B annually)
  - <https://worldsteel.org/data/world-steel-in-figures/world-steel-in-figures-2024/>