

Two Percent Energy, Twenty-Six Percent of EBIT: The Hidden Cost of Idle Capacity

Idle capacity, repriced steel and CBAM: what German Mittelstand metal manufacturers should change in their machine-hour rates before the 2027 planning round

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German metal manufacturers spend around two percent of revenue on energy and are told it is their biggest problem. It is not, at least not directly. The real exposure arrives through idle capacity, repriced steel and customers moving production abroad, and it sits inside a cost model most companies have not rebuilt since the volumes changed.

Executive Summary

A mid-sized German metal manufacturer, with €50 to €500 million in revenue, working in machining and sheet metal and typically operating as a contract manufacturer or tier-two supplier, spends between 1.5 and 3 percent of revenue on energy. Ask the managing directors whether energy is their company's biggest problem and they will usually say no. On the line item, they are right. On the exposure, they are not.

What is happening

The energy shock is not arriving through the electricity meter. It is arriving through three channels that never appear in a cost report labelled "energy":

- **Idle capacity.** Industrial capacity utilisation in Germany stood at **77.5 percent** in January 2026 against a long-term average of 83.2 percent (**ifo**). Gesamtmetall, a union of employers' associations in the German metal and electrical industry, puts the normal level for the sector at 85 percent. A plant running below normal carries costs that do not scale down: depreciation, space, indirect staff, and a substantial share of its energy. Those idle capacity costs usually land in a year-end variance that nobody acts on.
- **The steel.** A new EU steel safeguard took effect on **1 July 2026**, cutting duty-free import quotas by **47 percent** and doubling the out-of-quota tariff to **50 percent**. Hot-rolled coil in Northern Europe reached **€711 per tonne** at the end of July, up roughly 18 percent on a year earlier. Behind it, CBAM, the EU carbon border charge, has begun a slow ramp that runs to 2034.
- **Relief that goes to someone else.** The subsidised industry energy price is allocated by sector, not by energy intensity. Basic metals production has a **71 percent** eligibility rate; fabricated metal products, **14 percent**. The manufacturer's steel supplier can get 5 ct/kWh on half its consumption. The manufacturer pays between 15 and 25.

Our position

The binding constraint is not the energy price but the cost model. Many manufacturers are pricing 2026 work on a machine-hour rate built for a utilisation level the market no longer delivers, against a material cost that has repriced since the calculation was last touched.

That is how a company can be busy and unprofitable in the same quarter, and why the year-end variance analysis explains so little.

This is a planning and costing problem. It is solvable, and solving it does not require anyone to buy a solar array.

The Market These Companies Are Operating In

The cost argument only matters in context, so start with demand.

German metal and electrical production fell again in the first half of 2026, **2.2 percent** below the prior year. Stripping out defence-related sectors, output in the second quarter would have been a further 2 percent lower, the weakest level since the second quarter of 2020 at the peak of the Covid crisis. Gesamtmetall reports that the industry has lost around **270,000 jobs** since 2018 and has fallen below 3.8 million employees for the first time since 2015; it forecasts up to **150,000** further job losses in 2026.

Profitability has compressed sharply. Gesamtmetall's average net return on sales for the sector fell from **4.0 percent** in 2023 to 2.3 percent in 2024 and an estimated **1.5 percent** in 2025. One in four M+E companies made a loss in 2025, and a further fifth managed only a schwarze Null, meaning a net return between zero and two percent.

Order books are weak. In mid-2025, **42 percent** of M+E companies reported a shortage of orders, and 30 percent expected to cut staff in the following months. Mechanical engineering production fell around 5 percent in 2025, a third consecutive year of decline, and the VDMA cut its 2026 forecast from plus one percent to zero in June. Restructuring practitioners now describe metal manufacturers and machine builders as the dominant group among large insolvencies.

Labour cost pressure is building on top. IG Metall opened the 2026 bargaining round with a demand for a **5 percent** pay increase, with regional negotiations starting on 7 October.

A note of balance. Not every indicator points down. The ifo survey shows whole-economy capacity utilisation rising to 83.6 percent in January 2026, continuing a recovery that began in mid-2025. The gap to the 77.5 percent industry figure from the same survey is explained by services, where utilisation stood at 89.5 percent, above its long-term average. IG Metall's own survey of works councils found 63 percent reporting good or very good utilisation, up six points on autumn 2025. These are different instruments measuring different things. They do not cancel the manufacturing data, but the picture is not uniformly bleak, and a recovery, where it comes, will expose exactly the costing issues this article describes.

What a Metal Fabricator Actually Spends on Energy

The public debate about "the metal industry" is usually conducted at the wrong level of aggregation. It is two industries, directly adjacent in the value chain, with an order-of-magnitude difference in energy intensity.

Sector	Classification	Electricity cost as share of gross value added	Eligibility for industry energy price
Basic metals: smelting, rolling, casting	WZ 24 Metallerzeugung	37.2%	71%
Fabricated metal products: machining, sheet metal, welded structures, tools	WZ 25 Metallerzeugnisse	3.9%	14%

Source: ecoplanet analysis of Destatis company statistics and the EnFG eligible-sector annex.

WZ 25 is the largest single industrial grouping in Germany, with **41,273 businesses**.

These intensities are measured against **gross value added**, not revenue. For a typical machining or sheet metal operation, where purchased material is 40 to 50 percent of revenue, the equivalent figure against revenue is lower, 1.5 to 3 percent for total energy. On €120 million of revenue, that is €1.8 to €3.6 million a year. Meaningful, not existential.

The relief that does not reach them

Germany introduced a subsidised industrial electricity price for 2026 to 2028 with a target of **5 ct/kWh** on up to half of an eligible company's consumption. The total budget is **€3.8 billion**, funded from the Climate and Transformation Fund and claimed retrospectively through BAFA from 2027.

Three conditions must be met at once: membership of one of 91 listed sectors, annual consumption of at least 1 GWh, and demonstrated electricity cost intensity. Eligibility is decided by sector, not by the actual energy intensity of the individual plant, so a company can be energy-intensive and still receive nothing. Of **202,730** German industrial companies, only **30,586** fall within an eligible sector.

What the rest receive instead: the electricity tax for manufacturing stays at the EU minimum of €0.50 per MWh against a standard rate of €20.50, a reduction of €20 per MWh or about 2 ct/kWh, claimed through the local customs office on form 1450. This rate has applied since 2024; 2026 only made it permanent, so it protects an existing level rather than adding new relief. In addition, a one-off **€6.5 billion** federal subsidy to transmission network charges reduces bills by 1.3 to 2.4 ct/kWh automatically.

Industrial electricity in Germany in 2026 typically costs between **15 and 25 ct/kWh** depending on volume, contract and network area. A German plant pays around three times what a Finnish one does for the same volume, and the spread between the cheapest and most expensive EU member state exceeds threefold.

The structural point. The subsidy flows upstream, to the steel and aluminium producers whose prices the manufacturer pays. A cost advantage granted to your supplier is not a cost advantage for you. At best it slows the rate at which your input price rises.

Channel One: Idle Capacity and the Machine-Hour Rate

This is the core of the argument. It requires a short explanation of how a manufacturer builds a price.

How the calculation works

Most German machining and sheet metal companies calculate on a **machine-hour rate** (Maschinenstundensatz), an extension of classic cost-plus calculation (Zuschlagskalkulation). Everything attributable to running a machine group goes into a cost pool: depreciation, floor space, maintenance, tooling, indirect staff such as programmers and quality inspectors, and energy. The pool is divided by the machine hours expected in a normal year, the **normal capacity level** (Normalbeschäftigung). The result is a rate in euros per hour. Multiply it by cycle time, add setup (Rüstzeit), material and margin, and you have a quote.

Two properties of this method matter.

Most of the pool is fixed. Depreciation does not fall when volume falls. Space costs do not move. Indirect staff are fixed in practice: you cannot release a quarter of your CNC programmers for one quarter and recruit them back the next. For a typical machining operation, 70 to 80 percent of the machine pool is fixed over a twelve-month horizon.

The rate is only as good as the normal capacity assumption behind it. If actual hours fall below normal, the fixed cost is spread across fewer hours than the rate assumed. The difference is not recovered through prices. It becomes **idle capacity cost**.

Why you should not simply raise the rate

The obvious response is to recalculate the rate on actual hours and raise prices accordingly. It is the wrong one, and every experienced controller knows why. Raising prices because volume has fallen loses further orders, which lowers utilisation further, which raises the rate again. This is the well-documented pricing death spiral, and it is precisely why German cost accounting separates the cost of capacity actually used, which belongs in the price, from idle capacity costs, the cost of capacity not used, which are a management problem, not a pricing input.

So the rate should normally stay anchored to normal capacity. The question is what happens to the idle capacity costs.

What goes wrong in practice

Two things, and both are organisational rather than technical.

The normal capacity assumption goes stale. A company that set its normal capacity at 85 percent in 2019 and has run at 78 to 80 percent for three consecutive years is no longer experiencing a cyclical dip. Its normal has moved. A rate built on the old normal is now structurally too low. The cause is not a bad quarter; the market has shifted beneath it. Recognising that is a strategic decision, and it tends not to get made, because the conclusion is uncomfortable: either current prices are too low, or current capacity is too high.

The idle capacity cost is invisible until year end. In most mid-sized companies, idle capacity costs surface once a year, as a single volume variance (Beschäftigungsabweichung) in the year-end cost reconciliation. It is labelled "lower volumes," booked, and forgotten. By then, twelve months of quoting decisions have been taken without it.

The number that ought to trigger a decision reaches management too late and too aggregated to act on. That number is simple: we are carrying €1 million a year of capacity we are not using; do we fill it, reprice it, or remove it?

Where energy hides in this

Put energy inside the machine pool, and a counterintuitive effect appears.

A substantial share of a plant's electricity draw does not scale with output. Compressed air is the clearest example. Compressed air systems typically consume **7 to 11 percent** of an industrial company's electricity and account for around 7 percent of total German industrial electricity demand. In many plants, **20 to 30 percent** of the compressed air generated is lost through leaks, and leaks run continuously, including outside working hours and overnight. Add hall heating and ventilation, lighting, extraction and machine standby, and a meaningful fraction of the energy bill is base load that is incurred whether the spindles turn or not.

The consequence: **when volume falls, energy cost per machine hour rises, even if the price per kilowatt-hour falls with it.** A company can run a successful energy efficiency programme, cut its total bill, and still see energy cost per part increase. The efficiency project worked. The unit cost went up anyway, because the fixed portion was spread over fewer hours.

This never appears in a cost report as an energy number. If it appears at all, it is buried in an unexplained overhead variance.

An observation from our client work in precision manufacturing, offered as a pattern rather than a sourced claim. Machine-hour rates are frequently carried forward from the prior year with an inflation adjustment rather than rebuilt from an updated view of capacity and cost. In a stable market that is a sensible use of controlling time. In a market where utilisation has moved several points and stayed there, the normal capacity assumption becomes the single largest unexamined number in the price.

Channel Two: The Steel

The second channel is the input. Two separate regulatory instruments are involved, and they work on very different timescales. They are frequently confused.

The safeguard: the cost that arrived in 2026

Regulation (EU) 2026/1384 replaced the steel safeguard that had applied since 2019. It was adopted by the European Parliament on 19 May 2026, approved by the Council on 8 June, and took effect on **1 July 2026**.

The key numbers: a total annual duty-free quota of **18,345,922 tonnes** across 28 product categories, administered quarterly and running from 1 July to 30 June each year. That is **47 percent less** than under the previous regime. Imports outside the quota pay an additional **50 percent ad valorem duty** on top of normal import duties. From 1 October 2026, importers must also prove the country where the steel was melted and poured, under Regulation (EU) 2026/1963, with transitional arrangements running to October 2027.

The safeguard covers hot- and cold-rolled flat products, coated sheet, stainless, bars, sections, wire rod, rebar, tubes and hollow sections, which is most of what a machining or sheet metal company buys.

The price effect

The benchmark for flat steel is **hot-rolled coil (HRC)**. Fastmarkets' HRC index for Northern Europe stood at **€711.25 per tonne** ex-works on 30 July 2026, against around €601 in mid-July 2025, an increase of roughly 18 percent. For sheet metal work, **cold-rolled coil (CRC)** is the more relevant benchmark: it held at €800 to €820 per tonne in mid-July, around €100 above HRC, reflecting tighter European cold-rolling capacity. **Hot-dip galvanised (HDG)** sheet typically trades at a further premium.

A caution on reading steel prices: published indices differ considerably depending on whether they track physical ex-works transactions or exchange-traded contracts. An exchange-traded HRC contract for Northwest Europe was quoted at around €1,000 per tonne at the end of June 2026, a very different figure for nominally the same product. Any steel price in a board paper should name its index.

CBAM: the cost that is scheduled

The **Carbon Border Adjustment Mechanism** puts a carbon price on imported iron, steel, aluminium and other emissions-intensive goods, to match what EU producers pay under the Emissions Trading System. Its definitive phase began on **1 January 2026**. Three points are widely misunderstood.

Most manufacturers are not CBAM declarants. A de minimis threshold of 50 tonnes per importer per year exempts around 90 percent of importers, mainly SMEs, while keeping roughly 99 percent of embedded emissions in scope. A manufacturer buying from an EU mill or a domestic steel service centre does not file a CBAM declaration. It meets CBAM only through the price its supplier charges.

The 2026 cost is small. In 2026, certificates are required for only **2.5 percent** of embedded emissions, mirroring the free emission allowances EU producers still receive. The first quarterly certificate prices were €75.36 per tonne of CO₂ for Q1 2026 and €75.28 for Q2. At those levels, the direct CBAM charge on a tonne of imported steel in 2026 is a few euros.

The ramp is steep and dated. The CBAM factor rises each year until it reaches **100 percent in 2034**, as EU free allocation is phased out. Blast-furnace steel from coal-heavy routes typically carries around twice the CO₂ intensity of EU electric-arc-furnace steel, so the cost gap between origins will widen predictably, year by year. Fastmarkets estimates the combined safeguard-and-CBAM effect could add up to **€50 per tonne** to landed steel costs by mid-2027 for high-carbon origins.

The practical conclusion. In 2026, the steel price increase is predominantly a safeguard story. CBAM is a planning story: a known, multi-year cost escalation that belongs in a medium-term plan and currently appears in very few.

A note on Swiss steel

German manufacturers sourcing from Switzerland face an unusual combination. Swiss-origin goods are exempt from EU CBAM because the Swiss emissions trading system is linked to the EU ETS. Switzerland did not, however, receive an exemption from the new steel safeguard; only Norway, Iceland and Liechtenstein did. It negotiated a country-specific quota, which the Swiss industry association Swissmem described as "massively lower" than in the past. The result is an origin with no carbon charge but a tighter volume cap.

What this does to a manufacturer

Purchased material is typically 40 to 50 percent of revenue for a machining or sheet metal company. The problem is not that steel prices rose; they always move. The problem is that most manufacturers cannot say, at part level, which products carry the exposure.

Material usually appears in the calculation as an average price per kilogram from a standard table. Which grade, which origin, which quota category, and whether a supplier's route is blast furnace or electric arc: that information exists in purchasing and rarely reaches the costing model. So the company cannot build a part-level surcharge, and customers will not accept an unevidenced one. Where contracts contain a **material price escalation clause** (Materialpreisgleitklausel), the pass-through works. Where they do not, the manufacturer absorbs the difference.

Channel Three: The Customer

The third channel is competitive rather than accounting, and it is the hardest to manage directly.

Germany's energy cost disadvantage is carried most heavily not by mid-sized metal manufacturers but by their customers: the large automotive, machinery and plant engineering groups. And those customers are moving.

The **DIHK Energiewende-Barometer 2026**, based on a survey of around 3,100 companies in June 2026, found that nearly 20 percent of all companies are considering, implementing or have completed a relocation of investment or production capacity abroad. **In industry, the figure is close to 40 percent. Among large industrial companies, it is around 60 percent.** The DIHK's own headline: one third of large industrial enterprises are already shifting production abroad. According to the DIHK, many companies are no longer evaluating relocation but have begun concrete steps.

Around two thirds of industrial companies say the energy transition and its associated costs are damaging their competitiveness. High energy costs are now also holding back investment: around a third of companies are postponing investment in their core processes, a quarter are holding back climate investment, and 16 percent are delaying investment in research and innovation.

For a manufacturer, this is the most important number in the article. When a customer relocates a production line, the manufacturer loses the volume regardless of its own energy position. The utilisation figures above are, in significant part, the downstream expression of somebody else's energy bill.

A manufacturer cannot manage its customers' energy costs. It can know which of its revenue depends on customer locations that are already under review, and do that arithmetic before the order disappears rather than after.

A Case From Baden-Württemberg

The pattern is visible at every scale.

WK Metall GmbH of Neuenbürg, near Pforzheim, filed for insolvency at the Pforzheim district court at the end of January 2026. Founded in 2008, the company is a contract sheet

metal manufacturer offering punching, laser cutting, bending, welding, CNC machining and laser engraving, serving mainly plant and machinery builders. Trade press attributed the insolvency to the crisis in the automotive sector together with high energy and raw material costs. The company had already begun restructuring and searching for an investor before filing; the provisional administrator from Schultze & Braun continued that process.

WK Metall had around 40 employees, well below the size band this article addresses. It is cited not as representative in scale but because the stated causes are exactly the three channels described here: a customer industry in structural decline, energy costs, and material costs, arriving together in a business with a fixed cost base sized for more work than it had. Larger manufacturers have more balance sheet to absorb the same combination for longer. They do not have a different combination.

The Worked Model

A deliberately transparent illustration, so the argument can be checked and challenged. The figures are constructed, not drawn from a specific company. The structure is typical for a contract machining and sheet metal business in the €100 to €150 million band.

The company

	€ million	% of revenue
Revenue	120.0	100.0%
Purchased material	48.0	40.0%
Direct labour	24.0	20.0%
Manufacturing overhead	28.8	24.0%
of which machine-group cost pool	17.1	
of which total energy	2.4	2.0%
Sales, general and administrative	15.0	12.5%
EBIT	4.2	3.5%

Around 450 employees. Steel and aluminium purchases €30 million. Normal capacity set at 85 percent, the long-term norm for the sector, giving 180,000 planned machine hours. Machine-hour rate: **€95**. EBIT of 3.5 percent is deliberately set above the sector's reported 2025 average net return of 1.5 percent, to represent a reasonably healthy company rather than a distressed one.

Assumptions, all arguable. 75 percent of the machine pool is fixed over twelve months: depreciation, space, indirect staff, calendar-driven maintenance; the remaining 25 percent scales with hours. €1.8 million of the energy bill sits inside the machine pool, of which 35 percent is base load: compressed air including leakage, hall climate, lighting, extraction and standby. This is supported by the compressed air data above but not measured for a specific plant. Steel repricing is illustrative: two thirds of steel spend is assumed to move with the Northern Europe HRC benchmark, which rose roughly 18 percent year on year; actual exposure depends on product mix, contract terms and supplier. Nothing else changes: no price increases, no headcount changes, no new contracts.

What happens at 78 percent utilisation

Utilisation falls from the 85 percent normal to 78 percent, close to the 77.5 percent if reported for German industry in January 2026.

	At normal capacity	At 78% utilisation
Machine hours	180,000	165,000
Machine pool cost	€17.1m	€16.7m
Cost recovered through the €95 rate	€17.1m	€15.7m
Idle capacity cost	n/a	€1.1m
Machine-pool energy	€1.80m	€1.70m
Energy cost per machine hour	€10.00	€10.32

Two things to read from this.

The idle capacity costs are €1.1 million, about a quarter of EBIT. The rate of €95 is not wrong as a normal-capacity rate; that is how it should be built. What matters is that €1.1 million of capacity is being paid for and not used, and in most companies that number appears once, at year end, as a volume variance.

Energy cost per hour rose 3.2 percent while machine-pool energy cost fell 5.4 percent. No change in energy price. Purely the effect of spreading base load across fewer hours.

Where the money goes

Exposure	€ million	% of revenue	% of EBIT
Total energy cost	2.4	2.0%	n/a
Idle capacity cost at 78% utilisation	1.1	0.9%	26%
Steel repricing, gross	3.6	3.0%	86%
Steel repricing, net, if half is passed through via escalation clauses	1.8	1.5%	43%

Three observations.

The energy line is the one everyone is managing, and it is not where the pressure is. Idle capacity and material together are several times larger, and neither is labelled "energy" anywhere in the accounts.

The steel exposure is the largest and the least evenly spread. Three percent of revenue as an average says very little, because some parts are 70 percent material and some are 15. An average material assumption guarantees that high-material parts are underpriced and low-material parts are overpriced. The company wins the wrong tenders and loses the right ones.

Pass-through is the swing factor. The difference between gross and net steel exposure, here €1.8 million or 43 percent of EBIT, is determined entirely by whether the company can evidence its material cost at part level and has contracts that allow it to pass that cost on.

Two sensitivities

If utilisation recovers to 83 percent and steel holds, idle capacity cost falls to around €0.3 million. The recovery helps materially.

If utilisation stays at 78 percent, steel rises a further 10 percentage points, and IG Metall's 5 percent wage demand is settled in full, the combined additional cost exceeds EBIT: roughly €1.1 million of idle capacity cost, €2.8 million of net steel, and €1.2 million on direct labour alone.

Which of these happens is largely outside the company's control. Knowing which one is happening in month three rather than month twelve is entirely within it.

What Companies Are Doing, and What They Are Not

What they are doing

Cutting energy consumption. For the roughly 172,000 industrial companies outside the subsidy, efficiency, load management and systematic monitoring are the remaining direct lever. Compressed air leak programmes, pressure optimisation and variable-speed compressors are well proven. This is correct, it pays back, and it addresses the smaller part of the exposure.

Procuring energy better. Fixed-price contracts, structured procurement, and photovoltaics for self-consumption, which for many mid-sized plants delivers savings comparable to the subsidy they cannot access.

Reducing headcount. The employment figures above show this in aggregate. It addresses labour cost; it does not address idle machine capacity or material exposure.

Claiming what relief exists. Electricity tax refunds and network charge relief are real and should be claimed. They are small relative to the channels described above.

All of this is sensible. None of it touches the cost model.

What they are not doing

Revisiting the normal capacity assumption. The rate is built once a year on a normal capacity level that may have been set years ago. Whether that level is still realistic is rarely asked explicitly, because the answer forces a choice between repricing and reducing capacity, and neither is comfortable.

Reporting idle capacity cost monthly. Idle capacity costs are the single most decision-relevant number in a business running below capacity. In most mid-sized companies they are not reported at all during the year.

Separating fixed from variable cost. Almost every manufacturer can state its total overhead. Few can state what share of it would survive a 20 percent volume drop. Without that split, there is no reliable **contribution margin** (Deckungsbeitrag) calculation, and no rational basis for deciding whether to take marginal work at a reduced price.

Tracing material to part level. Grade, origin, quota category and supplier route sit in purchasing. The costing model uses an average. The two are not connected.

Planning for CBAM. The ramp to 2034 is fixed in regulation and predictable in direction. It appears in very few medium-term plans.

Working from one set of numbers. Sales quotes from a rate card. Operations plans from a capacity model. Finance reports from actuals. Purchasing tracks material prices. The four are reconciled once a year.

An observation from our client work, flagged as such. The obstacle is almost never data. The information exists in the ERP, the manufacturing execution system, purchasing, and the controller's spreadsheets. It is fragmented across systems that were never designed to be read together, and there is no regular forum in which sales, operations, purchasing and finance agree what an hour of capacity costs and what a part should sell for.

Six Moves

Reset the normal capacity assumption explicitly. Once a year, as a management decision rather than a controlling routine, ask: given the market the company is actually in, what level of utilisation is realistic? If the honest answer has moved, the rate moves with it, and so does the conversation about whether current capacity is the right size.

Report idle capacity cost monthly. Separate the cost of used capacity from idle capacity costs and put the idle capacity number in front of management every month, by machine group. It is the trigger for the three available responses: fill the capacity, reprice it, or remove it.

Split every overhead line into fixed and variable. This is the prerequisite for a contribution margin view, and for making deliberate decisions about marginal orders. In a market below normal capacity, work that covers variable cost and contributes to fixed cost can be the right order to take, provided it is a conscious decision and the price does not become the customer's new reference point.

Trace material exposure to part level. For each major part family, record grade, origin, quota category and supplier route. This is the precondition for a defensible surcharge, for negotiating escalation clauses, and for knowing which parts become uncompetitive as CBAM ramps up.

Build a multi-year view, and two scenarios within it. Model the P&L at two utilisation levels and two material price paths, with CBAM's scheduled ramp included. The value is not the forecast. It is knowing in advance which levers you would pull at each level, and at what point a decision becomes unavoidable.

Put sales, operations, purchasing and finance on one set of assumptions. One capacity figure, one rate, one material price basis, updated on one cycle. The calculation is the easy part. The alignment is the work.

Three Honest Limits

Better costing does not create demand. If the order book is 20 percent short, an accurate view of idle capacity tells you precisely what you are losing. It does not make you profitable. What it changes is which orders you pursue, which you decline, and what you charge for the

ones you win. That matters a great deal in a shrinking market, but it is not a substitute for volume.

Some capacity should be removed rather than repriced. A proper contribution analysis occasionally shows that a product line, a machine group or a site has not covered its costs for several years and will not at any achievable price. That is a difficult conversation in a family-owned business and is frequently deferred. Deferral is itself a decision, with a cost that compounds.

The binding constraint may be commercial power, not calculation. A tier-two supplier with one dominant customer may know exactly what its parts cost and still be unable to pass anything on. In that situation, the value of the model lies not in the price negotiation but in telling the owners, early and accurately, how long the current arrangement can be sustained and what the alternatives cost.

Questions We Are Asked

Is this an energy problem or a costing problem?

A costing problem with an energy origin. Energy prices, carbon policy and trade measures are the external shock. The reason they do more damage than they should is that the cost model absorbs them invisibly. The companies best placed are not necessarily those with the cheapest electricity. They are those who know, within a month, what an hour of capacity and a kilogram of material actually cost them.

Should we recalculate our machine-hour rate on actual utilisation?

Generally, no. That is the route into a pricing death spiral. Keep the rate anchored to normal capacity, but review whether your normal capacity assumption is still realistic, and report idle capacity cost separately and monthly so that it triggers a decision.

We do not import steel. Does CBAM affect us?

Indirectly. If you buy from EU mills or service centres, you are almost certainly below the 50-tonne declarant threshold for direct imports, or not an importer at all. CBAM reaches you through your supplier's price. The effect is small in 2026 and rises every year to 2034, and the gap between high- and low-carbon origins widens as it does. It belongs in your medium-term plan.

Can we get the industry energy price?

If you are classified under WZ 25, probably not. The eligibility rate is 14 percent, and you also need at least 1 GWh of annual consumption. Check your specific classification against the sector list rather than assuming either way, but plan around the electricity tax reduction and network charge relief rather than the 5 ct/kWh.

Our controller says our costing is fine. How would we know?

Three tests. Ask when the normal capacity assumption behind the machine-hour rate was last explicitly reviewed. Ask what share of manufacturing overhead would survive a 20 percent volume drop. Ask for the contribution margin by customer for your top twenty. If any of the three takes more than a week to produce, that is the answer.

Is this worth doing at our size?

The model is proportionate; a transformation programme may not be. Rebuilding the rate structure and a contribution view for a €120 million manufacturer takes weeks, not years. What is disproportionate at that size is building a large internal capability to maintain complex models. That argues for doing it properly once and keeping it simple enough for the people who use it every month.

What is the one number you would put on a board page?

Idle capacity cost by machine group, month by month, next to contribution per machine hour. Almost everything in this article eventually resolves into those two numbers.

How Centida Helps

We build integrated planning and decision systems for mid-sized companies: the connecting layer between what operations knows about capacity, what purchasing knows about material, what sales knows about customers, and what finance has to report.

In metal manufacturing, that means three things in practice: a capacity and rate model with an explicitly reviewed normal capacity level and monthly idle capacity reporting; a contribution margin view that separates traceable variable cost from overhead, so marginal-order decisions are made deliberately; and a multi-year scenario structure that shows what the P&L does at different utilisation levels, material price paths and CBAM stages, before the year ends rather than after.

We hold no energy procurement mandate and sell no equipment, so "your rate structure needs work and your electricity contract is fine" is a conclusion we are free to reach.

If you are entering next year's planning round without a current view of what an hour of capacity really costs you, that is the conversation to have before the rate card is set.

About the author

Christian Barte is founder and CEO of Centida. He spent his career in finance leadership across multiple continents and industries, including as CFO in industrial companies, with earlier roles at AT&T, Detecon, Orange Business and Horváth. His work focuses on the management foundations that connect strategic intent to operational decisions: planning architecture, steering frameworks, and the governance that makes them hold.

He writes here not as a production engineer but as someone who has sat in the finance seat of an industrial company when the volumes fell and the cost base did not, and has had to explain the variance to a supervisory board.

Centida is a boutique consultancy focused on planning and reporting, based in Oberkirch, Baden-Württemberg, working with finance and management teams across manufacturing, energy and utilities, telecoms and professional services.

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Model figures in the worked model are illustrative and constructed for this article; they do not describe any specific company. Observations attributed to our client work describe recurring patterns and are not sourced statistical claims. Regulatory and market positions described here reflect the state of play as at September 2026.