



33 COUNTRIES · 14 PILLARS · 7 INDUSTRIES

Industry Economics & Competitiveness Quarterly

The competitive landscape of industrial-commodity
manufacturing worldwide.



Q4 · 2025

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Contents

01	The Quarter in Brief	3
	The summit held for an 11th straight year — but beneath it, labor re-priced and a new name cracked the top 10.	
	What Moved This Quarter	3
	The Findings Behind the Quarter	4
02	What This Report Measures	5
	Fourteen pillars, thirty-three countries, one comparable score — and how it's built.	
	Competitiveness, Measured Across 14 Pillars	5
	Why These 33 Countries	6
03	The Big Picture: Industry Competitiveness	7
	The full 33-nation standing — who climbed, who slipped, and why a cheap cost base alone doesn't win.	
	Biggest Movers Over the Past Year (rank change, Q4 2024 → Q4 2025)	8
	The Map Behind the Ranking	8
04	Regional Snapshots	11
	The same 33, cut into four regions — Asia-Pacific's grip on the top against Europe's crowded lower half.	
05	Country-by-Country Reviews	13
	All 33, ranked from most competitive to least — each nation's review, tier by tier.	
	RANKED 1 – 33	China · India · Indonesia · Saudi Arabia · Singapore · Thailand · Philippines · South Korea · United States · Canada · Taiwan · Turkey · Spain · Colombia · Russia · Mexico · Belgium · Poland · Australia · Germany · Italy · Hungary · Netherlands · Chile · Finland · France · Japan · South Africa · Czech Republic · Brazil · United Kingdom · Norway · Sweden
06	How the Score Is Built	35
	All 14 pillars, in two families — where a cheap cost base and real industrial strength pull apart.	
	The Full Picture	43
	BASE PILLARS	Manufacturing Labor Costs · Construction Labor Costs · Energy & Utilities Costs · Capital & Construction Costs · Domestic Tax Environment · Logistics & Infrastructure · Freight Costs · Macroeconomic Environment
	INDUSTRY-SPECIFIC PILLARS	Domestic Market Size · Industrial Production · Commodity Prices · Feedstock-to-Product Margin · Global Trade Integration · Tariff Protection & Market Access
07	Methodology & The Full Report	44
	How to read the figures — and where to get the full report.	

CHAPTER 1

The Quarter in Brief

The top of the table barely moved — China leads for an 11th straight year — but the quarter’s news is what shifted beneath it: a sharp re-pricing of labor, a split in energy costs, and a new face in the top 10.

<p>MOST COMPETITIVE</p> <p>China</p> <p>#1 of 33 · score 60</p>	<p>BIGGEST COST MOVER</p> <p>+51%</p> <p>Russia, factory labor</p>	<p>ENERGY SWING</p> <p>+24%</p> <p>Sweden, industrial energy</p>	<p>NEW TOP-10 ENTRANT</p> <p>South Korea</p> <p>#11 → #8, Taiwan out</p>
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What Moved This Quarter

The biggest input-cost move in the field was **Russia’s**: the all-in cost of factory labor jumped **about 51% over the year** to **about \$9.8 an hour**, with construction labor up **about 44%** to about \$10.0. The sharpest move the other way was **Singapore’s**, where factory-labor cost **fell about 27%** to **about \$15.7 an hour**. On energy, **Sweden** rose most — its average industrial price up **about 24%** to **around \$28.8 per MMBtu** — while **Hungary** (**-24%**) posted the field’s largest energy fall, to about \$29.3.

Each move below is year-on-year and confirmed against the multi-year annual series — a one-month spike the annual trend contradicts is left out. Orange marks a cost that **rose** (dearer to operate); grey marks one that **fell**.

▲ COSTS THAT ROSE

<p>▲ Russia · factory labor</p> <p>to \$9.8/h</p> <p style="text-align: right;">+51%</p>
<p>▲ Russia · construction labor</p> <p>to \$10.0/h</p> <p style="text-align: right;">+44%</p>
<p>▲ Netherlands · factory labor</p> <p>to \$58.1/h</p> <p style="text-align: right;">+24%</p>
<p>▲ Sweden · industrial energy</p> <p>to \$28.8/MMBtu</p> <p style="text-align: right;">+24%</p>

▼ COSTS THAT FELL

<p>▼ Singapore · factory labor</p> <p>to \$15.7/h</p> <p style="text-align: right;">-27%</p>
<p>▼ Hungary · industrial energy</p> <p>to \$29.3/MMBtu</p> <p style="text-align: right;">-24%</p>

Every move shown is year-on-year and trend-confirmed. Several headline-looking swings this quarter were base effects against an unusual prior month — a spike or dip the annual record reverses — and are excluded.

The Findings Behind the Quarter

China is the world’s most competitive manufacturing base for the 11th year running, leading Intratec’s 33-country ranking every year since 2015 — and still leading now, with a **score of 60**. No rival has assembled its combination of low operating costs, the world’s largest domestic market and the deepest industrial base; it ranks **#1 in six of the seven industries** tracked.

The cost of that base varies enormously across the field. It costs **about 46 times more** to employ a factory worker in Belgium than in Indonesia — the all-in cost runs from **about \$1.3 an hour in Indonesia** to **about \$60 in Belgium** — yet China sits mid-pack at **about \$6.6 an hour**, far from the cheapest and a fraction of the **about \$51** it costs in the United States. The “cheap China” shorthand is wrong on labor and right only on competitiveness.

Energy splits the field just as sharply: powering a plant costs **more than three times as much in the United Kingdom as in Saudi Arabia** — from **around \$12 per MMBtu** to **around \$39** — as gas and feedstock endowments split the energy-rich Gulf from high-cost northern Europe. The employer’s tax bill stretches just as wide: social-security runs from **1% in South Africa** to **45% in France**.

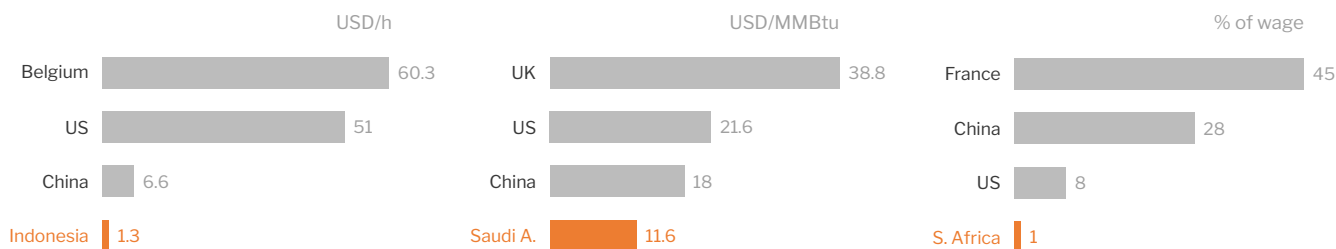


Figure 1.1 Total employer cost, all-in (USD/hour). Indonesia cheapest, Belgium dearest — a near 46× spread.

Figure 1.2 Average industrial energy price (USD/MMBtu). The UK costs more than 3× Saudi Arabia.

Figure 1.3 Employer social-security (% of wage). France loads 45× what South Africa does.

Over the last completed year (2024 → 2025), the top-10 boundary changed hands. **South Korea climbed in**, rising #11 → #8 — the only entry across it — while **Taiwan dropped out** (#10 → #11). **Singapore climbed to #5** past **Thailand**. The top four — China, India, Indonesia, Saudi Arabia — held.

The **United States** is at its weakest standing in years, sliding from **#2 in 2021 to #9** in the current snapshot — four straight years of decline — as higher domestic inflation and a stronger dollar eroded the cost edge that once put it second only to China. **Brazil, Russia and Italy** led the decliners, each sliding several places as rising input costs and weaker industry-specific scores pushed them down even where absolute scores barely moved.

THE VIEW FROM INTRATEC

“The most competitive place to manufacture is almost never the cheapest place to do any one thing. China is mid-pack on wages and pays a 28% employer tax — it leads because it pairs solid operating costs with a market and an industrial base no one else can match. Competitiveness is a package, and that is what our ranking measures.” — *Thiago Carneiro, Lead Analyst, Industry Economics & Competitiveness*

CHAPTER 2

What This Report Measures

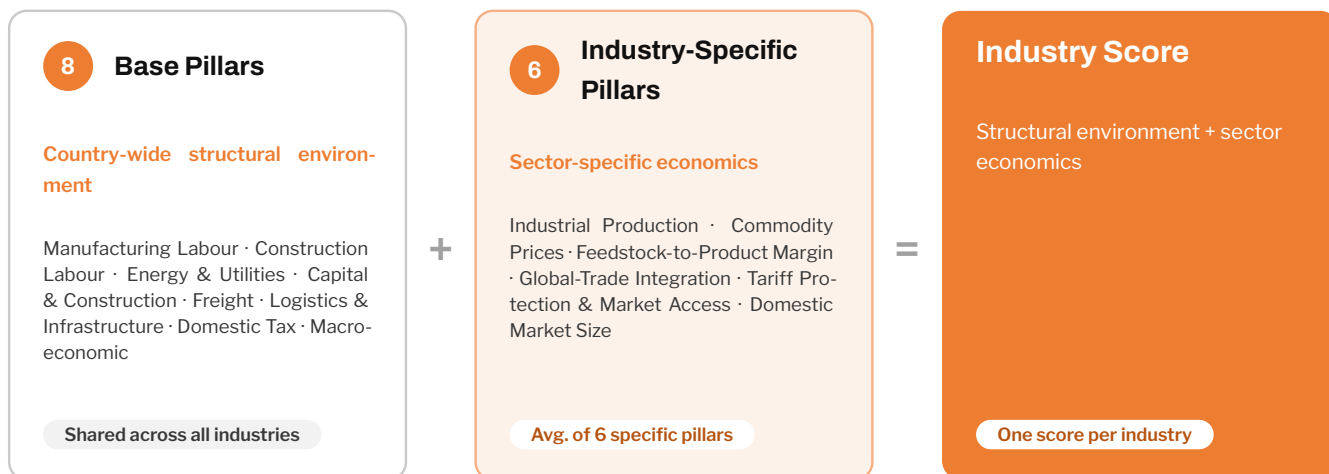
Before the rankings: what this report measures, how it is built, and why these 33 countries. The Industry Competitiveness Quarterly answers one question — where in the world is it most competitive to manufacture industrial commodities?

Every quarter, Intratec scores **33 countries** as places to make the industrial commodities the modern economy runs on — polymers, olefins and derivatives, aromatics and derivatives, alcohols and organic acids, inorganic chemicals, fertilizers and metals — turning the answer into a single **0–100 Country Score** and a ranking from 1 to 33. The figures behind it are real, and every country is shown.

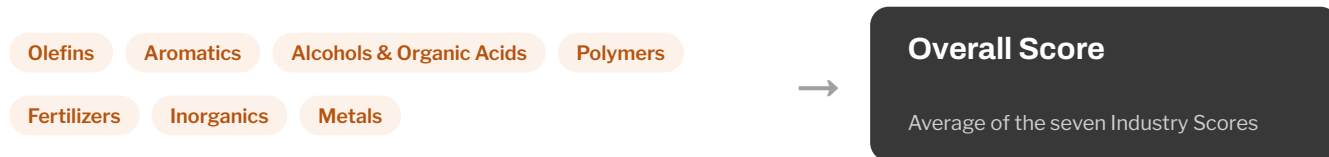
Competitiveness, Measured Across 14 Pillars

The score rests on **14 pillars** in two families — the **Base pillars (8)**, the cost of operating anywhere, and the **Industry-Specific pillars (6)**, the pull of the commodity industries themselves. They build a country's score from the bottom up: the Base pillars set a shared cost base, each industry adds its own composite, the two combine at equal weight into a per-industry score, and the seven average into one **0–100 Country Score**. The split carries the lesson that runs through the whole brief — **the cheapest place to operate is rarely the most competitive**.

FOR EACH INDUSTRY

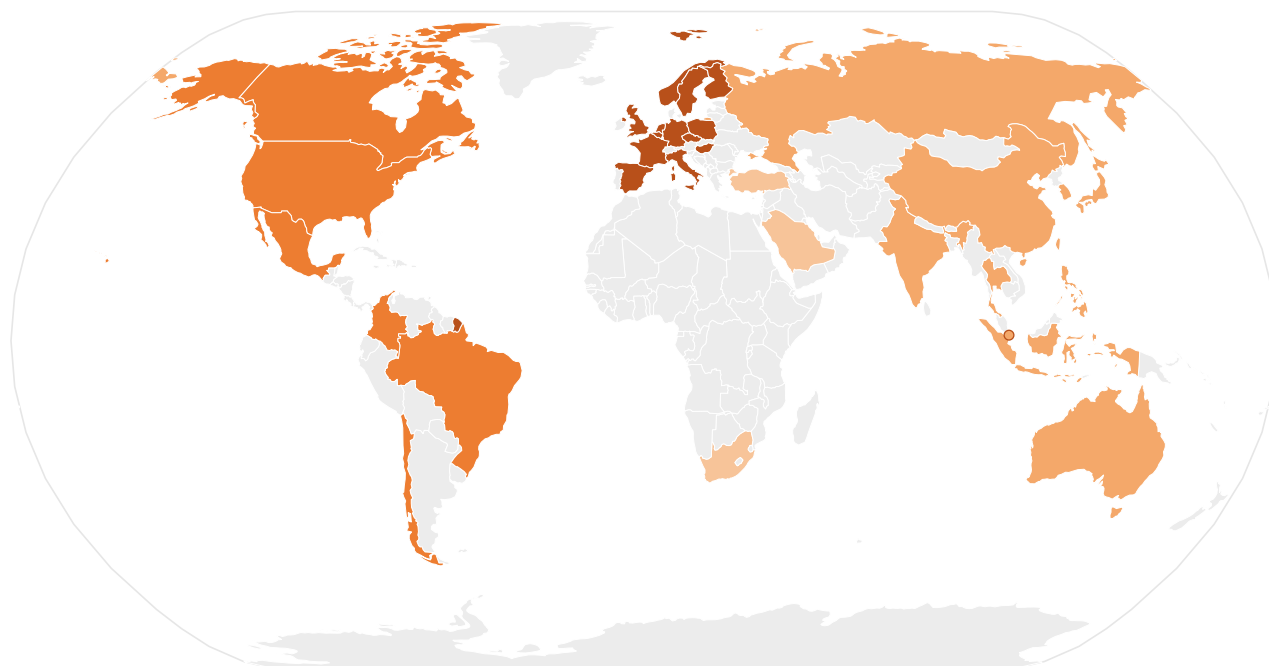
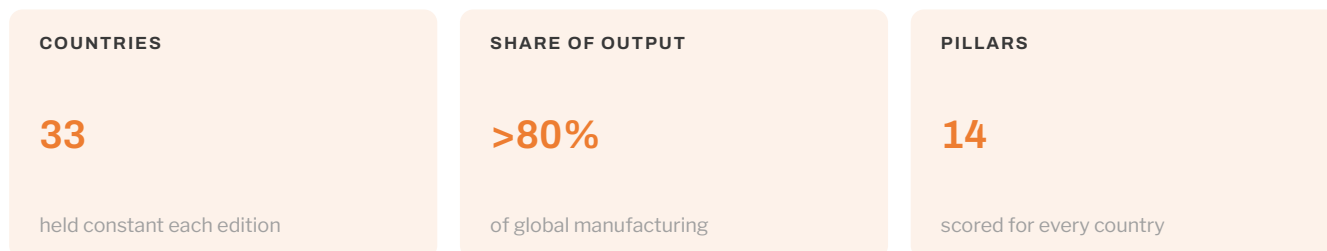


ACROSS ALL INDUSTRIES



Why These 33 Countries

The 33 are not an arbitrary list: together they account for **more than 80% of global manufacturing output**, spanning four world regions – a curated mix of mature high-income hubs (the United States, Germany, Japan), resource-rich exporters (Saudi Arabia, Canada) and fast-growing supply-chain nodes (Mexico, India, Brazil). The universe is **held constant across editions**, so a country’s move reflects real change on the ground, not a changed comparison group.



Americas
6 countries

Europe
13 countries

Asia
11 countries

Africa & Middle East
3 countries

Figure 2.1 The 33 benchmarked countries, shaded by Intratec world region. The universe is held constant across editions, so a shift in a country’s standing reflects underlying conditions rather than a changed comparison group.

This brief covers seven industries: polymers, olefins and derivatives, aromatics and derivatives, alcohols and organic acids, inorganic chemicals, fertilizers and metals. The closing **Methodology** page sets out the figures in full.

CHAPTER 3

The Big Picture: Industry Competitiveness

The big picture: all 33 countries ranked, and the map of why they land where they do. China leads with a score of about 60; below the top handful the field tightens fast — and where a country lands owes as much to the strength of its commodity industries as to the cost of operating there.

The ranking that follows pairs each country’s score with its change over the past year. A country can gain score and still slip in rank when its rivals gain faster.

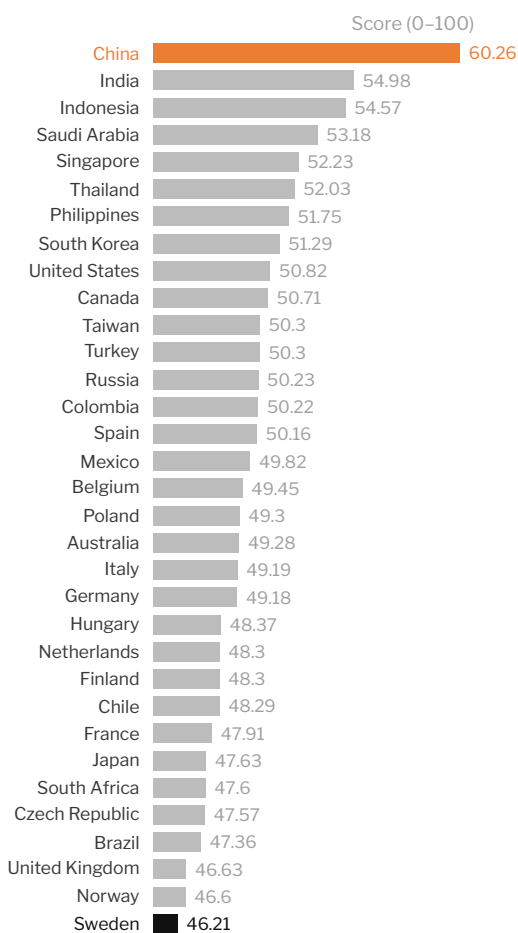


Table 3.1 Full ranking — overall Country Score (0-100) and the year-on-year change in the score value.

RANK	COUNTRY	SCORE	YOY Δ
1	China	60.26	+0.15
2	India	54.98	-0.47
3	Indonesia	54.57	-0.10
4	Saudi Arabia	53.18	+0.02
5	Singapore	52.23	+0.21
6	Thailand	52.03	-0.42
7	Philippines	51.75	-0.51
8	South Korea	51.29	+0.85
9	United States	50.82	-0.29
10	Canada	50.71	+0.27
11	Taiwan	50.30	-0.23
12	Turkey	50.30	+0.26
13	Russia	50.23	-0.75
14	Colombia	50.22	-0.12
15	Spain	50.16	+0.20
16	Mexico	49.82	+0.12
17	Belgium	49.45	+0.38
18	Poland	49.30	+0.29
19	Australia	49.28	+0.34
20	Italy	49.19	-0.17
21	Germany	49.18	+0.26
22	Hungary	48.37	+0.85
23	Netherlands	48.30	+0.17
24	Finland	48.30	+0.60
25	Chile	48.29	-0.25
26	France	47.91	+0.08
27	Japan	47.63	+0.12
28	South Africa	47.60	-0.01
29	Czech Republic	47.57	+0.33
30	Brazil	47.36	-0.47
31	United Kingdom	46.63	-0.81
32	Norway	46.60	-0.33
33	Sweden	46.21	-0.55

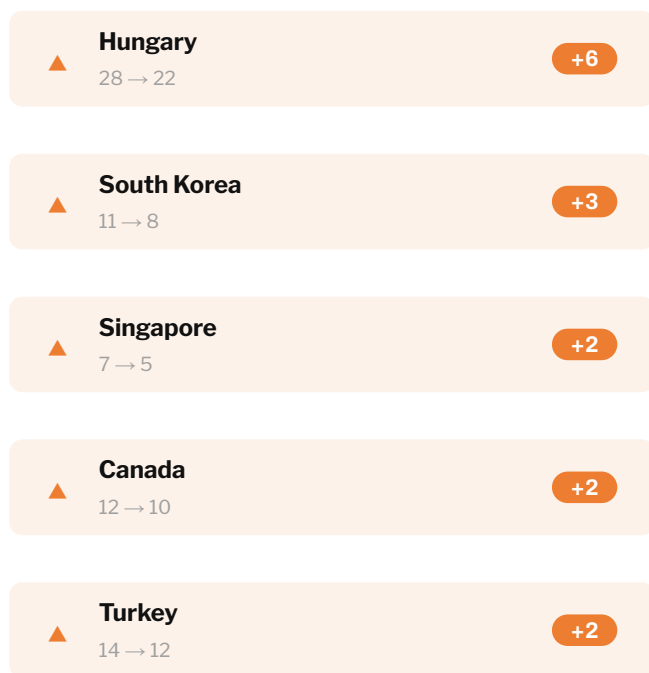
Figure 3.1 Overall Country Score (0-100), all 33 countries. China highlighted; bars start at 45 to separate the tightly-clustered field.

South Africa, Saudi Arabia and France posted genuinely flat scores year-on-year.

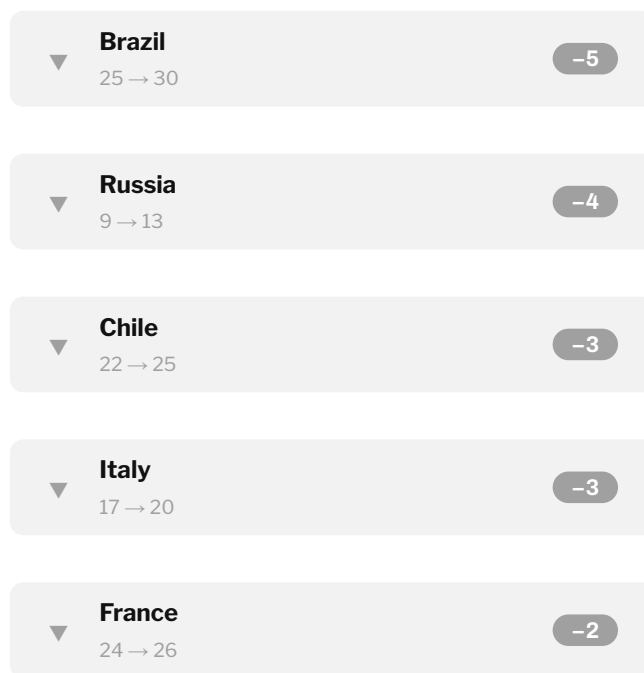
Biggest Movers Over the Past Year (rank change, Q4 2024 → Q4 2025)

Orange marks a riser; grey marks a faller. Each box shows where a country ranked a year ago (Q4 2024) against where it ranks now (Q4 2025) — the same standing the table above uses, so every right-hand number matches the table. The score Δ in the table measures the score's value; these measure its position. In a band this tight a small score move swings several places: Brazil slid five, from 25th to 30th.

▲ RISERS



▼ FALLERS



The split between score and rank is the story: Hungary and South Korea booked the table's biggest score gains — an identical +0.85 — but Hungary climbed six places to South Korea's three, because the same points buy more ground through the crowded middle than near the top.

The Map Behind the Ranking

The ranking hides a split. One half of each country's score is its **Base-pillars** standing — how cheap and stable it is to operate anywhere, across labor, energy, capital, freight, tax, logistics and macro; the other is its **Industry-Specific** standing — how strong it actually is in the commodity industries themselves, in production scale, market size, trade reach and margins. The two rarely belong to the same country: Indonesia owns the cheapest operating base in the field yet ranks only third overall, while the United States reaches ninth on a middling cost base, carried by the strength of its industries. Rank every country on each half and plot one against the other, and the field sorts into a clean shape — the leaders strong on both, the high-cost European economies at the foot weak on both, and the real trade-off, a cheap base against a thin industry or a strong industry at a dear cost, belongs to the middle.

On the map, both axes are **ranks of 33** — a country's standing on each family, not its 0–100 score — so a better rank sits higher and further right.

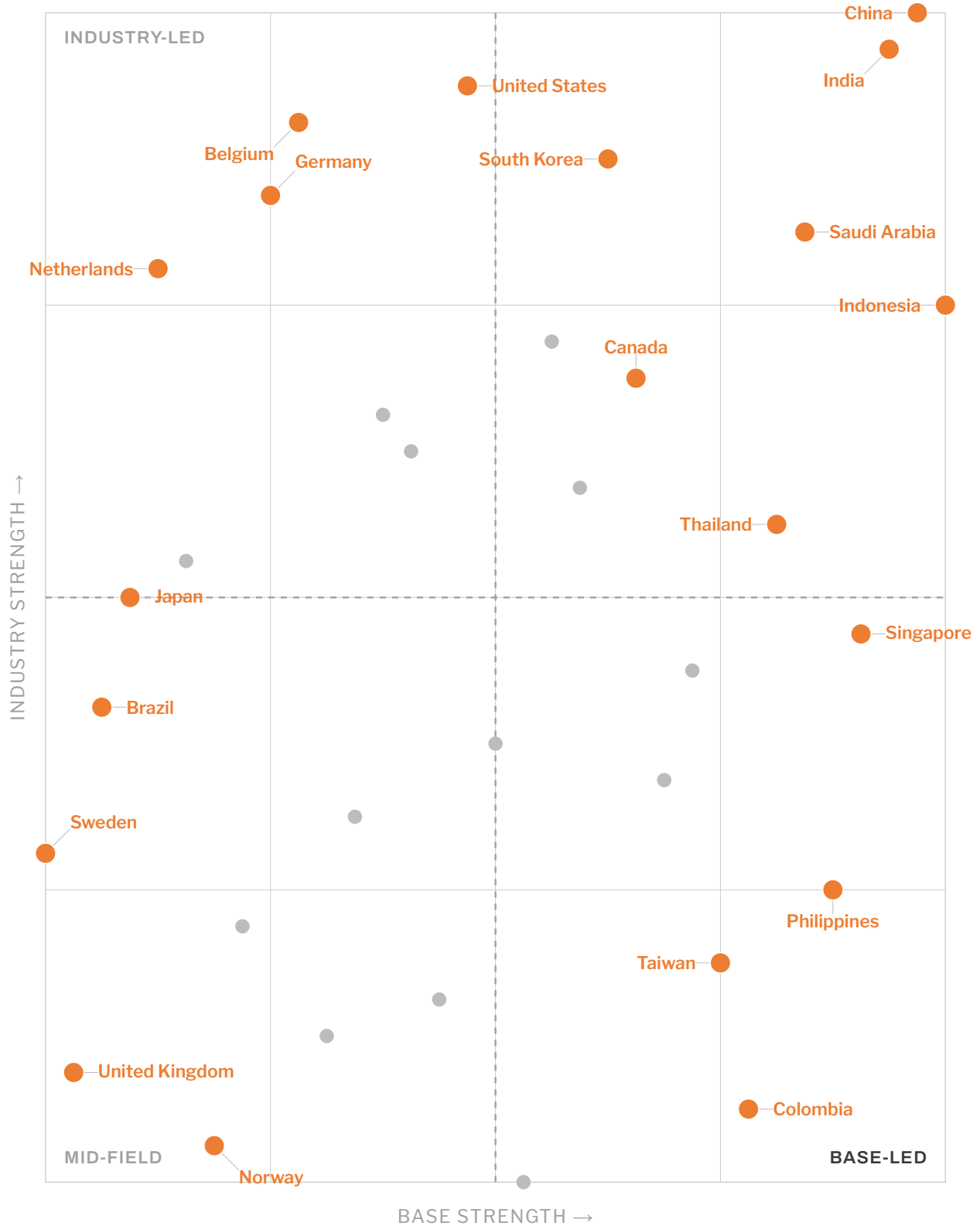


Figure 3.2 The field of 33 — Base-pillars rank (horizontal) against Industry-Specific rank (vertical); on both axes a better rank sits higher/further right. China leads the industry axis; Indonesia leads the base axis. 20 countries labeled across the four quadrants; the remaining 13 plot as quiet grey dots. Crosshair at the field midpoint.

Each pillar has its own leaders and its own anchor at the foot, on the same #1-of-33 ranks as the pillar map. Across four of the pillars that move a manufacturer’s decision most – the cheapest labor, the cheapest energy, the friendliest domestic-tax environment and the strongest home-market draw – no country tops them all.

PILLAR LEADERS & ANCHORS — RANK OF 33

Leaders = the best three; anchors = the bottom three of 33. Labor and energy read 1 = cheapest; domestic tax 1 = friendliest; market draw 1 = strongest. China is marked where it appears.

MANUFACTURING LABOR COSTS	ENERGY & UTILITIES COSTS	DOMESTIC TAX ENVIRONMENT	DOMESTIC MARKET SIZE
CHEAPEST	CHEAPEST	FRIENDLIEST	STRONGEST
#1 Indonesia	#1 Saudi Arabia	#1 Singapore	#1 China
#2 Saudi Arabia	#2 Russia	#2 Thailand	#2 India
#3 India	#3 Indonesia	#3 United States	#3 United States
ANCHORS	ANCHORS	ANCHORS	ANCHORS
#33 Belgium	#33 United Kingdom	#33 Brazil	#33 Chile
#32 Germany	#32 Hungary	#32 France	#32 Norway
#31 Netherlands	#31 Brazil	#31 Italy	#31 Philippines

TAKEAWAYS

- * The leaderboard is tight below the top: ranks 9 through 25 sit inside a four-point band (about 51 down to about 48), so a small score move shifts several places.
- * The trade-off belongs to the middle: the top of the table (China, India, Saudi Arabia) is strong on both halves and the European floor (Sweden, Norway, the UK) is weak on both – it is the mid-field that must trade a cheap base against a strong industry.
- * No country leads every pillar: Indonesia is cheapest on labor, Saudi Arabia on energy, Singapore on domestic tax, China on the home market – and the dear end of each cost pillar is the same neighborhood, Western and Northern Europe.

IN A SENTENCE

The map’s lesson is blunt: **being cheap to operate is not the same as being competitive to manufacture.** What the score rewards is where a country sits on this whole field – the strength of its industries, not the size of its wage bill.

CHAPTER 4

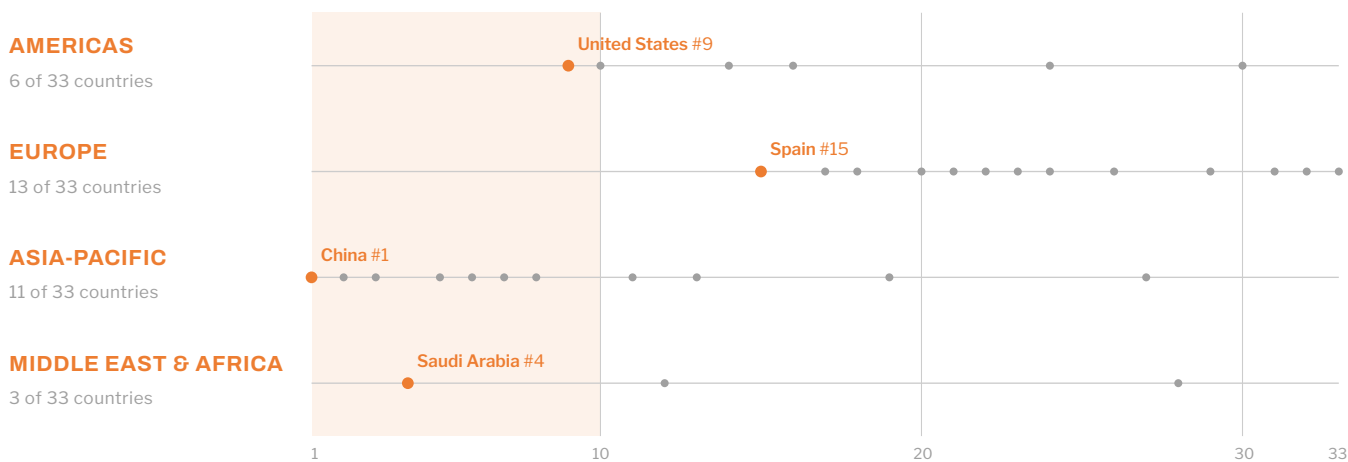
Regional Snapshots

The same 33, cut by geography. The competitive center of gravity sits in Asia-Pacific — which holds the top three and seven of the top ten — while Europe occupies most of the lower half and the Americas spread the full length of the table.

The ranking divides into four regions. **Asia-Pacific** holds **#1 China, #2 India and #3 Indonesia** and most of the top ten; the **Americas** run the whole length — the **United States #9** at the top, Brazil #30 near the foot; **Europe** is the broadest bloc by count but sits mostly in the lower half; and **the Middle East & Africa** is small but punches high on **Saudi Arabia #4**. Each roster below places its members on the overall ranking, with the region’s best rank marked.

THE 33 BY REGION — POSITION ON THE OVERALL RANKING

All four blocs share one 1→33 overall-ranking axis (1 = most competitive); the shaded band is the top 10. Each orange dot marks the bloc’s best-ranked country.



TAKEAWAYS

- * Asia-Pacific owns the top of the table — the global top three and seven of the top ten — while Europe, the largest bloc by count, occupies most of the lower half.
- * The Americas are the field’s most divided bloc — the only region holding both a top-ten economy (the United States, #9) and a bottom-five one (Brazil, #30).
- * Each region’s standout is a different story: the Americas’ US on industrial scale, Asia-Pacific’s China on the whole package, the Gulf’s Saudi Arabia on cheap energy, Europe’s Spain as the best of a high-cost bloc.

AMERICAS

The **United States** leads the region at **#9 overall** — #3 in the world on the industry side, dragged off the podium by a middling #18 cost base. **Canada** (#10) sits just behind, the two North American economies holding the bloc's only top-ten places. **Colombia** (#14) and **Mexico** (#16) anchor a competitive upper-middle, while **Chile** (#25) slips into the lower third. **Brazil** (#30) is the region's laggard after a five-place slide. From a top-ten United States to a near-foot Brazil, the Americas span 21 places — the only bloc that holds both a top-ten economy and a bottom-five one.

THE REGIONAL LINE

“The United States is the Americas’ most competitive place to manufacture industrial commodities, ranking 9th of 33 countries worldwide — third globally on industrial strength, even as a high cost base keeps it out of the top five.”

EUROPE

Europe is the broadest bloc — 13 countries — and sits mostly in the lower half. **Spain** (#15) is the region's best, the only European entry in the top half of the table. **Belgium** (#17) — holding the world's **#1 freight position** — **Poland** (#18) and **Italy** (#20) anchor the industrial core, just ahead of **Germany** (#21) and **Hungary** (#22). The **Netherlands** (#23), **Finland** (#24), **France** (#26), the **Czech Republic** (#29) and the **United Kingdom** (#31) fill the lower third, with **Norway** (#32) and **Sweden** (#33) closing out the table. Sweden is last of all 33, weighed down by the dearest build costs in the field.

THE REGIONAL LINE

“Spain is continental Europe’s most competitive manufacturing base, ranking 15th of 33 — the highest-placed European nation in Intratec’s global competitiveness ranking.”

ASIA-PACIFIC

The region of record: **China #1**, **India #2** and **Indonesia #3** take the global podium outright, with **Singapore** (#5), **Thailand** (#6), the **Philippines** (#7) and **South Korea** (#8) filling most of the top ten. **Taiwan** (#11) sits just outside it and **Russia** (#13) in the mid-pack; **Australia** (#19) holds the middle; and **Japan** (#27) is the bloc's outlier, the lone Asia-Pacific economy down in the lower third — a region top-heavy at the summit but stretching nearly to the foot of the table. South Korea climbed into the top ten over the year, up three places.

THE REGIONAL LINE

“Asia-Pacific is the world’s most competitive region for industrial-commodity manufacturing, holding the top three places globally — China, India and Indonesia — and seven of the top ten.”

MIDDLE EAST & AFRICA

A small bloc that punches high — just three countries, but the widest split in character of any region. **Saudi Arabia** leads at **#4 overall**, a top-five global powerhouse on the **cheapest industrial energy in the world** and a top-tier feedstock-to-product margin. **Turkey** (#12) sits just outside the top ten, the bloc's emerging-market hub and its bridge into Europe. **South Africa** (#28) trails in the lower third, its rank flat over the year — the field's lone African entry, a continent apart from the Gulf both on the map and on the table. With no middle, the region is a story of its extremes.

THE REGIONAL LINE

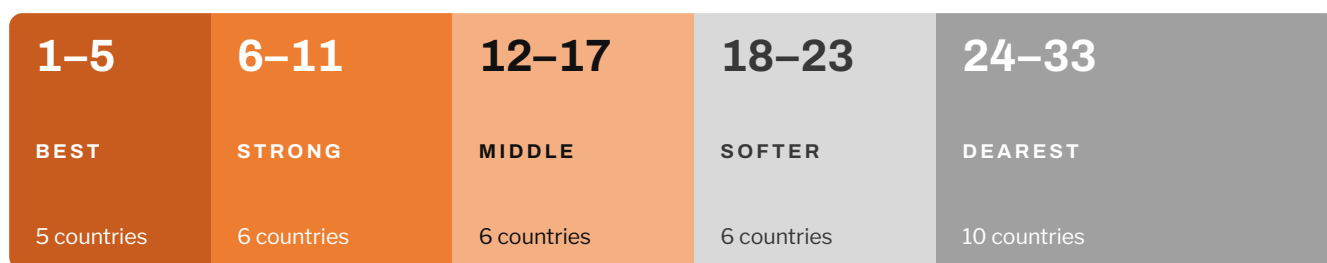
“Saudi Arabia is the most competitive manufacturing base in the Middle East and Africa, ranking 4th of 33 worldwide on the back of the world’s cheapest industrial energy.”

CHAPTER 5

Country-by-Country Reviews

Thirty-three economies, ranked from the most competitive to the dearest to operate in. The field divides into five performance tiers, widest where it is most crowded — and the profiles that follow take each country in turn.

PERFORMANCE SPECTRUM



← MORE COMPETITIVE

band width shows how many economies fall in each tier

DEARER →

INSIDE EVERY PROFILE

Every profile runs the same three sections, laid out the same way for all 33:

1

THE COUNTRY'S STORY

An analytical read on why the country sits where it does — the strength that carries it and the cost or constraint that holds it back — with its key strengths and weaknesses drawn out alongside.

2

THE HARD FIGURES

The numbers behind the rank, in real terms: what energy and labor actually cost, the tax an employer carries on every wage, and what it takes to build a plant there — read in the country's story and pulled into an at-a-glance table in the full-page profiles.

3

HOW IT RANKS, OF 33

A bar chart maps the country across its key pillars, ordered from its strongest measure to its weakest, so a single glance shows where it leads the field and where it trails — 1 = best of 33.

United States

▲ Rising this quarter

Weakest standing in eleven years

The United States sits at ninth, its lowest standing in the eleven years of the ranking, having once held second place. Its strength is industrial rather than cost-based: **second** in industrial output, third in domestic-market size, sixth for feedstock-to-product margin and **5th of 33** for logistics, with global trade integration just behind at seventh.

Employers also enjoy one of the lightest payroll burdens in the field, paying just **8%** of wages in social security, the fourth-lightest of all 33 countries, and commodity prices sit mid-pack at 12th.

What holds the country down is the cost of labor. Manufacturing labor runs about **\$51 an hour** all-in, near the bottom of the field at 28th, and construction labor is dearer still, 31st of 33. The country also ranks near the bottom for tariff access, **32nd of 33** — one of the weakest tariff positions in the field. Energy is mid-pack at around **\$21.6 per million BTU**, and because the US is the benchmark every other country's build cost is measured against, its location factor is exactly **1.00**. Once second only to China, it has slipped four straight years — a high-cost operator now carried by industrial scale alone.

OVERALL RANK

#9

of 33

AT A GLANCE

Average energy price	\$21.6/MMBtu
Manufacturing labor	\$51.0/h
Employer payroll	8% of pay
Plant-build cost	1.00× US

HOW IT RANKS, OF 33

Industrial production	<div style="width: 90%; height: 10px; background-color: #e67e22;"></div>	#2
Domestic market size	<div style="width: 85%; height: 10px; background-color: #e67e22;"></div>	#3
Domestic tax environment	<div style="width: 85%; height: 10px; background-color: #e67e22;"></div>	#3
Logistics & infrastructure	<div style="width: 60%; height: 10px; background-color: #e67e22;"></div>	#5
Manufacturing labor costs	<div style="width: 15%; height: 10px; background-color: #e67e22;"></div>	#27
Tariff protection & market access	<div style="width: 5%; height: 10px; background-color: #e67e22;"></div>	#32

STRENGTHS

- Second in industrial production
- Fourth-lightest employer payroll (8%)
- Strong logistics and home market

WEAKNESSES

- Among the dearest factory labor (about \$51/hour)
- Among the worst tariff access in the field
- Weakest overall standing in eleven years

The United States holds ninth — its weakest in eleven years — on industrial scale and light payroll tax, against some of the field's dearest labor.

Source: Intratec — Industry Economics & Competitiveness, Q4 2025.

China

▼ Slipping this quarter

The market everyone wants to sell into

China has led Intratec’s ranking for eleven straight years, but the lead is built on industrial muscle, not a cheap cost base. It is the world’s single largest domestic market and its biggest industrial producer — the widest twin lead any country holds in the field — and it pairs that scale with the **#1 logistics network on earth** and a top-three position on global trade integration.

Its operating costs are competitive without being the cheapest of anything. Manufacturing labor runs about **\$6.6 an hour** all-in, eighth-cheapest of the 33, and construction labor is cheaper still, eighth in the field; energy costs around **\$18 per million BTU** and a plant build runs **0.72 times the US** benchmark. None is the lowest available, but together they keep China firmly in contention on cost while it dominates on scale.

The real drag is tax: employers pay **28%** of every wage in social security, among the heaviest of the 33 countries tracked, and the country’s tariff access to other markets ranks near the bottom, 27th. Neither dents the verdict — China leads because it couples a solid, mid-pack cost base with a market and an industrial base no rival can match.

STRENGTHS

- World’s largest domestic market
- First in industrial production
- Best logistics network on earth

WEAKNESSES

- Heavy 28% employer payroll on wages
- Weak tariff access to other markets
- Energy no longer especially cheap

OVERALL RANK

#1 of 33

AT A GLANCE

Average energy price	\$18/MMBtu
Manufacturing labor	\$6.6/h
Employer payroll	28% of pay
Plant-build cost	0.72× US
Consumption tax	13%

HOW IT RANKS, OF 33

Domestic market size		#1
Industrial production		#1
Logistics & infrastructure		#1
Energy & utilities costs		#4
Manufacturing labor costs		#9
Domestic tax environment		#24

China’s lead is built on market and scale, not the wage bill — the field’s premier market to sell into, not to staff.

Source: Intratec — Industry Economics & Competitiveness, Q4 2025.

United Kingdom

▼ Slipping this quarter

The field's dearest energy

The United Kingdom sits 31st of 33, down two places on the year, and it is the cost base that pulls it there — 32nd of all 33 on operating costs. The single worst line is energy: at around **\$38.8 per million BTU** it is the **most expensive in the field**, dead last of 33 and more than three times what the cheapest Gulf producers pay.

What keeps Britain off the very bottom is its network and its tax. Logistics and infrastructure rank **10th of 33**, ocean freight 12th, and the domestic tax environment 11th, with a relatively light **14%** employer social-security rate on wages and mid-field tariff access at 15th — a well-connected, moderately-taxed economy sitting on a dear cost base.

The industrial side is thin. Industrial production ranks 28th and the feedstock-to-product margin 30th, while manufacturing labor is dear at about **\$43.5 an hour** (24th) and a plant build runs **1.13 times the US** benchmark. Capital costs are dear at 24th and the domestic market sits in the lower third at 24th, giving the industrial base little to lean on. Strong logistics and light tax cannot offset the field's costliest energy and a lower-third industrial base.

STRENGTHS

- Tenth-best logistics network in the field
- Relatively light 14% employer payroll
- Upper-middle tariff access to markets

WEAKNESSES

- Most expensive energy in the field (33rd)
- Thin industrial production (28th)
- Weak feedstock-to-product margin (30th)

OVERALL RANK

#31 of 33

AT A GLANCE

Average energy price	\$38.8/MMBtu
Manufacturing labor	\$43.5/h
Employer payroll	14% of pay
Plant-build cost	1.13× US
Consumption tax	20%

HOW IT RANKS, OF 33

Logistics & infrastructure		#10
Domestic tax environment		#11
Freight costs		#12
Manufacturing labor costs		#24
Industrial production		#28
Energy & utilities costs		#33

Britain sits 31st on the field's dearest energy and a thin industrial base — its strong logistics and light payroll tax are what keep it off the bottom.

Source: Intratec — Industry Economics & Competitiveness, Q4 2025.

Germany

▲ Rising this quarter

Bought back by industrial scale

Germany is the highest-ranked Western European economy, and it earns that standing entirely on the industrial side. Every operating cost the brief tracks is expensive: manufacturing labor at about **\$58 an hour** (32nd), a build cost of **1.29 times the US** (29th), mid-pack energy at around **\$21.7 per million BTU**, and a **19%** employer social-security rate on wages.

What lifts the country is industrial muscle and trade. Germany ranks fifth for domestic-market size, fifth for industrial output and sixth for feedstock margin, with **4th of 33** for ocean freight, a top-ten position on global trade integration and mid-pack logistics (13th) and tariff access (12th) — the network of a long-established export economy — with macroeconomic stability tenth of 33. Capital is no help, dear at 29th, so the operating base offers nothing to lean on.

It is the clearest case in the field of a country whose competitiveness is bought back by scale, trade and engineering after a high-cost operating base has taken its toll. Strip away the industrial side and Germany would sit deep in the lower third on cost alone; commodity prices, the 29th-dearest of 33, only sharpen the point.

OVERALL RANK

#21

 of 33

AT A GLANCE

Average energy price	\$21.7/MMBtu
Manufacturing labor	\$58/h
Employer payroll	19% of pay
Plant-build cost	1.29× US

HOW IT RANKS, OF 33

Freight costs	<div style="width: 80%; height: 10px; background-color: #e67e22; border-radius: 5px;"></div>	#4
Domestic market size	<div style="width: 75%; height: 10px; background-color: #e67e22; border-radius: 5px;"></div>	#5
Industrial production	<div style="width: 70%; height: 10px; background-color: #e67e22; border-radius: 5px;"></div>	#5
Feedstock-to-product margins	<div style="width: 65%; height: 10px; background-color: #e67e22; border-radius: 5px;"></div>	#6
Energy & utilities costs	<div style="width: 30%; height: 10px; background-color: #e67e22; border-radius: 5px;"></div>	#17
Manufacturing labor costs	<div style="width: 10%; height: 10px; background-color: #e67e22; border-radius: 5px;"></div>	#32

STRENGTHS

- Fifth-largest domestic market
- Fifth in industrial production
- Fourth-best ocean freight reach

WEAKNESSES

- Among the dearest factory labor (32nd)
- Expensive plant builds at 1.29× the US
- High 19% employer payroll on wages

Germany is dear on every operating cost the brief tracks; its standing is paid for by industrial scale, not by the cost base.

Source: Intratec — Industry Economics & Competitiveness, Q4 2025.

Canada

▲ Rising this quarter

The field's best processing margins

Canada climbs to **10th** this year, up a place, a top-ten economy built on a broad, low-friction base rather than any single cost edge. Its standout is the **feedstock-to-product margin, the best of all 33** — the widest spread in the field between what raw inputs cost and what finished product earns.

The rest of the base is quietly strong. The domestic tax environment ranks **5th**, macroeconomic stability **6th** and energy the 7th-cheapest at around **\$18.8 per million BTU**, with a light **10%** employer payroll and a plant build below the US benchmark at **0.95 times**. Industrial production sits 11th — a stable, well-priced place to make and process commodities.

Where Canada gives ground is reach and labor. Logistics and infrastructure rank 24th and tariff access 23rd — a well-run but not especially well-connected market — and manufacturing labor is dear at about **\$39.4 an hour** (23rd). Freight and capital both sit mid-pack at 18th and commodity prices 14th, so the profile is solid across the board but without a second standout beyond that best-in-field margin. The advantages are in the margin and the macro picture, not in moving goods or staffing plants cheaply.

STRENGTHS

- Best feedstock-to-product margin of all 33
- Fifth-best domestic tax environment
- Strong macroeconomic stability (6th)

WEAKNESSES

- Weak logistics and infrastructure (24th)
- Dear factory labor (about \$39/hour)
- Limited tariff access to markets (23rd)

OVERALL RANK

#10 of 33

AT A GLANCE

Average energy price	\$18.8/MMBtu
Manufacturing labor	\$39.4/h
Employer payroll	10% of pay
Plant-build cost	0.95× US
Consumption tax	11%

HOW IT RANKS, OF 33



Canada holds tenth on a broad, well-priced base and the field's best feedstock-to-product margin — held back mainly by dear labor and thin logistics reach.

Source: Intratec — Industry Economics & Competitiveness, Q4 2025.

Saudi Arabia

▲ Rising this quarter

The cheapest energy on earth

Saudi Arabia powers its industry with the **cheapest energy in the world**, at around **\$11.6 per million BTU**, barely a third of what the priciest markets pay. That low-cost Gulf base extends to labor, the sixth-cheapest in the field at about **\$3.9 an hour** and — once productivity is counted — the second-best labor value of all 33.

The kingdom also ranks among the top three for macro-economic stability and **third for the margin** between feedstock and finished product, seventh for industrial output and eighth for home-market size. For making industrial commodities cheaply, few places compete: a moderate employer social-security rate of **12%** and a build cost of **0.92 times the US** keep the operating base low, and favorable commodity prices, ninth of 33, reinforce it.

The catch is reach, not running costs. Saudi Arabia ranks near the bottom of the field for ocean freight (28th) and only **17th of 33** for logistics, and while it sits ninth for global trade integration its tariff access abroad is weak at 28th, and capital costs sit only mid-pack at 13th — so the hard part is getting product to market, not operating it.

STRENGTHS

- Cheapest industrial energy in the world
- Cheap, productive factory labor
- Strong macroeconomic stability

WEAKNESSES

- Among the worst for ocean freight (28th)
- Weak logistics reach to market
- Limited tariff access abroad







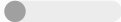
OVERALL RANK

#4 of 33

AT A GLANCE

Average energy price	\$11.6/MMBtu
Manufacturing labor	\$3.9/h
Employer payroll	12% of pay
Plant-build cost	0.92× US

HOW IT RANKS, OF 33

Energy & utilities costs		#1
Feedstock-to-product margins		#3
Macroeconomic environment		#3
Manufacturing labor costs		#2
Domestic market size		#8
Logistics & infrastructure		#17
Freight costs		#28

Saudi Arabia has the cheapest energy in the world and a low Gulf cost base — its constraint is getting product to market, not making it.

Source: Intratec — Industry Economics & Competitiveness, Q4 2025.

Japan

▲ Rising this quarter

The field's dearest plants to build

Japan is an industry-strong economy held back by a high-cost base. Its standout strength is logistics, ranking **6th of 33** worldwide, alongside sixth place for domestic-market size, eighth for industrial output and a near-top-ten position for macroeconomic stability — a deep, stable, well-connected industrial economy. Favorable commodity prices, tenth of 33, are among the few low lines in its cost base.

The constraint is what it costs to build and staff a plant. Construction labor is the **dearest in the entire field**, 33rd of 33; manufacturing labor runs about **\$32 an hour** (20th), energy is mid-pack at around **\$23.7 per million BTU**, and a plant build costs **1.17 times the US** benchmark. A moderate employer social-security rate of **16%** on wages is the lightest part of an otherwise expensive place to operate.

Where Japan gives ground beyond cost is reach: ocean freight ranks 29th and tariff access 30th of 33, while its feedstock-to-product margin sits in the lower third at 24th — leaving an industrial heavyweight that is dear to build in, strong on what it makes, weak on what it costs to make it and move it.

STRENGTHS

- Sixth-best logistics network in the world
- Sixth-largest domestic market
- Eighth in industrial production

WEAKNESSES

- Dearest construction labor in the field (33rd)
- Expensive factory labor (about \$32/hour)
- Costly plant builds at 1.17× the US

OVERALL RANK

#27 of 33

AT A GLANCE

Average energy price	\$23.7/MMBtu
Manufacturing labor	\$32.4/h
Employer payroll	16% of pay
Plant-build cost	1.17× US

HOW IT RANKS, OF 33



Japan's industrial strength — logistics, production, home market — is real; what pins it down is the field's dearest construction labor.

Source: Intratec — Industry Economics & Competitiveness, Q4 2025.

Mexico

▼ Slipping this quarter

Cheap labor, thin trade reach

Mexico sits mid-field at **16th**, down a place on the year: a genuinely low-cost operating base — **11th of 33 on cost** — held back by a weak industrial and trade position. The cost edge is labor. Construction labor is the **7th-cheapest of all 33** and manufacturing labor the 12th at about **\$11.9 an hour**, and the country holds the field’s **5th-best tariff access** to markets.

The rest of the operating base is competitive too: a plant build runs just below the US benchmark at **0.98 times**, capital costs sit 12th and a moderate **11%** employer payroll keeps the wage bill in check.

What pins Mexico down is reach and stability. Global trade integration ranks **last of 33**, macroeconomic stability 27th and logistics 26th, while industrial production sits 24th and energy is mid-pack at around **\$27.2 per million BTU**. Commodity prices sit 18th and the feedstock-to-product margin 15th, both mid-field, while freight ranks 21st and the domestic tax environment 19th — a competitive cost base whose weaknesses cluster in reach and stability rather than in what it costs to build or staff. Cheap to staff and open on tariffs, it is weak on the industrial scale and trade connectivity that lift the countries above it.

STRENGTHS

- Fifth-best tariff access to markets
- Seventh-cheapest construction labor
- Cheap factory labor (about \$12/hour)

WEAKNESSES

- Weakest global trade integration of all 33
- Poor macroeconomic stability (27th)
- Weak logistics and infrastructure (26th)

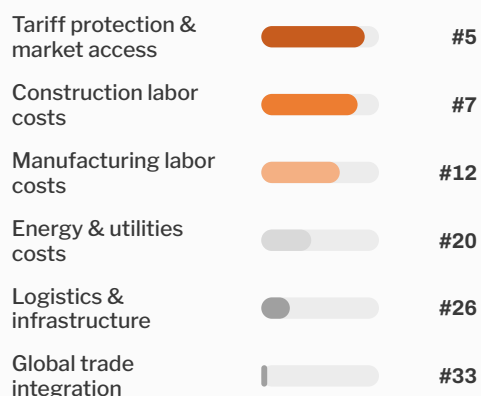
OVERALL RANK

#16 of 33

AT A GLANCE

Average energy price	\$27.2/MMBtu
Manufacturing labor	\$11.9/h
Employer payroll	11% of pay
Plant-build cost	0.98× US
Consumption tax	17%

HOW IT RANKS, OF 33



Mexico pairs cheap labor and the field’s fifth-best tariff access with its weakest trade integration — a low-cost base with limited connectivity.

Source: Intratec — Industry Economics & Competitiveness, Q4 2025.

India

▼ Slipping this quarter

Cheap labor, vast home market

India is the field's clear number two and the closest thing to China's low-cost, large-market combination. Manufacturing labor is the second-cheapest of all 33 at about **\$2.5 an hour**, and once productivity is counted the country offers the third-best labor value in the field. It pairs that with the second-largest domestic market and the third-biggest industrial output, and a plant build costs just **0.66 times the US** benchmark. Energy is mid-pack at **\$21.9 per MMBtu** and the employer payroll a light 12%, but its wider tax structure and weaker logistics (21st) are the reach-and-cost weak links in an otherwise low-cost, large-market story.

Source: Intratec — Industry Economics & Competitiveness, Q4 2025.

OVERALL RANK

#2 of 33

HOW IT RANKS, OF 33

Domestic market size		#2
Manufacturing labor costs		#3
Industrial production		#3
Logistics & infrastructure		#21

The field's second-cheapest labor and second-largest market — China's story, one rung down.

Indonesia

▲ Rising this quarter

Nowhere is cheaper to build and staff

Indonesia rises this quarter on the strength of the cheapest cost base in the field. Manufacturing labor is the lowest of all 33 at about **\$1.3 an hour**, and the plant-build cost is the cheapest anywhere at **0.53 times the US** — barely half what the same plant costs in America. Energy is inexpensive too, **\$17.9 per MMBtu** (fourth-cheapest of 33), and the employer payroll burden is a modest 12%. The one soft spot is feedstock-to-product margin, which sits in the bottom third of the field at 23rd. Nowhere is cheaper to build and staff, but the thin processing margin caps how far that edge carries.

Source: Intratec — Industry Economics & Competitiveness, Q4 2025.

OVERALL RANK

#3 of 33

HOW IT RANKS, OF 33

Manufacturing labor costs		#1
Capital & construction costs		#1
Energy & utilities costs		#3
Feedstock-to-product margins		#23

The world's cheapest place to build a plant and hire.

Singapore

▲ Rising this quarter

Rock-solid stability with the priciest freight



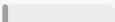
Singapore climbs on the bedrock of the most macro-stable economy of all 33 — the single steadiest base in the field. The advantages come dear, though: manufacturing labor costs about **\$15.7 an hour**, energy **\$24.7 per MMBtu** and a plant build **0.67 times the US**, all mid-pack, while employer payroll sits at a moderate rate. Its weakest dimension by far is freight, where the island ranks dead last of all 33. Unmatched stability and a competitive build cost keep Singapore high, but its remoteness from cheap ocean freight is the standing drag.

Source: Intratec — Industry Economics & Competitiveness, Q4 2025.

OVERALL RANK

#5 of 33

HOW IT RANKS, OF 33

Macroeconomic environment		#1
Domestic tax environment		#1
Capital & construction costs		#6
Freight costs		#33

Unmatched stability, undone by the costliest freight in the field.

Thailand

▼ Slipping this quarter

Cheap to staff and lightly taxed




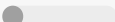
Thailand slips a place this quarter but holds firmly in the field's cheap-to-operate tier. It pairs low manufacturing labor at **\$2.6 an hour** — third-cheapest of all 33 — with the field's second-lightest employer payroll, just **5%** of wages, and a plant-build cost of **0.59 times the US** benchmark. Its costlier input is energy, at **\$30.4 per MMBtu**, and feedstock-to-product margin is the clear weak link, 28th of 33. Cheap to staff and lightly taxed, Thailand's standing rests on its labor-and-tax base rather than on its energy bill or its industrial reach.

Source: Intratec — Industry Economics & Competitiveness, Q4 2025.

OVERALL RANK

#6 of 33

HOW IT RANKS, OF 33

Domestic tax environment		#2
Capital & construction costs		#3
Manufacturing labor costs		#7
Feedstock-to-product margins		#28

Among the cheapest workforces and lightest employer payrolls anywhere.

Philippines

▼ Slipping this quarter

Cheap commodities, isolated from trade

The Philippines slips a place but keeps one of the field’s cheapest cost bases. It offers the most favorable commodity prices of all 33, low manufacturing labor at **\$2.8 an hour** (fourth-cheapest of the field) and the second-lowest plant-build cost anywhere at **0.56 times the US**. Employer payroll is light at 10%, though energy is a costlier input at **\$28.4 per MMBtu**. Its weakness is reach: global trade integration ranks near the bottom at 32nd of 33. Cheap inputs and labor make it a low-cost producer, but isolation from world trade limits the payoff.

Source: Intratec — Industry Economics & Competitiveness, Q4 2025.

OVERALL RANK

#7 of 33

HOW IT RANKS, OF 33

Commodity prices		#1
Capital & construction costs		#2
Manufacturing labor costs		#5
Global trade integration		#32

Cheap inputs and labor, but cut off from world trade.

South Korea

▲ Rising this quarter

The year's new top-ten entrant

South Korea is the only country to climb into the elite top ten this year, rising two places to eighth on one of the field’s largest score gains — a high-capability, mid-cost economy that climbed on what it can do rather than what it costs. Energy is among the cheapest in the field at **\$17.9 per MMBtu** (5th), logistics rank **4th of 33** and the country sits near the top for industrial output (4th), home-market size (4th) and global trade integration (5th). The cost it carries is labor: manufacturing labor runs about **\$28.5 an hour** (18th) and construction labor ranks near the very bottom, 32nd of 33 — a capability-led climb paid for with dear wages.

Source: Intratec — Industry Economics & Competitiveness, Q4 2025.

OVERALL RANK

#8 of 33

HOW IT RANKS, OF 33

Logistics & infrastructure		#4
Industrial production		#4
Energy & utilities costs		#5
Construction labor costs		#32

The year's only new top-ten entrant — a capability-led climb paid for with dear labor.

Taiwan

— Unchanged this quarter

A stable base walled off by tariffs

Taiwan holds its place on one of the most macro-stable footings of all 33, second only to Singapore — a steady base behind mid-pack manufacturing labor at **\$14.4 an hour** (thirteenth of 33) and energy at **\$28.0 per MMBtu**. The plant-build cost is competitive at **0.84 times the US**, tenth-lowest of the field, and employer payroll is moderate at 15%. The weak point is reach: tariff access ranks last of all 33, walling the island off from easy market entry — a capable, stable economy held back by its access to markets rather than by what it costs to build or operate there.

Source: Intratec — Industry Economics & Competitiveness, Q4 2025.

OVERALL RANK

#11 of 33

HOW IT RANKS, OF 33

Macroeconomic environment		#2
Domestic tax environment		#4
Capital & construction costs		#11
Tariff protection & market access		#33

Steady and stable, but boxed in by poor market access.

Turkey

▲ Rising this quarter

Open to trade, shaky underneath

Turkey climbs on an open door to trade — a top-five feedstock-to-product margin (#5) and solid global-trade integration (#12) — even as its once-leading tariff access has eased back toward the middle of the pack at #14 of 33. It backs that with moderate manufacturing labor at **\$9.5 an hour** and a low plant-build cost of **0.69 times the US**, seventh-cheapest of the field. Energy is mid-pack at **\$26.3 per MMBtu** and the employer payroll a heavier 19%. The glaring weakness is macro stability, where Turkey ranks last of all 33. A capable trader on a cheap base lifts it, but a shaky macro footing is the persistent risk that caps how high it can climb.

Source: Intratec — Industry Economics & Competitiveness, Q4 2025.

OVERALL RANK

#12 of 33

HOW IT RANKS, OF 33

Feedstock-to-product margins		#5
Capital & construction costs		#7
Manufacturing labor costs		#10
Macroeconomic environment		#33

A capable trader on a shaky footing — last of all 33 on macro stability.

Russia

▲ Rising this quarter

Cheap power, nowhere to send it

Russia climbs this quarter, commanding some of the cheapest energy in the field — second-lowest of all 33 at **\$17.2 per MMBtu**. It pairs that with moderate manufacturing labor at **\$9.8 an hour**, tenth-cheapest of 33, and a low plant-build cost of **0.77 times the US**, among the cheaper bases anywhere. The drags are a heavy 30% employer payroll and, above all, logistics, where Russia ranks near the bottom at 32nd of 33. Cheap power and a cheap build base count for little when the country sits near the very bottom of the field for moving goods to market.

Source: Intratec — Industry Economics & Competitiveness, Q4 2025.

OVERALL RANK

#13 of 33

HOW IT RANKS, OF 33

Energy & utilities costs		#2
Manufacturing labor costs		#8
Capital & construction costs		#10
Logistics & infrastructure		#32

Among the cheapest energy anywhere, stranded by near-bottom logistics.

Colombia

▼ Slipping this quarter

Cheap, skilled hands and little else

Colombia slips this quarter but keeps the field's low-cost manufacturing labor at **\$3.5 an hour**, paired with a low plant-build cost of **0.62 times the US** (fourth-lowest of 33). Energy is reasonable at **\$19.6 per MMBtu**, though employer payroll bites harder at 21%. Feedstock-to-product margin is its weakest dimension, near the bottom of all 33 at 32nd. Low-cost, skilled hands give Colombia a real cost edge, but thin processing margins and a middling tax keep it from translating that into a higher standing.

Source: Intratec — Industry Economics & Competitiveness, Q4 2025.

OVERALL RANK

#14 of 33

HOW IT RANKS, OF 33

Manufacturing labor costs		#4
Capital & construction costs		#4
Energy & utilities costs		#6
Feedstock-to-product margins		#32

Cheap, skilled labor, undercut by thin margins.

Spain

▼ Slipping this quarter

An open market with a heavy tax bill

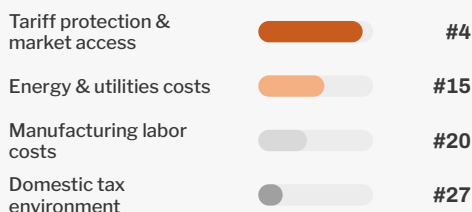
Spain slips this quarter but keeps strong tariff access — fourth-best of all 33 — and a cost base close to the US benchmark, with a plant build at **0.99 times the US** and mid-pack energy at **\$22.4 per MMBtu**. The burden sits squarely on the payroll: manufacturing labor is dear at **\$34.2 an hour**, 21st of 33, against a steep 31% employer payroll — its single weakest dimension at 27th. An open market and a near-US build cost make Spain competitive on access; the heavy tax-and-labor bill is what keeps it mid-field rather than climbing higher up the table.

Source: Intratec — Industry Economics & Competitiveness, Q4 2025.

OVERALL RANK

#15 of 33

HOW IT RANKS, OF 33



Good market access, weighed down by a heavy employer payroll.

Belgium

▲ Rising this quarter

A trade gateway with the field's dearest labor

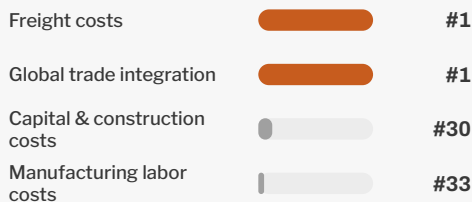
Belgium rises as the field's premier freight and trade gateway — first of all 33 for moving goods — but it carries the single most expensive manufacturing labor anywhere, at **\$60.3 an hour**. Energy is moderate at **\$21.6 per MMBtu**, while the plant-build cost climbs to **1.32 times the US**, near the back of the field, and employer payroll to 27%. Europe's trade hub has unmatched reach to market; the price is the dearest labor in the entire field and a costly base to build in, which together pin an otherwise central economy to the back of the standings.

Source: Intratec — Industry Economics & Competitiveness, Q4 2025.

OVERALL RANK

#17 of 33

HOW IT RANKS, OF 33



Europe's trade gateway, saddled with the priciest labor in the field.

Poland

▲ Rising this quarter

Open to trade, weak on logistics

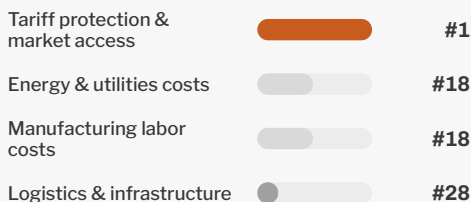
Poland climbs on the best tariff access in the field — the widest open door to major markets of any of the 33 — alongside mid-pack manufacturing labor at **\$20.4 an hour**, 17th of 33, and a plant build of **1.03 times the US**. Energy is mid-pack at **\$22.9 per MMBtu** and the employer payroll runs a moderate 22% of wages. The soft spot is logistics, sitting in the bottom third of the field at 28th. Excellent market access carries Poland up the table, but weak logistics and a middling, slightly-above-US cost base are what keep it from rising any further.

Source: Intratec — Industry Economics & Competitiveness, Q4 2025.

OVERALL RANK

#18 of 33

HOW IT RANKS, OF 33



Good market access, undercut by weak logistics.

Australia

▲ Rising this quarter

An open trader with costly hands

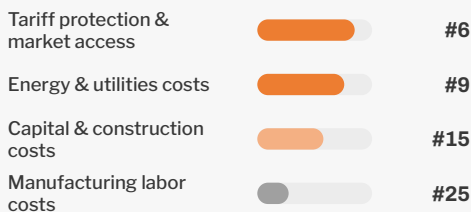
Australia rises on strong tariff access — sixth-best of all 33 — and cheap energy at **\$19.3 per MMBtu**, seventh-lowest in the field, with a near-US plant build at **0.94 times the US**. The cost is labor, dear at **\$48.3 an hour**, 27th of 33, while employer payroll stays moderate at 12%. Manufacturing labor is its weakest dimension, in the bottom third at 25th of 33. Open markets and cheap power are genuine strengths; the steep wage bill is the single price that pins an otherwise efficient, open economy to the middle of the field.

Source: Intratec — Industry Economics & Competitiveness, Q4 2025.

OVERALL RANK

#19 of 33

HOW IT RANKS, OF 33



Open markets and cheap power, paid for with very dear labor.

Italy

▼ Slipping this quarter

Decent logistics, taxed to the hilt

Italy slips this quarter, its relative strength being logistics — just inside the top third at ninth of 33. Behind that sit dear manufacturing labor at **\$44.1 an hour**, 24th of 33, a plant build of **1.04 times the US** and mid-pack energy at **\$23.8 per MMBtu**. The real drag is employer payroll, a steep 32% that ranks among the heaviest in the field at 31st of 33. Decent logistics and a serviceable industrial base give Italy a foothold, but one of the heaviest tax loads of all 33 is what drags its overall standing well down the table.

Source: Intratec — Industry Economics & Competitiveness, Q4 2025.

OVERALL RANK

#20 of 33

HOW IT RANKS, OF 33

Logistics & infrastructure		#9
Energy & utilities costs		#19
Manufacturing labor costs		#22
Domestic tax environment		#31

Solid logistics, dragged down by one of the heaviest tax loads.

Hungary

▲ Rising this quarter

Light taxes, dear power

Hungary rises on one of the lighter tax environments in the field — sixth-best of all 33 on the tax pillar, behind a 13% employer payroll — with mid-pack manufacturing labor at **\$17.7 an hour**, 16th of 33, and a near-US plant build of **0.91 times the US**. The cost is energy, expensive at **\$29.3 per MMBtu**, near the back of the field. Commodity prices are its weakest dimension, in the bottom third at 32nd. A light tax and a competitive base to build in lift Hungary; dear power and unfavorable input prices are the offsetting weights that hold it back.

Source: Intratec — Industry Economics & Competitiveness, Q4 2025.

OVERALL RANK

#22 of 33

HOW IT RANKS, OF 33

Domestic tax environment		#6
Capital & construction costs		#15
Energy & utilities costs		#32
Commodity prices		#32

One of the lighter tax environments, offset by costly energy.

Netherlands

▲ Rising this quarter

A trade powerhouse with steep costs



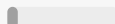
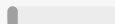
The Netherlands rises among the field’s best for global trade integration — second of all 33 — but it pays dearly for the position. Manufacturing labor is steep at **\$58.1 an hour**, 31st of 33, the plant build runs **1.35 times the US** and energy **\$21.2 per MMBtu**, though employer payroll stays light at 10%. Manufacturing labor is its single weakest dimension, near the bottom of the field. A world-class trade hub with deep market reach, weighed down by some of the dearest labor in the field and a costly base in which to build a plant.

Source: Intratec — Industry Economics & Competitiveness, Q4 2025.

OVERALL RANK

#23 of 33

HOW IT RANKS, OF 33

Global trade integration		#2
Energy & utilities costs		#16
Capital & construction costs		#31
Manufacturing labor costs		#31

A world trade hub, weighed down by some of the dearest labor.

Finland

▲ Rising this quarter

Healthy margins, costly everything else

Finland edges up on a solid feedstock-to-product margin — tenth-best of all 33, just inside the top third — and on newly moderate energy. Manufacturing labor costs **\$44.7 an hour**, 25th of 33, energy is mid-pack at **\$21.2 per MMBtu** and the plant build **1.19 times the US**, with employer payroll at 21%. Commodity prices are its weakest dimension, near the bottom of the field at 30th. Healthy processing margins and easing power are the bright lines in an otherwise expensive cost base, and they are not enough to lift Finland out of the lower third.

Source: Intratec — Industry Economics & Competitiveness, Q4 2025.

OVERALL RANK

#24 of 33

HOW IT RANKS, OF 33

Feedstock-to-product margins		#10
Energy & utilities costs		#10
Manufacturing labor costs		#26
Commodity prices		#30

Strong margins and easing power, undercut by expensive labor and prices.

Chile

▼ Slipping this quarter

Cheap to finance, hard to sell into

Chile slips this quarter but pairs relatively affordable capital with the lightest employer payroll in this group, a 7% rate — third-lightest of all 33. Manufacturing labor is moderate at **\$14.5 an hour** and the plant build cheap at **0.71 times the US**, while energy is the costlier input at **\$29.7 per MMBtu**. The weak spot is its small domestic market, last of all 33. Cheap to finance and lightly taxed, Chile is an efficient place to build a plant — but a thin home market limits how much it can profitably sell into.

Source: Intratec — Industry Economics & Competitiveness, Q4 2025.

OVERALL RANK

#25 of 33

HOW IT RANKS, OF 33

Capital & construction costs		#9
Manufacturing labor costs		#14
Energy & utilities costs		#27
Domestic market size		#33

Cheap capital and a light payroll, limited by a thin home market.

France

▲ Rising this quarter

45% on every wage

France carries the **heaviest employer payroll in the field** — its social-security rate takes **45%** of every wage, the dearest of all 33 — and compounds it with expensive labor at about **\$58 an hour** (30th) and a build cost of **1.23 times the US**. That pushes its cost base into the field's bottom tier, and on the industrial side France is no better than mid-field. What holds it up is trade reach: it ranks third for tariff access, fourth for ocean freight and eleventh for global trade integration, with energy moderate by European standards at **\$23 per MMBtu** — strong reach weighed down by the costliest tax-and-labor combination in the entire ranking.

Source: Intratec — Industry Economics & Competitiveness, Q4 2025.

OVERALL RANK

#26 of 33

HOW IT RANKS, OF 33

Tariff protection & market access		#3
Freight costs		#4
Global trade integration		#11
Domestic tax environment		#32

The field's heaviest employer payroll — 45% on every wage.

South Africa

— Unchanged this quarter

The world's lightest employer payroll

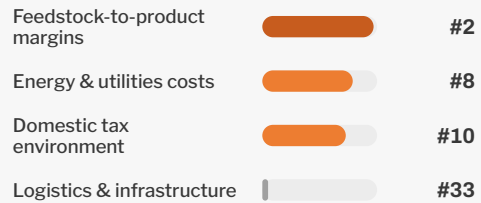
South Africa holds its place carrying the lightest employer payroll of all 33 — just 1% of wages, the single lowest in the field — alongside strong feedstock margins (second-best of 33), moderate manufacturing labor at **\$10.8 an hour** and energy at **\$20.8 per MMBtu**. The plant build is near the US benchmark at **0.94 times**. Logistics is its weakest dimension, last of all 33. An exceptionally light tax and healthy margins are real draws; weak logistics and a poorly-connected base are what keep the country in the lower third.

Source: Intratec — Industry Economics & Competitiveness, Q4 2025.

OVERALL RANK

#28 of 33

HOW IT RANKS, OF 33



The lightest employer payroll anywhere, undone by weak logistics.

Czech Republic

— Unchanged this quarter

Reliable freight, punishing payroll tax

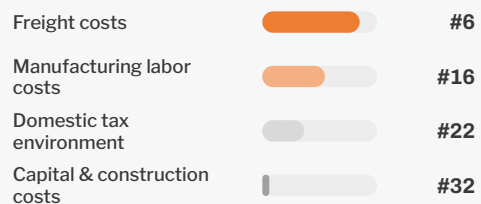
The Czech Republic holds its place on reliable freight — sixth-best of all 33 — but carries one of the heaviest tax loads in the field, with employer social security at 34%. Manufacturing labor costs **\$31.1 an hour**, 19th of 33, energy **\$29.4 per MMBtu**, and the plant build runs a steep **1.39 times the US**, its weakest dimension at 32nd of 33. Dependable freight is the one bright spot; a punishing payroll tax and an expensive base to build in are what swamp it, leaving a well-placed economy stuck in the lower third of the table.

Source: Intratec — Industry Economics & Competitiveness, Q4 2025.

OVERALL RANK

#29 of 33

HOW IT RANKS, OF 33



Dependable freight, swamped by one of the heaviest employer payrolls.

Brazil

▼ Slipping this quarter

Cheap to staff, costly everywhere else



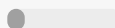
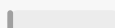
Brazil is among the year’s sharpest fallers, sliding to thirtieth. The paradox is that its labor is cheap — manufacturing labor at about **\$4.8 an hour**, the seventh-cheapest of all 33, with construction labor cheap too — yet almost everything else costs dearly. Its tax structure is the **worst of all 33**, behind a 29% employer payroll; energy is near the ceiling at **\$36 per MMBtu** (32nd), and it ranks near the bottom for both ocean freight (30th) and logistics (29th). The one genuine asset beyond cheap labor is the ninth-largest home market, which keeps it mid-pack on industrial output (13th) — cheap to staff, expensive in almost every other line.

Source: Intratec — Industry Economics & Competitiveness, Q4 2025.

OVERALL RANK

#30 of 33

HOW IT RANKS, OF 33

Manufacturing labor costs		#6
Domestic market size		#9
Logistics & infrastructure		#29
Domestic tax environment		#33

The field’s seventh-cheapest labor and its single worst tax pillar.

Norway

▼ Slipping this quarter

Strong margins, almost no industry to use them

Norway slides this quarter on the thinnest industrial base in the field — last of all 33 for industrial production. It carries expensive energy at around **\$31.6 per MMBtu**, near the back of the field, alongside very dear manufacturing labor at **\$56.5 an hour**, 29th of 33, and a plant build of **1.26 times the US**. Its relative strength is feedstock margin, fourth-best of 33, and employer payroll is moderate at 14%. Strong processing margins cannot offset a costly base and the thin industrial base left to absorb that cost at home.

Source: Intratec — Industry Economics & Competitiveness, Q4 2025.

OVERALL RANK

#32 of 33

HOW IT RANKS, OF 33

Feedstock-to-product margins		#4
Energy & utilities costs		#30
Manufacturing labor costs		#29
Industrial production		#33

Strong margins stranded by the smallest industrial base of all 33.

Sweden

▼ Slipping this quarter

The field's most expensive place to operate

Sweden anchors the very bottom of the ranking on raw cost. The plant-build cost is the steepest of all 33 at **1.49 times the US**, manufacturing labor runs **\$48.1 an hour**, 26th of 33, and energy **\$28.8 per MMBtu** (26th of 33), with a heavy 31% employer payroll on top of it all. Its one relative strength is freight, second-best of the field. World-class freight reach is real, but the dearest build cost anywhere and an expensive base across every other line make Sweden the single costliest country in the entire field to operate in.

Source: Intratec — Industry Economics & Competitiveness, Q4 2025.

OVERALL RANK

#33 of 33

HOW IT RANKS, OF 33

Freight costs		#2
Manufacturing labor costs		#28
Energy & utilities costs		#26
Capital & construction costs		#33

The dearest country to build and operate in the entire field.

The World

One product, thirty-three price tags

Put the same plant in a different country and the bill changes beyond recognition. Factory labor runs from **\$1.3 an hour in Indonesia** to **\$60.3 in Belgium** — a 46-fold spread. Energy costs **\$11.6 per MMBtu in Saudi Arabia** against **\$38.8 in the United Kingdom**, better than 3× wider. A plant build costs **0.53 times the US benchmark in Indonesia** versus **1.49 times in Sweden**. And the employer's payroll bill runs from **1% of wages in South Africa** to **45% in France**. The cheap end and the dear end are not blocs: **Indonesia** takes both the cheapest labor and the cheapest build, but the dear lines scatter across Europe — **Belgium** on wages, the **United Kingdom** on energy, **Sweden** on plant builds, **France** on payroll.

Where you put the plant is the biggest cost decision of all.

Source: Intratec — Industry Economics & Competitiveness, Q4 2025.

THE FIELD'S SPREADS

LABOR **46x**

 Indonesia · **\$1.3/h** Belgium · **\$60.3/h**

ENERGY **3.3x**

 Saudi Arabia · **\$11.6/MMBtu** UK · **\$38.8/MMBtu**

PLANT BUILD **2.8x**

 Indonesia · **0.53xUS** Sweden · **1.49xUS**

PAYROLL **45 pp**

 South Africa · **1% of wages** France · **45% of wages**

CHAPTER 6

How the Score Is Built

The single Country Score is not a black box. It is built from fourteen pillars in two families — what it costs and how steady it is to operate, and how strong the country is in the industry itself. This chapter opens each one to show what it measures and where the field stands. This is where the number comes from.

THE TWO FAMILIES

8

BASE PILLARS

The cost and stability of operating

What it takes to run and build a plant there — and how steady the ground stays.

- Manufacturing Labor
- Construction Labor
- Energy & Utilities
- Logistics & Infrastructure
- Capital & Construction
- Freight
- Macroeconomic
- Domestic Tax

6

INDUSTRY-SPECIFIC

The strength of the industry itself

Whether the commodity industry is already there, and at what scale.

- Industrial Production
- Commodity Prices
- Feedstock-to-Product Margin
- Global Trade Integration
- Domestic Market Size
- Tariff Protection

HOW THIS CHAPTER WORKS

The chapter takes the fourteen pillars one at a time. Each gets the same read:

▶ WHAT IT MEASURES

the metric behind the pillar, in plain terms

e.g. all-in manufacturing labor, in \$/hour

▶ BUILT FROM

the drivers that make it up

e.g. productivity, direct & indirect pay

▶ IN THE SCORE

which way ranks higher, and the family it sits in

e.g. lower cost ranks higher · a base pillar

▶ WHY IT MATTERS

what the pillar does to a plant's economics

e.g. the cost that lands on every ton

▶ FIVE CHEAPEST, FIVE DEAREST

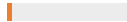
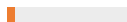
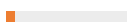
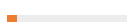

the field's extremes on that pillar, as a ranked bar

the five best and five worst of the 33






1 MANUFACTURING LABOR COSTS

Once output is counted, adjusted factory labor runs from about **\$2.3 in Indonesia** to **\$60 in Belgium** — a **26×** span. Saudi Arabia rises to **2nd** on high productivity; China holds **8th**, winning on the package, not the wage.

▲ TOP 5

1	Indonesia		\$2.3
2	Saudi Arabia		\$3.9
3	India		\$4.3
4	Philippines		\$5.2
5	Colombia		\$5.3

▼ BOTTOM 5

29	Norway		\$56.5
30	France		\$58.0
31	Netherlands		\$58.1
32	Germany		\$58.4
33	Belgium		\$60.3

WHAT IT MEASURES

What it costs an employer to run a factory worker for an hour, once output is counted.

BUILT FROM

- * **Direct pay** — base wages, overtime, bonuses and allowances
- * **Indirect pay** — benefits, social security and payroll contributions
- * **Productivity factor** — total employer cost scaled by output per worker (US = 1.0×)

IN THE SCORE

Lower cost ranks higher · one of eight base pillars.

WHY IT MATTERS


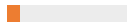
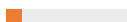
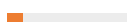

A commodity plant runs shift labor around the clock, so the hourly cost lands on every ton it ships.

Figure 6.1 · Adjusted labor cost, USD/h. Productivity-adjusted labor cost — pay scaled by output (USD). Five cheapest, five dearest of 33.






2 CONSTRUCTION LABOR COSTS

Once output is counted, adjusted construction labor runs from about **\$4.8 in Indonesia** to **\$82 in Japan** — a **17×** span. China holds **8th** near \$20; low site productivity, not high pay, pushes Japan to the foot.

▲ TOP 5

1	Indonesia		\$4.8
2	Philippines		\$8.8
3	Thailand		\$10.7
4	India		\$11.1
5	Turkey		\$11.1

▼ BOTTOM 5

29	Sweden		\$55.5
30	South Korea		\$55.9
31	Netherlands		\$57.1
32	Czech Rep.		\$58.1
33	Japan		\$81.7

WHAT IT MEASURES

What it costs to employ the skilled trades that build a process plant, once their output is counted.

BUILT FROM

- * **Direct pay** — base wages, overtime, bonuses and allowances
- * **Indirect pay** — benefits, social security and payroll contributions
- * **Productivity factor** — total employer cost scaled by output per worker (US = 1.0×)

IN THE SCORE

Lower cost ranks higher · one of eight base pillars.

WHY IT MATTERS

These trades pour the concrete and weld the pipe, so their wage sets a large slice of the upfront build bill.

Figure 6.2 · Adjusted labor cost, USD/h. Productivity-adjusted construction labor — pay scaled by output (USD). Five cheapest, five dearest of 33.

3 ENERGY & UTILITIES COSTS

On the full utility bill — power, gas, steam, water and industrial gases — Saudi Arabia leads the 33 and the United Kingdom trails, a **47-point gap** on the 0–100 scale. China ranks **4th**.

▲ TOP 5

1 Saudi Arabia		68.9
2 Russia		63.6
3 Indonesia		61.2
4 China		59.4
5 South Korea		58.6

▼ BOTTOM 5

29 Thailand		43.8
30 Norway		40.4
31 Brazil		37.9
32 Hungary		34.9
33 United Kingdom		21.8

WHAT IT MEASURES

What it costs to power a plant and feed it the utilities it runs on — electricity, gas, steam, water and industrial gases.

BUILT FROM

- * **Energy price** — the blended cost of power, gas and fuels
- * **Industrial utilities** — steam, process and cooling water, and industrial gases

IN THE SCORE

A cheaper power-and-utility base ranks higher · one of eight base pillars.

WHY IT MATTERS

Chemical and metals plants are energy-hungry, so a cheap power and utilities bill can decide whether a site clears its margin.

Figure 6.3 · Pillar score, 0–100 · higher = better. Energy & Utilities pillar score. Five highest, five lowest of 33.

4 CAPITAL & CONSTRUCTION COSTS

Building the plant, against the **United States at 1.0**: from **0.56 in Indonesia** to **1.52 in Sweden** — about **2.7×**. China builds at about 0.7×

▲ TOP 5

1 Indonesia		0.56
2 Philippines		0.59
3 Thailand		0.62
4 Colombia		0.65
5 India		0.69

▼ BOTTOM 5

29 Germany		1.32
30 Belgium		1.32
31 Netherlands		1.37
32 Czech Rep.		1.43
33 Sweden		1.52

WHAT IT MEASURES

What it costs to build a process plant from the ground up, measured against the US.

BUILT FROM

- * **Materials & equipment** — steel, cement and imported machinery, delivered
- * **Construction labor** — local crews, plus imported skilled labor where needed
- * **Business & logistics adjustments** — regulatory quality and the cost of moving goods

IN THE SCORE

Lower cost ranks higher · one of eight base pillars.

WHY IT MATTERS

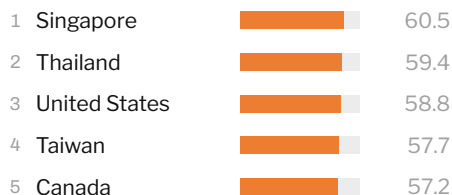
A new plant is a billion-dollar bet, and the build cost sets the bar every future ton of output has to clear.

Figure 6.4 · Plant build cost, US = 1.0. Plant build cost relative to the US (US = 1.0). Five lowest, five highest of 33.

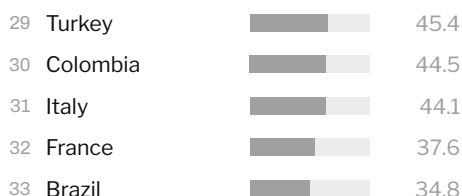
5 DOMESTIC TAX ENVIRONMENT

Across corporate income tax, consumption tax, employer payroll and equipment import duties, Singapore is the friendliest of the 33 and Brazil the heaviest — a **26-point gap** on the 0–100 scale. China ranks **24th**.

▲ TOP 5



▼ BOTTOM 5



WHAT IT MEASURES

The total tax a plant carries — corporate income, consumption, employer payroll and equipment import duties.

BUILT FROM

- * **Corporate income tax** — the statutory rate on profits
- * **Payroll & consumption** — employer social security and VAT/GST
- * **Equipment import duties** — tariffs on imported plant machinery

IN THE SCORE

A friendlier tax regime ranks higher · one of eight base pillars.

WHY IT MATTERS

A plant lives with the tax code for its whole life; a heavy profit, payroll or import levy quietly taxes every ton it makes.

Figure 6.5 · Pillar score, 0–100 · higher = friendlier. Domestic Tax pillar score. Five friendliest, five heaviest of 33.

6 LOGISTICS & INFRASTRUCTURE

China has the strongest logistics-and-infrastructure footing of the 33; South Africa trails the field, a 24-point gap on the 0–100 scale.

▲ TOP 5



▼ BOTTOM 5



WHAT IT MEASURES

How well a country moves goods inside its borders and out to the world.

BUILT FROM

- * **Transport networks** — road and rail reach, and the ports and shipping links
- * **Utility infrastructure** — the power, water and gas networks a plant plugs into
- * **Logistics efficiency & investment** — how well the system runs, and the capital going into it

IN THE SCORE

Stronger logistics ranks higher · one of eight base pillars.

WHY IT MATTERS

Feedstock comes in and product goes out by ship, rail and truck, so weak links add cost and delay to every shipment.

Figure 6.6 · Pillar score, 0–100 · higher = better. Logistics & Infrastructure pillar score. Five highest, five lowest of 33.

7 FREIGHT COSTS

Belgium holds the most competitive freight position — on interior connectivity, not sea access; the pure-port city-state of Singapore sits last.

▲ TOP 5

1	Belgium		57.8
2	Sweden		55.8
3	Poland		55.5
4	France		55.2
5	Germany		55.2

▼ BOTTOM 5

29	Japan		44.8
30	Brazil		44.5
31	Russia		43.4
32	South Africa		43.4
33	Singapore		42.3

WHAT IT MEASURES

What it costs to ship feedstock in and finished product out to market.

BUILT FROM

* **Maritime freight rates** — ocean freight across container, dry-bulk and liquid lanes, import and export

* **Inland freight rates** — the rail and road haul to and from port

IN THE SCORE

Stronger freight position ranks higher · one of eight base pillars.

WHY IT MATTERS

Commodities are heavy and low-value per ton, so the freight bill can swing a plant's delivered price more than its factory cost.

Figure 6.7 · Pillar score, 0–100 · higher = better. Freight pillar score. Five highest, five lowest of 33.

8 MACROECONOMIC ENVIRONMENT

Singapore offers the steadiest macroeconomic environment; Turkey anchors the field, dragged down by inflation.

▲ TOP 5

1	Singapore		58.1
2	Taiwan		57.4
3	Saudi Arabia		55.6
4	United States		54.9
5	Netherlands		54.4

▼ BOTTOM 5

29	South Africa		44.2
30	Colombia		43.8
31	Brazil		40.9
32	Russia		35.8
33	Turkey		24.4

WHAT IT MEASURES

How stable a country is to operate in — its inflation, currency and credit conditions.

BUILT FROM

* **Price stability** — steady, moderate inflation scores best

* **Exchange-rate stability** — how steadily the currency holds against the dollar

* **Financing conditions** — interest rates, credit standing and national savings

IN THE SCORE

Stronger stability ranks higher · one of eight base pillars.

WHY IT MATTERS

A plant signs long contracts and borrows for decades, so runaway inflation or a swinging currency can wreck a sound investment.

Figure 6.8 · Pillar score, 0–100 · higher = better. Macroeconomic pillar score. Five highest, five lowest of 33.

1 DOMESTIC MARKET SIZE

Market draw — China is #1 near 89, about 30 points clear of #2 India — the most lopsided standing in the brief.

▲ TOP 5

1	China		89.4
2	India		59.7
3	United States		58.0
4	South Korea		52.6
5	Germany		52.3

▼ BOTTOM 5

29	Finland		46.1
30	South Africa		46.0
31	Philippines		45.7
32	Norway		45.7
33	Chile		45.7

WHAT IT MEASURES

How large the in-country demand is for the commodity family.

BUILT FROM

* **Apparent consumption** — local production, plus imports, minus exports

* **Seven commodity families** — a representative basket each — olefins, polymers, fertilizers, metals and more — averaged at equal weight

IN THE SCORE

Stronger market ranks higher · one of six industry-specific pillars.

WHY IT MATTERS

A large home market lets a plant sell next door instead of exporting, sparing it freight and the swings of foreign demand.

Figure 6.9 · Pillar score, 0–100 · higher = better. Domestic market-size pillar score. Five highest, five lowest of 33.

2 INDUSTRIAL PRODUCTION

How strong a country is in the commodity industries themselves. China towers near 86, about 27 points clear of #2 the United States — the widest industry lead of the six.

▲ TOP 5

1	China		86.2
2	United States		59.1
3	India		55.2
4	South Korea		53.0
5	Taiwan		52.2

▼ BOTTOM 5

29	Hungary		46.4
30	South Africa		46.1
31	Chile		46.0
32	Philippines		45.9
33	Norway		45.8

WHAT IT MEASURES

How much of the commodity the country already makes, and at what scale.

BUILT FROM

* **Output volume** — physical production of each commodity, in tonnes or energy-equivalent

* **Seven commodity families** — a representative basket each — olefins, polymers, fertilizers, metals and more — averaged at equal weight

IN THE SCORE

Stronger production ranks higher · one of six industry-specific pillars.

WHY IT MATTERS

A deep production base brings suppliers, skilled workers and shared infrastructure that make the next plant cheaper to run.

Figure 6.10 · Pillar score, 0–100 · higher = better. Industrial-production pillar score. Five highest, five lowest of 33.

3 COMMODITY PRICES

The Philippines has the cheapest commodity-price position of the 33, just ahead of Indonesia and Singapore; Norway is the dearest.

▲ TOP 5

1	Philippines		57.4
2	Indonesia		57.1
3	Singapore		57.1
4	Thailand		56.9
5	Russia		55.4

▼ BOTTOM 5

29	Germany		45.5
30	Finland		45.0
31	Sweden		44.5
32	Hungary		43.9
33	Norway		43.7

WHAT IT MEASURES

The delivered price level of the country's commodity basket — its input-cost position.

BUILT FROM

- * **Delivered commodity price** — landed cost in USD/tonne; prices inverted, so the cheapest scores highest
- * **Seven commodity families** — a representative basket each — olefins, polymers, fertilizers, metals and more — averaged at equal weight

IN THE SCORE

A lower delivered price ranks higher — a structural input-cost edge · one of six industry-specific pillars.

WHY IT MATTERS

The commodity basket is the largest single input cost, so a cheaper local price is a standing advantage for every plant that buys it.

Figure 6.11 · Pillar score, 0–100 · higher = better. Commodity-prices pillar score. Five highest, five lowest of 33.

4 FEEDSTOCK-TO-PRODUCT MARGIN

Canada leads the feedstock-to-product margin, with South Africa and Saudi Arabia close behind; the field is tightly bunched.

▲ TOP 5

1	Canada		55.2
2	South Africa		53.9
3	Saudi Arabia		53.8
4	Norway		52.6
5	Turkey		52.5

▼ BOTTOM 5

29	South Korea		47.8
30	United Kingdom		46.8
31	Philippines		45.9
32	Colombia		45.1
33	Singapore		44.7

WHAT IT MEASURES

The spread between what feedstock costs and what the product sells for.

BUILT FROM

- * **Feedstock cost** — the price of the raw input the route runs on
- * **Product price** — what the finished commodity fetches
- * **Dominant production route** — assessed for each country's main feedstock-to-product path

IN THE SCORE

Wider margin ranks higher · one of six industry-specific pillars.

WHY IT MATTERS

The feedstock-to-product spread is where a commodity plant actually earns; cheap feedstock and a firm product price keep it in the black.

Figure 6.12 · Pillar score, 0–100 · higher = better. Feedstock-to-product-margin pillar score. Five highest, five lowest of 33.

5 GLOBAL TRADE INTEGRATION

Belgium is the most globally integrated on trade, ahead of the Netherlands and China; Mexico trails.

▲ TOP 5

1	Belgium		61.7
2	Netherlands		58.6
3	China		57.9
4	India		56.6
5	South Korea		55.2

▼ BOTTOM 5

29	Norway		44.6
30	Chile		43.8
31	Colombia		43.6
32	Philippines		43.5
33	Mexico		43.3

WHAT IT MEASURES

How tied the country's industry is to international trade flows.

BUILT FROM

- * **Export & import value** — the scale of trade flows in both directions
- * **Trade openness** — combined flows relative to the size of the economy
- * **Partner diversification** — how widely export and import partners are spread

IN THE SCORE

Stronger integration ranks higher · one of six industry-specific pillars.

WHY IT MATTERS

A well-connected industry can sell surplus abroad and source cheaper inputs, smoothing the booms and busts of its home market.

Figure 6.13 · Pillar score, 0–100 · higher = better. Global-trade-integration pillar score. Five highest, five lowest of 33.

6 TARIFF PROTECTION & MARKET ACCESS

Poland holds the most favorable tariff-protection and market-access position, with the Netherlands and France close behind; Taiwan sits at the foot.

▲ TOP 5

1	Poland		54.9
2	Netherlands		54.8
3	France		54.5
4	Spain		54.5
5	Mexico		54.3

▼ BOTTOM 5

29	South Africa		44.3
30	Japan		41.2
31	Russia		39.7
32	United States		39.4
33	Taiwan		35.0

WHAT IT MEASURES

The tariffs and trade barriers shaping what crosses the country's borders.

BUILT FROM

- * **Import protection** — the applied tariffs a country charges on incoming goods
- * **Export market access** — the tariffs its exporters face in destination markets

IN THE SCORE

More favorable access ranks higher · one of six industry-specific pillars.

WHY IT MATTERS

Tariffs decide whether a plant can reach export customers and whether cheaper imports undercut it at home.

Figure 6.14 · Pillar score, 0–100 · higher = better. Tariff-protection & market-access pillar score. Five highest, five lowest of 33.

The Full Picture

Set every country against every pillar and one lesson repeats: no country is strong everywhere. The economies that operate cheapest rarely lead on the industry itself, and the ones with the deepest industrial strength seldom offer the lowest cost base — competitiveness is a balance struck across the fourteen, not a single edge. Read each row as one country’s profile: where the orange runs deep it holds an advantage, where it fades to grey it leans on the rest.

Base pillars (8)

MfgLab = Manufacturing Labor · ConLab = Construction Labor · Enrgy = Energy & Utilities · Logis = Logistics & Infrastructure · Capit = Capital & Construction · Frght = Freight · Macro = Macroeconomic · Tax = Domestic Tax

Industry-Specific (6)

Prod = Industrial Production · Price = Commodity Prices · Marg = Feedstock-to-Product Margin · Trade = Global Trade Integration · Mkt = Domestic Market Size · Tarif = Tariff Protection & Market Access

RANK BAND 1-5 6-11 12-17 18-23 24-33

Table 6.1 Pillar map — every country on all 14 pillars, by rank (1 = best of 33). Base pillars (8) || Industry-Specific (6). Darker orange = stronger; grey = weaker.

	MfgLab	ConLab	Enrgy	Logis	Capit	Frght	Macro	Tax	Prod	Price	Marg	Trade	Mkt	Tarif
China	9	9	4	1	8	15	17	24	1	6	25	3	1	27
India	3	4	11	21	5	13	15	28	3	11	9	4	2	19
Indonesia	1	1	3	20	1	11	20	8	18	2	23	18	13	16
Saudi Arabia	2	11	1	17	13	28	3	16	7	9	3	9	8	28
Singapore	13	12	21	2	6	33	1	1	19	3	33	14	22	22
Thailand	7	3	29	30	3	14	28	2	17	4	28	16	18	24
Philippines	5	2	24	16	2	26	23	7	32	1	31	32	31	18
South Korea	17	32	5	4	22	9	5	14	4	8	29	5	4	25
United States	27	29	12	5	20	25	4	3	2	12	6	7	3	32
Canada	23	20	7	24	18	18	6	5	11	14	1	21	21	23
Turkey	10	5	23	14	7	16	33	29	20	13	5	12	14	14
Taiwan	11	18	28	8	11	22	2	4	5	7	22	13	15	33
Russia	8	8	2	32	10	31	32	25	9	5	11	26	7	31
Spain	20	10	15	18	17	8	19	27	14	21	13	15	12	4
Mexico	12	7	20	26	12	21	27	19	24	18	15	33	17	5
Colombia	4	6	6	31	4	20	30	30	22	15	32	31	25	20
Australia	25	25	9	22	14	24	14	13	25	19	12	6	23	6
Poland	18	17	18	28	21	3	25	17	21	25	20	19	20	1
Germany	32	22	17	13	29	5	10	21	6	29	8	8	5	12
Belgium	33	26	13	3	30	1	13	23	10	26	16	1	11	8
Italy	22	15	19	9	23	23	21	31	12	23	17	10	10	10
Hungary	15	16	32	15	15	19	26	6	29	32	18	22	27	13
Finland	26	23	10	19	25	10	12	18	23	30	10	25	29	7
Chile	14	13	27	27	9	27	24	20	31	17	27	30	33	26
Netherlands	31	30	16	7	31	17	7	15	16	27	19	2	19	2
France	29	24	14	12	27	4	16	32	15	24	14	11	16	3
Japan	21	33	22	6	26	29	11	9	8	10	24	17	6	30
South Africa	19	28	8	33	16	32	29	10	30	16	2	28	30	29
Czech Republic	16	27	25	11	32	6	18	22	26	28	26	23	26	9
Brazil	6	14	31	29	19	30	31	33	13	22	21	20	9	17
United Kingdom	24	19	33	10	24	12	22	11	28	20	30	24	24	15
Norway	30	21	30	25	28	7	8	12	33	33	4	29	32	21
Sweden	28	31	26	23	33	2	9	26	27	31	7	27	28	11

The gap after **Tax** separates the Base-pillars family (8) from the Industry-Specific family (6). 1 = best of 33, per pillar.

CHAPTER 7

Methodology & The Full Report

How the figures are built and bounded, who to call, and where the deeper, per-country detail lives — the fine print behind the headlines.

Where these figures come from. Intratec is an independent economics firm: it has no commercial ties to the markets it measures and no stake in where any country lands. The rankings are not survey results or expert opinion — they are computed from verifiable, quantitative data, and all 33 countries, together more than 80% of global manufacturing output, are assessed by exactly the same rules: the same 14 pillars, the same calculations, the same standards. No country is weighted, adjusted, or favored, and every figure passes two layers of validation — automated cross-checks, then expert review — before publication. The full methodology is open for inspection — no login, no subscription — at <https://methodology.intratec.us>.

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THE FULL REPORT

This brief is complete and self-standing — all 33 countries, the full ranking, real figures, nothing withheld. Behind it sits the full **Industry Economics & Competitiveness** program: **thirty-three country reports, refreshed monthly** — one per nation, each benchmarking its country against the entire field, pillar by pillar, across all seven industries. Where this brief gives a country a page, its report gives it the complete picture: every pillar broken down to its underlying metrics, the history behind each figure, and the forecasts. If this brief told you **where** a country stands, the country's own report tells you **why** — and what to watch next.

See the country reports at <https://intrat.ec/iie>, or reach us at press@intratec.us.

<https://intrat.ec/iie>

FIGURES FINAL, Q4 2025

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