

BUSINESS & MARKET DUE-DILIGENCE

The Door-Moving Specialist's Second *Diversification*

PHA owns the entire vehicle-door "moving" system but sells it almost wholly to one captive customer group. A debt-free balance sheet now funds a US/EV re-run of the co-location playbook — can it end better than China did?

KOSDAQ 043370 · PHA Co., Ltd.

FY2025 revenue	Operating margin	Net cash (debt-free)	Captive to Hyundai-Kia
₩1,200.7bn	4.0%	~₩137.7bn	~70%

Prepared for a consulting firm supporting M&A / investment due-diligence on PHA Co. and the global automotive door-closure sector. This is a business-analysis and market-research brief, not an equity research note: it contains no price target and treats sell-side targets only as third-party sentiment.

Evidence base · DART annual report 2025.12 (rcept 20260318000311) + Q1-2026 quarterly (rcept 20260515000715) + 5-yr structured consolidated financials, KRX 1-yr company panel, SEC EDGAR (Strattec), and adversarially-verified market research. The ~70% Hyundai-Kia share is a company-sourced web estimate (~2023), not an audited DART figure. Figures cited inline to source. · Seoul · 2026-06-16

Contents

EIGHT SECTIONS · ~32 PAGES

The monograph is built around a single analytical spine — the **captive specialist's self-help re-rating**: PHA owns the whole vehicle-door "moving" system (latch, hinge, striker, module, and the new power/electronic closure content) but sells it almost wholly into one customer group, Hyundai Motor Group. Its debt-free balance sheet now funds a deliberate two-engine diversification — a US/EV geographic re-shoring and a mechanical-to-mechatronic content shift — whose payoff is real but back-loaded to 2026–2028 and hostage to one anchor's US EV volumes. Every section is read through that lens.

—	Executive Summary <i>the thesis, five findings, and the three deal make-or-break factors</i>	3
1	The Company & Its One Product <i>door-moving systems, the captive Tier-1 model, the ~70% anchor</i>	5
2	The Lost Decade & the Recovery <i>2016 peak, China collapse, the five-year climb back to ₩1.2tn</i>	7
3	Products & Segment Economics <i>five families, the subsidiary P&L, capacity by region, the moat</i>	10
4	The Served Market & Forecast <i>four product markets, content-per-vehicle, the 5-year view</i>	14
5	Competitive Landscape <i>peers, the Kiekert insolvency, the Strattec contrast, positioning</i>	18
6	The Strategic Signal <i>two engines of diversification — Georgia geography and EV content</i>	22
7	Outlook & Scenarios <i>base/bull/bear to 2030, on a business basis</i>	26
8	Risk Register <i>the EV chasm, concentration, margin capture, governance</i>	28
—	Working With Nathan Research <i>compliant expert-network access for deeper, primary diligence</i>	29
A	Appendix <i>sources, methodology, data gaps, glossary</i>	31

HOW TO READ THIS DOCUMENT

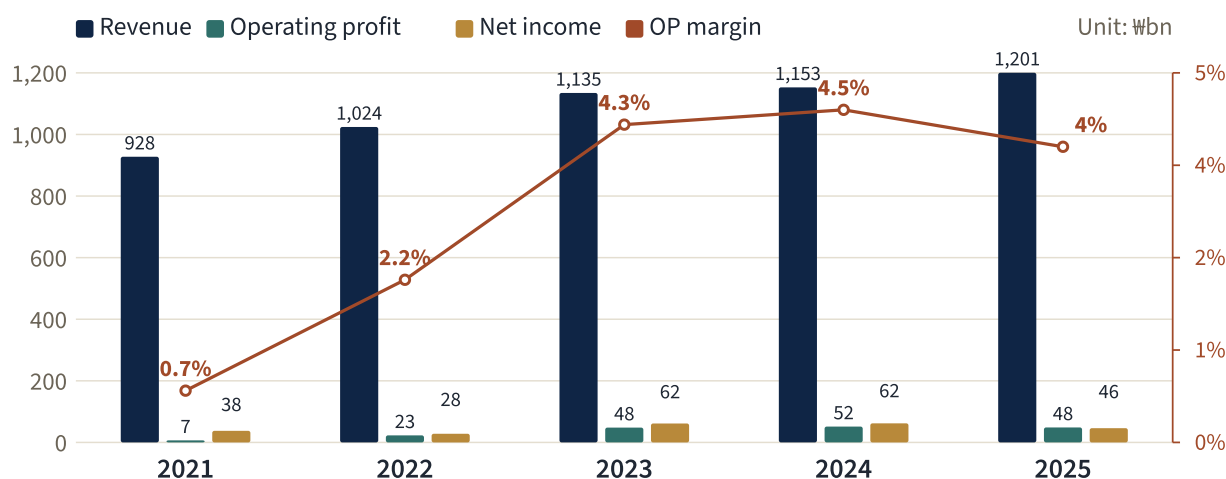
The number that matters most is not the +4.1% FY2025 revenue growth — it is the gap between a **debt-free, ₩137.7bn net-cash balance sheet** and a **~0.3× price-to-book discount**. A balance sheet that strong does not normally trade that cheap. The thesis of this report is that PHA is a captive door-closure specialist whose self-help re-rating turns on one question — whether the US/EV diversification breaks the ~70% single-customer dependence before the back-loaded plant losses become permanent.

Executive Summary

THE THESIS

PHA Co. (KOSDAQ 043370) is a cash-rich, deep-value Tier-1 specialist that owns one thing completely – the vehicle's **door "moving" system** (latch, hinge, striker, module, and the new power/electronic closure content) – and sells it almost entirely into a single captive customer group, Hyundai Motor Group, estimated at **~70% of revenue** Newspim 2023-05-31. In FY2025 it generated **₩1,200.7 bn of revenue (+4.1% YoY)** at a **4.0% operating margin**, and carries a debt-free balance sheet with **~₩137.7 bn of net cash** DART 20260318000311. The tension a buyer must price is between that fortress sheet and a persistent ~0.3× price-to-book discount: a company this solvent does not normally trade this cheap.

Exhibit 1 · Five years of recovery: revenue back to ₩1.2tn, but FY2025 margin slipped even as revenue rose



Source: DART 20260318000311 (annual report 2025.12), 5-yr consolidated CFS. OP margin on right-hand 0–5% scale.

That ~70% concentration is both moat and cage. As a moat it is 40 years of design-in lock-in, plants co-located beside Hyundai-Kia's factories, and switching costs that re-validate an entire closure system. As a cage it is a decade of stalled revenue – the 2016 peak of ₩1.22tn was only re-crossed in FY2025 – and a "no independent growth engine" discount the market applies to a captive supplier. The company is now executing a deliberate, two-engine self-help re-rating: a **geographic engine** (a US\$67mn / ₩87bn plant in Georgia, co-located with Hyundai's new EV Metaplant) and a **content engine** (mechanical latch and hinge → mechatronic e-latch, power tailgate, power-frunk, charge-port door) Manufacturing Dive; DART 20260318000311.

THE ONE-SENTENCE THESIS

PHA owns the entire vehicle-door moving system but sells it almost wholly to one captive customer group; its debt-free balance sheet now funds a US/EV re-run of the co-location playbook whose payoff is real but back-loaded to 2026–2028 and hostage to one anchor's US EV volumes — and the entity that embodies the diversification (PHA America) is also the group's biggest FY2025 margin drag. The dominant question is whether Georgia ends better than China did. The signal is not greenfield optimism: it is a *correction* of a prior diversification (China, 2016–2021), re-running the same co-location playbook in the US with EVs instead of China with ICE.

Five findings a diligence team should anchor on

- 1 The balance sheet is the asset, and it is a competitive weapon.** Net cash ~₩137.7bn (~55% of market cap), debt-free, retained earnings ₩769.9bn ≈ 2.8× market cap DART 20260318000311 — standing out precisely as the latch incumbent (Kiekert) files insolvency and the module leader (Brose) explores a stake sale.
- 2 The diversification is already in the P&L — on both sides.** North-America revenue grew **+24% YoY in Q1-2025** with door-module +17%, the exact content-mix shift the signal predicts Hana Securities 2025-05-16. But PHA America also posted a **-₩4.5bn FY2025 net loss** on start-up cost — the group's single biggest margin drag DART 20260318000311.
- 3 The content engine is the more durable half.** R&D doubled from 2.04% to **4.18% of parent revenue** (FY2023→FY2025), aimed at e-latch, power-frunk and charge-port content — markets growing ~2× the mechanical base DART 20260318000311; Dataintel. Geography bets on one customer's US volumes; content lifts revenue-per-car across every customer.
- 4 The competitive set is destabilising in PHA's favour — but the cautionary read is North America.** Kiekert (~21% latch share) filed insolvency 2025-09-23 and Brose is exploring a stake sale; yet Strattec earns money in NA latch/power-access where PHA America loses it — making the NA loss look like execution, not market MarkLines; EDGAR STRT.
- 5 The discount is structural, not directional.** Short interest ran 0.00–0.10% of float all year — the ~0.3× price-to-book is a captive-supplier / thin-float discount, and value funds (VIP 8.72%, Kopernik 6.19%) are accumulating against a 61.6% insider bloc KRX short_balance.csv; DART 20260401000721.

The three deal make-or-break factors**1 • The Georgia bet**

Does the HMGMA EV ramp hold, inverting PHA America's -₩4.5bn loss into the margin the thesis assumes from 2026 — or does Georgia become a second China?

2 • Breaking the ~70%

Will the EV-startup and global-OEM names scale from supercar-grade volume to material revenue, or does diversification stay a slide, not a P&L line?

3 • Capital & control

A 61.6% insider bloc, a ~0.3× book discount and undeployed net cash set the governance an acquirer inherits — plus the unresolved 2026-05 insider trade-plans.

1 The Company & Its One Product

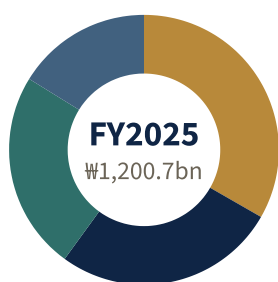
DOOR-MOVING SYSTEMS

PHA (founded 1985 as Pyeonghwa Precision, KOSDAQ-listed 2001, renamed PHA in March 2021) is a Daegu-based automotive Tier-1 with a single domain: the **door "moving" / closure system** — the mechanisms that open, close, lock, lift and motorise a vehicle's doors, hood, trunk and tailgate DART 20260318000311. It is not a broad parts conglomerate. It owns one corner of the car — the closure — and owns it completely, across five product families: latch, door module, hinge, striker, and an "other" bucket of power and electronic content.

One product, sold one way, to ~one customer

The business model is **captive Tier-1 OEM supply**. PHA co-develops parts with an automaker at the new-model design-in stage, wins the platform, then supplies under OEM contracts pegged to the carmaker's build schedule — there is no separate order backlog; volume follows the customer's build plan DART 20260318000311. Its customer roster spans 15-plus global OEMs (Hyundai, Kia, GM, Stellantis, Nissan, Ford, BMW, and program-level EV names), but the revenue weight is concentrated: Hyundai Motor Group is estimated at **~70% of revenue** — a company-sourced figure of ~2023 vintage, not an audited DART disclosure Newspim 2023-05-31.

Exhibit 2 · FY2025 revenue mix: the "other" power/electronic bucket is the largest single line and the growth engine



<ul style="list-style-type: none"> ■ Other — power/electronic <small>₩399.4bn · AHLS, PTG, PSD, frunk, ECU</small> ■ Latch — the franchise <small>₩321.1bn · the highest-volume part</small> ■ Door module <small>₩285.6bn · fastest-growing (+17% Q1)</small> ■ Hinge <small>₩194.5bn · aluminium lightweighting</small> 	<p>33.3</p> <p>26.7</p> <p>23.8</p> <p>16.2</p>
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Source: DART 20260318000311, product-family revenue table. Striker is folded into the price/product tables.

The structural distinction from a point-product latch maker is that PHA owns the **full door-moving stack** — mechanical latch, striker, hinge, the integrated module, and the latch ECU/controller it builds in-house (including 24V variants). That breadth lets it sell the whole "door moving system" rather than ceding the electronics to a larger Tier-1 such as Mobis or Continental, and it is the reason PHA captures the mechanical→mechatronic content step instead of being commoditised out of it ^{DART 20260318000311; Komachine}. The switching cost is structural: a latch is hard-tooled, crash-validated and OEM-homologated, so the carmaker re-validates the entire closure system if it changes supplier mid-platform.

<p>FY2025 revenue</p> <p>₩1,200.7bn</p> <p>+4.1% YoY · re-crossed 2016 peak</p>	<p>Operating margin</p> <p>4.0%</p> <p>down from 4.5% FY2024</p>	<p>Net cash</p> <p>~₩137.7bn</p> <p>debt-free · D/E ~35%</p>	<p>R&D / parent rev.</p> <p>4.18%</p> <p>doubled from 2.04% (FY2023)</p>
<p>Patents registered</p> <p>356</p> <p>592 applied · full stack</p>	<p>Group affiliates</p> <p>16 + 16</p> <p>domestic + overseas</p>	<p>Share count</p> <p>21.0mn</p> <p>flat · no capital event</p>	<p>Insider bloc</p> <p>61.6%</p> <p>PHC family holdco-led</p>

Why this matters for diligence

Value PHA on its **installed design-in position and its net-cash optionality**, not its 4% operating margin. The margin is thin because the business is a captive, cost-down-pressured Tier-1 with a brand-new loss-making US plant in the run-rate; the franchise value is the 40-year lock-in on Hyundai-Kia's closures plus a balance sheet that can fund a re-rating without dilution. The whole investment case — covered across this brief — is whether management can convert that optionality into a broken concentration before the diversification's start-up costs ossify.

THE CAPTIVE PARADOX

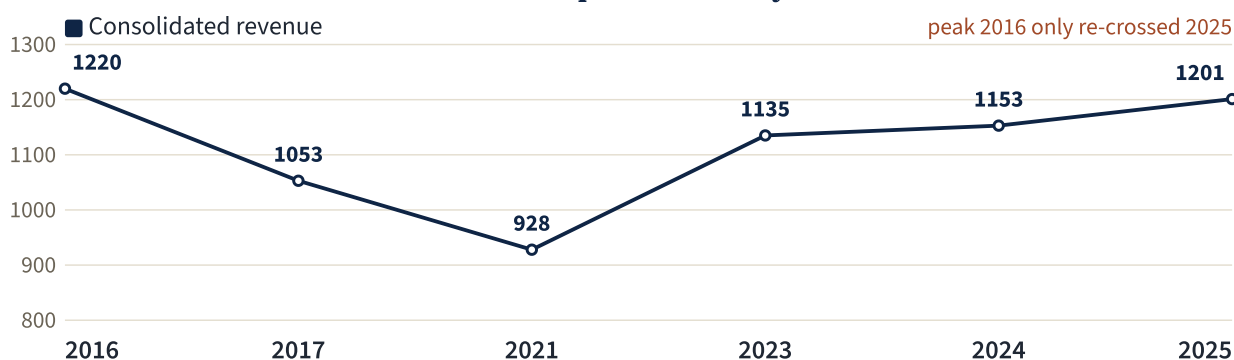
The ~70% Hyundai-Kia dependence is simultaneously PHA's **moat** (design-in lock-in, co-located plants, OEM switching cost) and its **cage** (no independent growth engine, a structural multiple discount, and exposure to a single group's volume cycle). Everything management is now doing — Georgia, EV content, global-OEM courtship — is an attempt to move that one number down. Treat the ~70% as the report's central variable, and remember it is an estimate, not a disclosed figure.

2 The Lost Decade & the Recovery

PEAK, TROUGH, RE-CROSS

PHA's defining financial fact is not its FY2025 result — it is the decade that preceded it. Consolidated revenue **peaked at ₩1.22tn in 2016**, fell to ₩1.053tn in 2017 (−13.8%), bottomed near **₩927.6bn in 2021** (a ~24% peak-to-trough decline), and only re-crossed the 2016 peak in **FY2025** at ₩1,200.7bn ^{thebell 2022-10-14; DART 20260318000311}. Nine years of revenue with nothing to show for it is the empirical root of the "no growth engine" discount — and the reason the diversification signal exists.

Exhibit 3 · The lost decade in one line: the 2016 peak took nine years to re-cross



Source: thebell (2016/2017/2021 external sales history) + DART 20260318000311 (FY2023–25 consolidated). Pre-2021 figures are external (pre-DART-window).

The proximate cause was **China**. PHA had drawn roughly 30–40% of revenue from overseas subsidiaries, about half of that from China; when Hyundai-Kia's China sales crashed from 2017, PHA's co-located Chinese plants went with them ^{thebell 2018-03-22}. At one point five of seven main overseas affiliates were loss-making, led by Beijing PHA (−₩16.4bn) ^{thebell 2016-06-13}. That history still echoes: in FY2025, Chinese plant utilisation runs only 43–66% and Beijing PHA was again loss-making (−₩1.5bn) ^{DART 20260318000311}.

THE SKEPTICAL READ OF "DIVERSIFICATION"

The China episode is the reason a buyer cannot take the US/EV story at face value. PHA's growth playbook — **co-locate a plant beside the captive customer's new overseas factory** — is precisely what it did in China, and it produced a decade of stranded capacity when the anchor's local volumes disappointed. The Georgia plant re-runs that exact playbook in the United States. Whether the outcome differs turns entirely on whether US EV volumes hold up better than China ICE volumes did — an open question given the 2025–2026 EV demand "chasm."

The recovery from the FY2021 trough was real but unspectacular: revenue compounded ~6.7%/yr 2021→2025 while operating margin climbed from a post-pandemic 0.7% to a 4.0–4.5% band. The five-year walk below is the spine of the business case — note that FY2025 is the inflection that should give a buyer pause.

Exhibit 4 · The five-year P&L walk, FY2021–FY2025 (consolidated, Wbn)

Wbn (consolidated)	FY2021	FY2022	FY2023	FY2024	FY2025	Q1-26
Revenue	927.6	1,024.4	1,134.6	1,152.9	1,200.7	305.2
Operating profit	6.6	22.9	48.3	51.5	48.4	13.3
OP margin	0.7%	2.2%	4.3%	4.5%	4.0%	4.4%
Gross profit	100.7	125.7	138.9	151.6	146.2	—
Net income (owners)	37.6	28.3	61.5	61.9	46.3	18.3
Total equity	645.8	673.1	721.0	800.2	844.9	864.3
R&D (parent)	—	—	13.7	26.6	29.0	—
Capex (PP&E acq.)	20.7	15.6	64.8	62.9	49.6	—

Source: DART 20260318000311 (annual, structured CFS) + 20260515000715 (Q1-2026). FY2025 = 41st term. EPS (consolidated): FY2023 ₩3,011 / FY2024 ₩3,171 / FY2025 ₩2,369.

Reading the trajectory

- ▶ **Post-pandemic trough → recovery.** OP margin bottomed at 0.7% in FY2021 and climbed steadily to ~4.5% by FY2024. (FY2021 net income of ₩37.6bn far exceeds operating profit because of large non-operating income that year.)
- ▶ **FY2025 is the inflection a buyer must explain.** Revenue rose +4.1% but operating profit fell -5.9% and net income fell -25% YoY (₩61.9bn → ₩46.3bn), driven by weaker overseas-subsiary profitability — chiefly North America
DART 20260318000311.
- ▶ **Q1-2026 keeps the warning live.** Revenue +2.1% YoY but OP -18.8% (₩16.3bn → ₩13.3bn); net income +20.7% only on non-operating help. The annualised run-rate is ≈₩1.22tn DART 20260515000715.

The most diligence-relevant feature of the recovery is **where the cash went**.

Capex stepped up sharply in FY2023–FY2024 (₩64.8bn and ₩62.9bn vs. ₩15–21bn in FY2021–22), funding the overseas plant build in Georgia and India; R&D more than doubled to ₩29.0bn, lifting the R&D-to-parent-revenue ratio from 2.04% to 4.18% DART 20260318000311. This is a company visibly re-allocating capital from a static domestic base toward the two diversification engines — geography and content — even as the reported margin slips. The slip is the cost of the build; the question is the payoff.

The FY2025 margin inflection, decomposed

FY2025's down-margin-despite-up-revenue is not a demand problem — group revenue grew and the order pipeline is healthy. It is an **overseas start-up problem**: PHA America carried ~₩294bn of revenue at a -₩4.5bn net loss as a brand-new Georgia plant absorbed labour, depreciation and US tariff cost ahead of utilisation, while Chinese plants ran at 43–66% DART 20260318000311. Sell-side framing (Hana) treats the FY2025 operating stall as temporary, with fixed-cost leverage rescuing margin from 2026 as US and India utilisation rises Hana Securities 2025-05-16. That is the single most important assumption in the entire forward case — and it is unproven as of mid-2026.

THE SIGNAL IN THE NUMBERS

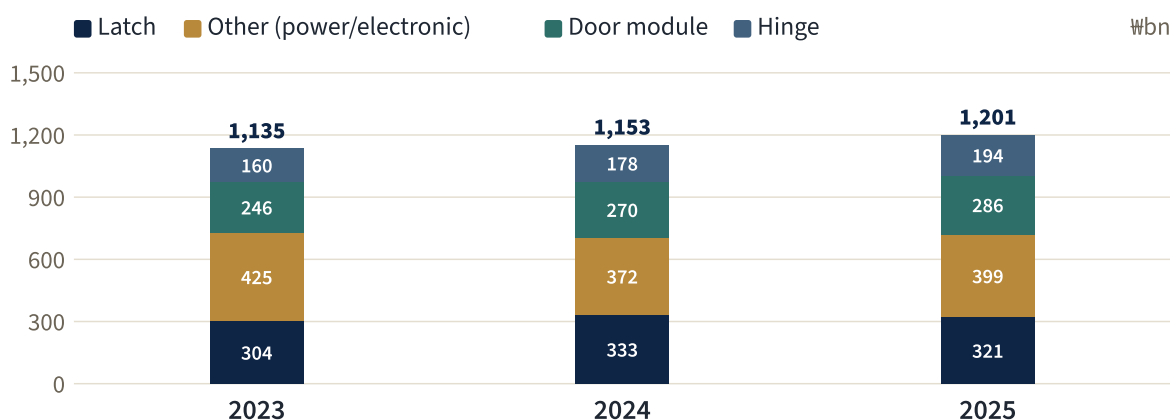
The five-year story is a captive supplier that stopped shrinking and started **spending against a plan** — capex into US/India plants, R&D into EV content. FY2025's weaker margin is the visible bill for that plan. A buyer's entire view of PHA reduces to one judgement: **is the -₩4.5bn North-America loss a temporary start-up cost that inverts with volume, or the first instalment of a second China?** Sections 6 and 7 underwrite both sides.

3 Products & Segment Economics

WHERE THE MARGIN LIVES

PHA's revenue decomposes into five product families – latch, the "other" power/electronic bucket, door module, hinge and striker – but the economics are better understood as one franchise (the latch-to-ECU stack) with three adjacent value-capture plays bolted on. The mix is shifting in exactly the direction the diversification thesis requires: away from the mature mechanical latch and toward the module and the electronic content.

Exhibit 5 · Product-family mix, FY2023–FY2025: the module and "other" lines grow while latch flattens



Source: DART 20260318000311, product-family revenue table (₩bn). "Other" = AHLS, power tailgate, power sliding door, frunk, ECUs; striker folded in.

THE FRANCHISE – LATCH (26.7%, ₩321.1BN)

The latch is fixed to the door and engages the body-mounted striker; PHA makes latches for every closure point – doors, seats, hoods, trunks, tailgates. Its upgrade path is the **E-latch**, which replaces the mechanical Bowden cable with electric-signal control (flush handles, soft-close cinching, ECU interlocks) – and PHA builds the latch ECUs in-house, owning the full latch-to-ECU stack phakr.com; DART 20260318000311. The latch line was –4% YoY in Q1-2025 (a mature core), but the electronic sub-line is growing – the mix-shift in miniature.

THE GROWTH BUCKET – "OTHER" POWER/ELECTRONIC (33.3%, ₩399.4BN)

The largest single line and the EV-content carrier: power tailgate / power trunk lid (run through the **Edscha PHA JV** with Germany's Edscha/Gestamp), power sliding door and BLDC drive units, power-frunk (net-new content per EV), charge-port doors, and the Active Hood Lift System. PHA's "low-noise, lightweight compact power trunk lid system" won the IR52 Jang Young-sil Award (2021) ir52.com; gestamp.com.

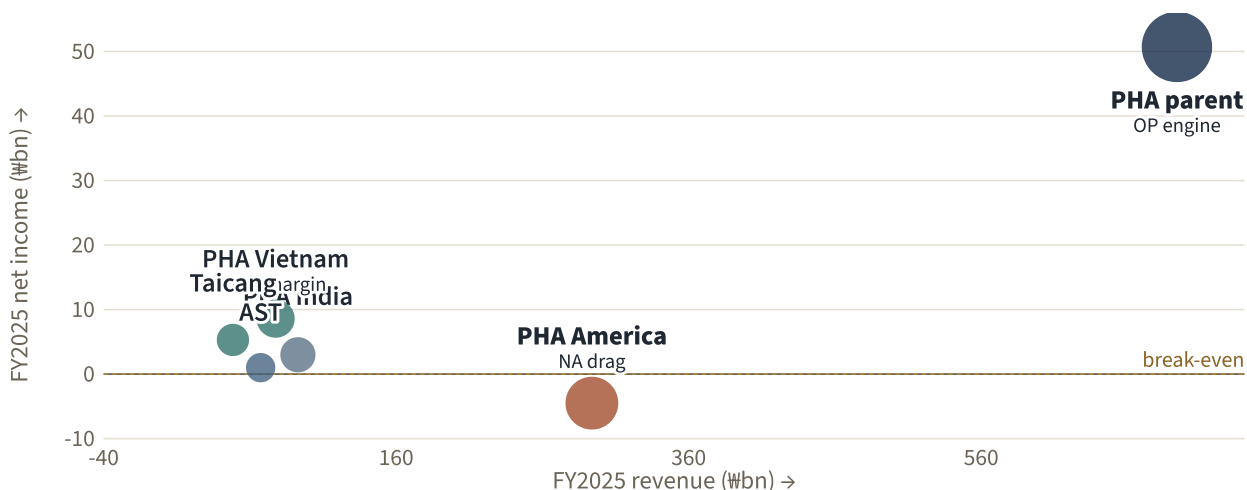
THE VALUE-CAPTURE PLAY – DOOR MODULE (23.8%, ₩285.6BN)

A pre-assembled door-inner carrier bundling latch, window regulator, wiring, speakers and seals into one bolt-on unit. Because PHA owns its own latch and a lightweight aluminium-guide-rail regulator, the module lets it capture latch + regulator + integration margin and lock the whole door corner – rather than ceding it to a systems integrator. It is the **fastest-growing family (+17% YoY in Q1-2025)** and the lead product, with latches, for the new Georgia plant feeding Hyundai's Metaplant Hana Securities 2025-05-16.

THE LIGHTWEIGHTING LEVER – HINGE (16.2%, ₩194.5BN)

Door, hood, trunk and tailgate hinges; the technology lever is aluminium lightweighting (mass / CO₂ / EV range), with engineering flowing from the Edscha/Gestamp tailgate-hinge relationship. Structurally it is the fastest-growing of PHA's conventional markets (Section 4) DART 20260318000311.

Exhibit 6 · Subsidiary P&L, FY2025: PHA America is the largest overseas revenue line and the only material loss



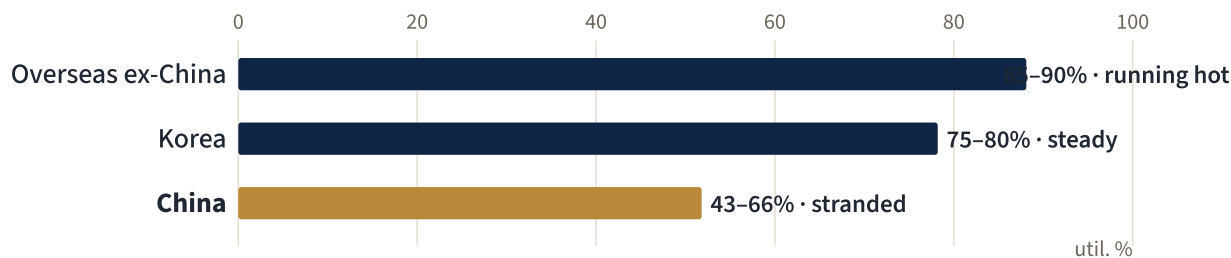
Source: DART 20260318000311, consolidated subsidiary P&L (pre-elimination, ₩bn). Bubble area = revenue. The remaining smaller subs sit in the same near-break-even band and are omitted for legibility: Slovakia +₩0.7bn, Yancheng +₩1.7bn (profit); Czech -₩0.5bn, Beijing -₩1.5bn (loss).

The subsidiary map is the segment story in one chart. The parent earns the group's profit (₩50.7bn net on ₩693.9bn revenue); Vietnam, Taicang and India are profitable; and **PHA America is the outlier** – ~₩294bn of revenue (the largest overseas contributor) at a -₩4.5bn net loss, worsening from -₩1.7bn in FY2024 DART 20260318000311. The diversification's flagship entity is also its biggest drag. That is the central economic fact of FY2025.

Capacity utilisation by region is the clearest read on where PHA's footprint earns and where it strands capital. The pattern is stark: overseas-ex-China plants (Czech, Slovakia, India, Vietnam, North America) run hot at 85–90%; Korea is steady at 75–80%; and China is sharply under-utilised at 43–66% — the residue of the post-2016 China collapse and intensified local competition

DART 20260318000311.

Exhibit 7 · Capacity utilisation by region, FY2025: China is stranded; the overseas-ex-China cluster runs hot



Source: DART 20260318000311, capacity-utilisation table (average across LATCH / HINGE / STRIKER / D-MODULE / OTHER). China = 43–66% range; "overseas" = ex-China cluster.

The region / export split — the Korean parent is now an export base

Exhibit 8 · Revenue by region and domestic/export, FY2024–FY2025 (consolidated, ₩bn, pre-elimination)

Channel	FY2024	% of total	FY2025	% of total	Read
Korea — domestic	351.1	30.5%	270.5	22.5%	shrinking
Korea — export	395.1	34.3%	490.8	40.9%	+24% — the swing
Other regions (overseas ex-China)	570.6	49.5%	586.8	48.9%	steady
China	88.3	7.7%	96.8	8.1%	stranded
Intercompany elimination	(252.2)	—	(244.2)	—	—

Source: DART 20260318000311, Section 4 (domestic/export) + region table. Percentages are of consolidated total before elimination, so they exceed 100% in aggregate.

The signal here is subtle but important: **Korea-entity export jumped ₩395bn → ₩491bn while Korea domestic fell ₩351bn → ₩271bn**. The Korean parent is increasingly an export base — shipping to global OEMs and to PHA's own foreign plants — so the "Korea segment" now tracks global content growth, not the slow Korea domestic market DART 20260318000311. The captive-plus-domestic caricature understates how globalised the revenue already is.

The cross-line moat — owning the whole door corner

The defensible economic point is that PHA is the only Korean specialist that owns the **full door-moving stack**: mechanical latch + striker + hinge + integrated module + the latch ECU/controller. That lets it capture the mechanical→mechatronic content step internally instead of ceding the electronics to a Tier-1 such as Mobis or Continental — and it lets it sell the door module (not just the latch), capturing regulator and integration margin on top DART 20260318000311; Komachine. The moat is depth-of-scope within one corner of the car, paid for with single-customer dependence.

Where the R&D is pointed

Parent R&D of ₩29.0bn (4.18% of parent revenue, FY2025) is almost entirely aimed at the electronification of closures: e-latch and PBV e-latch, 24V door-latch ECUs, power-frunk drive units, PSD/PTG drive and gate-driver controllers, anti-pinch controllers, aluminium hood/trunk-lid hinges, and charge-port doors. The Suwon EV centre is hiring DSP/MCU firmware, radar-sensor and circuit-design staff — a software/electronics capability build, not a metal-bending one DART 20260318000311. The IP base is 356 registered / 592 applied patents; some core latch IP is in-licensed (Minebea 2003 at 3%, Mitsuba 2015), which caps margin capture on the electronic upgrade.

SEGMENT VERDICT

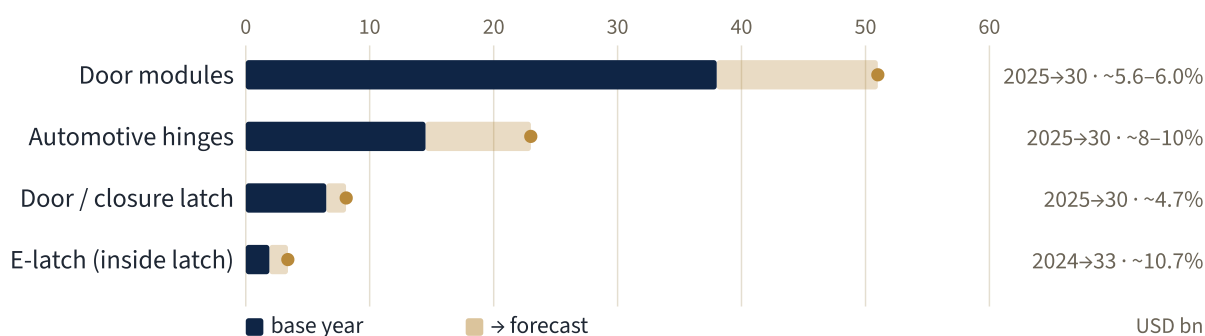
PHA's product economics are a **mature mechanical core (latch, hinge) cross-subsidising a content build (module, e-latch, power closures)**, with the whole apparatus running through a captive Hyundai-Kia channel. The mix is moving the right way — module +17%, electronics growing, latch flat — but the value capture on the electronic step is contested and partly licensed-in. The segment that decides the next three years is not a product line at all; it is a geography — North America — where the franchise is being re-platformed at a loss.

4 The Served Market & Forecast

CONTENT, NOT VOLUME

PHA's served market is not "cars" — it is four distinct global product markets (latch, module, hinge, and the power/electronic basket) sitting on top of one volume driver: global light-vehicle build, ~88.7M units in 2025 (-0.4% YoY) and roughly flat-to-+1-2%/yr to 2030 ^{S&P Global Mobility}. With unit volume essentially static, **PHA's growth must come from content-per-vehicle** — electrification, safety regulation and EV-only SKUs — not from the car count.

Exhibit 9 · PHA's four served markets, 2025 → 2030: hinge and the e-latch sub-segment outgrow the latch base



Source: Mordor / 360iResearch (latch); GII / Strategic MR (module); Fortune BI / MRFR (hinge); Dataintelo / FMI (e-latch). Vendor scopes differ; figures are mid-band [SOURCED]. PHA shares are not shown — see text.

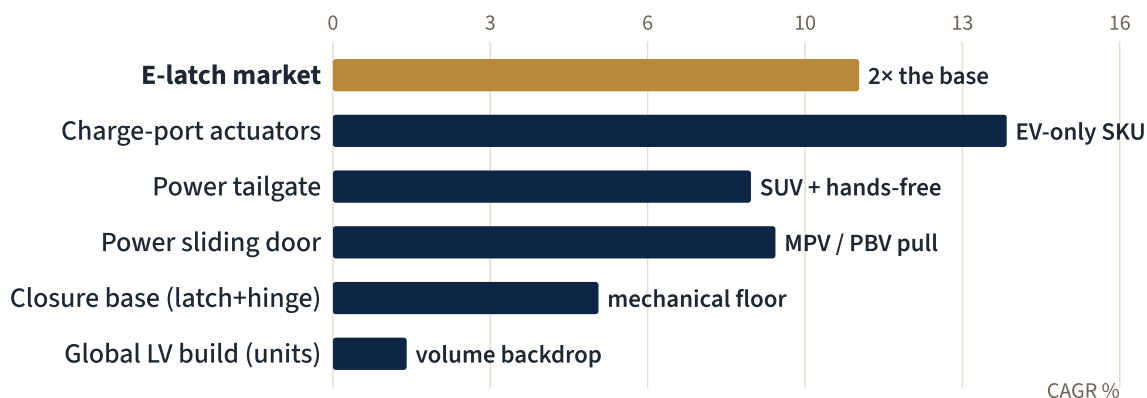
The four markets and PHA's position in each (all shares are NRG estimates from PHA segment revenue ÷ vendor market size, flagged where they diverge by scope):

- ▶ **Door / closure latch** — ~USD 6.5bn (2025), ~4.7% CAGR; PHA ₩321bn implies a **~3–4% global share [NRG estimate]**. The headline is slow, but the growth is inside the mix: e-latch is already 58.7% of the latch market and grows ~6.6%, with EV-segment latch cited as high as 15.3% ^{Mordor}.
- ▶ **Door modules** — ~USD 38bn (2025), ~5.6–6.0% CAGR; PHA ₩286bn ≈ **~0.5–0.6% share [NRG estimate]** — small globally, but understated because much of PHA's module value is captive Hyundai-Kia content ^{GII Research}.
- ▶ **Hinges** — ~USD 6–14.5bn by scope (2025), ~8–10% CAGR; PHA ₩195bn ≈ **~1.2–2.4% share [NRG estimate]**; aluminium lightweighting pushes PHA into the higher-ASP, faster sub-segment ^{Fortune BI}.
- ▶ **"Other" / power-electronic** — a basket worth ~USD 12–20bn, blended ~8–12% CAGR — roughly double the conventional base per-submarket [SOURCED/EST].

The single most important structural fact for PHA's forward case is that **the electronic and EV-only sub-markets grow at roughly twice the rate of the mechanical base**. A standalone e-latch print runs USD 1.86bn (2024) → 4.31bn (2033), a 10.7% CAGR; charge-port actuators compound 13.7%; power tailgate and power sliding door run ~8–9%. The mechanical closure base (latch + hinge) grows ~5.4%, and global unit volume only ~1–2%

Dataintelo; FMI; Strategic MR; S&P Global Mobility.

Exhibit 10 · Content-per-vehicle migration: the electronic and EV-only closure markets grow ~2× the mechanical base



Source: Dataintelo / FMI (e-latch, charge-port); Strategic MR / GM Insights (power tailgate / sliding door); FMI (closure base); S&P Global Mobility (LV build). CAGRs to ~2030–2033 [SOURCED].

This is why PHA's largest revenue bucket ("other," 33.3%) is also its fastest, and why the EV-content thesis is the right forward frame. Every EV lifts PHA's content-per-car: the engine bay becomes a **frunk** needing its own latch + drive + ECU; the rear gets a power tailgate; the doors get e-latch / ghost-closing; and the EV adds a charge-port door — each a net-new SKU where an ICE car had a simple mechanical latch ^{DART 20260318000311; Growth Market Reports}. PHA's R&D log maps onto this list almost item-for-item.

THE HONEST COUNTER

The content tailwind is a demand fact, not a margin guarantee. E-latch is a **contested field** (Brose, Kiekert, Magna, Aisin, U-Shin), and PHA in-licenses some core latch IP (Minebea, Mitsuba royalties), so a share of the electronic upgrade's value accrues to whoever owns the IP, not to PHA. The risk on the content engine is competitive margin capture, not market growth — the inverse of the geographic engine, whose risk is demand.

The cross-cutting drivers — mostly tailwinds, one whipsaw

Exhibit 11 · Structural drivers of PHA's served markets, 2026–2030

Vector	What it does to PHA's markets	Direction
Electrification	Each EV adds e-latch + frunk + charge-port door + heavier-closure hinge; HMG targets ~1.51M Korea-built EVs by 2030	Tailwind (content ↑)
Safety regulation	US adopts UN GTR-9 pedestrian protection as FMVSS (Sep 2024) — mandates active-hood-lift fitment in the last major holdout market	Tailwind (mandated)
Convenience creep	Power tailgate (~8%), power sliding door (~7–13%), flush/e-latch handles, hands-free	Tailwind
Lightweighting	Aluminium hinges/regulators raise ASP per part	Tailwind (value ↑)
Global build volume	~88.7M units 2025, flat-to-low-single-digit to 2030	Neutral / slight drag
US Section 232 tariffs	25% (Apr-25) → 15% (KR-US deal) → ~10% (Feb-26, post-SCOTUS); favours US-local plants, pressures Korea export	Mixed — whipsaw
China localisation	Local Tier-1 substitution; PHA China plants 43–66% utilised	Headwind in China

Source: S&P Global Mobility; MarkLines/CNBC (HMG EV); Federal Register 2024 (GTR-9); Strategic MR / GM Insights; Congress.gov CRS / S&P Ratings (tariffs). [SOURCED]

The tariff vector is the one that cuts both ways, and it is the strategic key to the whole Georgia decision. US Section-232 auto-parts tariffs took effect in 2025 at 25%, were cut to 15% under a Korea-US agreement, and fell toward ~10% by February 2026 after the Supreme Court struck the IEEPA tariffs. Whatever the exact rate, the regime **structurally favours production inside the US over Korea export** — which is precisely why PHA built Georgia, and why North-America revenue is large even while still loss-making Congress.gov CRS; S&P Ratings. The -W4.5bn NA loss is the entry cost into the fastest, most-protected slice of PHA's served markets.

The forecast view — the market offers more than PHA is capturing

Revenue-weighting PHA's four markets (latch ~4.7%, module ~6%, hinge ~8%, "other" ~8–12%) yields a **blended served-market CAGR of ~6–8% [NRG estimate]** — against ~1–2% global unit volume and ~3.3% for the Korea auto-parts aggregate Expert Market Research. The entire gap is content-per-vehicle: electrification, safety regulation, and EV-only SKUs. PHA out-grows the Korea aggregate because its mix is tilted to the faster electronic sub-segments and because it exports and localises rather than depending on flat Korea domestic build.

But here is the uncomfortable read: PHA's own FY2025 revenue growth of **+4.1% ran below its ~6–8% served-market CAGR**. The market is offering more growth than PHA is currently capturing — and the North-America ramp is the bridge between the two. If Georgia ramps, PHA closes the gap toward its served-market rate; if it stalls, PHA stays a sub-market-growth captive supplier and the discount persists DART 20260318000311; market sources.

MARKET READ FOR THE BRIEF

The served market is genuinely attractive — ~6–8% blended, content-driven, EV-levered, and partly protected by US tariff geography. That is a better backdrop than the captive-cyclical caricature implies. The question the market data *cannot* answer is execution: PHA has under-captured its own served-market growth, and the instrument meant to close that gap (Georgia) is the same instrument carrying the loss. The market is not the risk; the conversion is.

A NOTE ON MARKET-SIZING DIVERGENCE

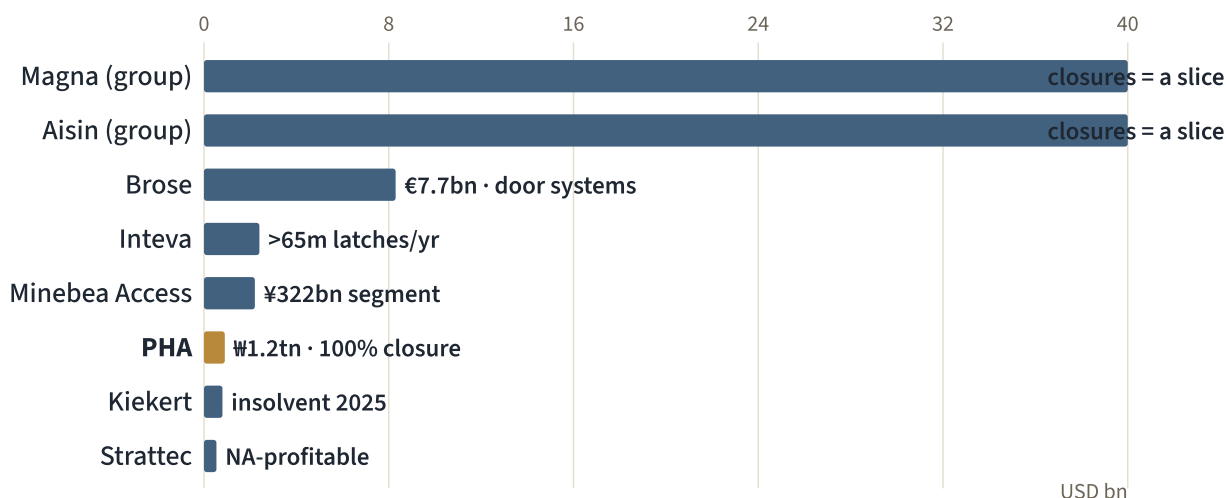
Third-party market sizes diverge widely by scope — whether "module" includes glass and wiring, whether "latch" counts side-door only or all closures — so every figure above is presented as a range with source basis, never as a single audited number. PHA's own global latch and module shares are not disclosed anywhere; all share figures are NRG estimates and flagged as such.

5 Competitive Landscape

SPECIALIST, NOT GENERALIST

The first thing a buyer must get right about PHA's competition is that **PHA is not a whole-vehicle Tier-1**. Comparing it on group revenue to Magna (~\$40bn), Aisin (~\$40bn) or Brose (€7.7bn) is misleading — those firms do door systems as one line among dozens. The like-for-like contest is the door-closure sub-segment, and there PHA's entire ₩1.2tn company (~\$0.9bn) is roughly the size of the latch leader's latch sales alone.

Exhibit 12 · Peer scale: PHA is a mid-tier specialist — the generalists' bars are mostly non-competing slices



Source: company filings/IR [hard]; market-research vendor estimates for "competing slice." Magna/Aisin group revenue dwarfs the door-closure line they actually compete with PHA on.

Read the bars with the caveat in the sublabels: Magna's and Aisin's ~\$40bn are **group** revenue, of which door closures are a slice; Brose's €7.7bn is door + seat + drive systems. The firms that actually contest PHA's product — on a like-for-like door-closure basis — are the latch/closure specialists: Kiekert, Mitsui Kinzoku ACT, Minebea AccessSolutions, Inteva and Strattec. Against that set PHA is a credible global mid-tier (plausibly top-10 in latches, though no hard global share exists for it) that survives by being the captive, co-located, full-door-system specialist to Hyundai-Kia — not by winning open global share Mordor; company filings.

The cycle's defining event — **Kiekert files insolvency**

The single most important competitive-landscape event of the cycle is the collapse of the latch incumbent. **Kiekert** — the German inventor of central locking, ~21% global latch share, >\$800m sales, China-owned (Hebei/North Lingyun) since 2012 — **filed for insolvency on 23 September 2025** after its owner declined a triple-digit-million funding injection; proceedings were opened by the Wuppertal court on 1 December 2025. No orders have been lost and multiple investors are bidding, but the #1 latch incumbent is financially destabilised and its European/NA latch business is in play

MarkLines; all-about-industries.

The second incumbent is also retrenching: **Brose** (€7.7bn, the ~18%-share door-module leader) is margin-squeezed and reportedly exploring a partial stake sale [Brose press](#); [Just-Auto](#). Two of the three apex closure names are simultaneously distressed.

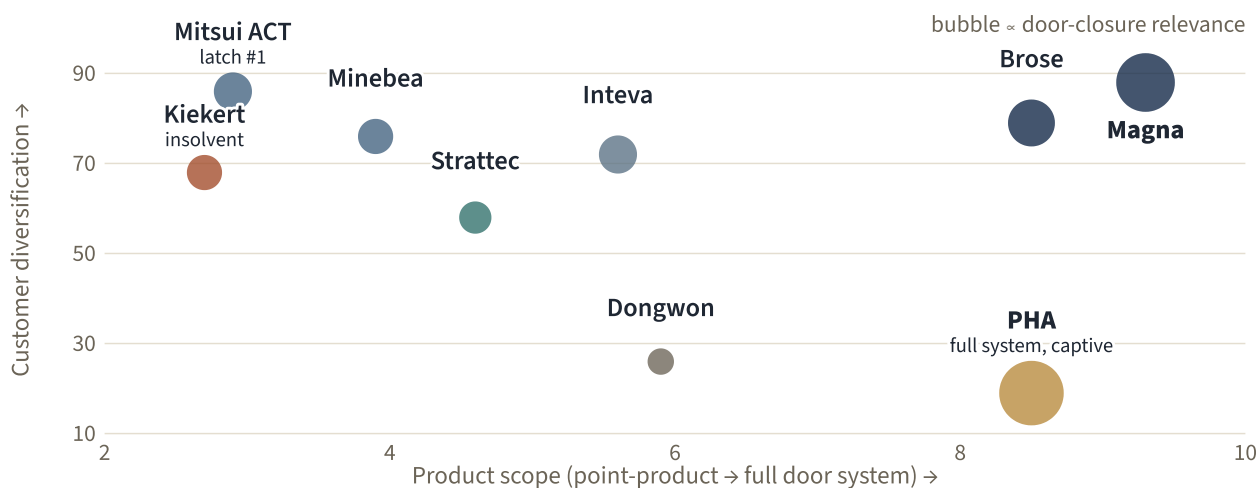
WHY THE KIEKERT INSOLVENCY VALIDATES THE PHA THESIS

Kiekert's distress is the empirical proof of the exact fragility PHA's balance sheet inverts: a balance-sheet-light, China-owned latch pure-play could not survive a downcycle. PHA — **debt-free, with ~\$137.7bn net cash** — is the structural opposite. In principle it could absorb displaced Kiekert volume or even bid on assets; in practice it has shown **no M&A appetite to date**, and its thin float and ~0.3× book limit equity-funded consolidation. The balance sheet is a competitive weapon PHA is holstering, not firing — which is itself a governance question for a buyer.

The pointed contrast — Strattec earns in North America where PHA loses

The most uncomfortable comparable for PHA is **Strattec Security** (NASDAQ: STRT) — the closest listed read-across: ~\$0.5bn revenue, latch + power-access focus, North-America-centric, with a truck/pickup content theme. Strattec posted FY2024 net sales of \$537.8m (+9.1%) and a strong FY2025, growing on "additional latch and power-access content on a major truck platform," and is **profitable in exactly the North-American market where PHA America loses money** EDGAR STRT; stockanalysis. The same model — latch + power access on US truck/EV platforms — works for Strattec. That makes PHA's NA loss look like execution and start-up timing, not a broken market.

Exhibit 13 · Positioning map: PHA is uniquely high on product scope but uniquely captive on customer base



Source: NRG synthesis of competitor filings/IR + market-research vendor scope estimates. X = product scope (point-product → full door system); Y = customer diversification. Bubble ∝ door-closure relevance.

The map locates the niche precisely. Magna and Brose sit top-right (scale + breadth + diversified OEM base — the quadrant PHA cannot reach). The latch champions — Mitsui, Kiekert, Minebea, Inteva — sit upper-left-to-centre (narrower scope, but globally diversified). **PHA sits centre-right and low:** to the right of the pure latch players (it integrates the whole door system) but far below them on customer diversification. It occupies the "full-system specialist, single-customer-anchored" cell — a defensible niche that trades a multiple discount for stability. Dongwon Metal sits inside PHA's domestic shadow (frames only).

MOAT, RANKED BY DURABILITY

- ▶ **Captive co-development lock-in** — ~70% HMG, design-in, co-located plants, high OEM switching cost.
- ▶ **Full door-closure bundling** — latch + hinge + striker + module + actuator under one roof vs. point-product rivals.
- ▶ **Balance-sheet resilience** — net cash ₩137.7bn, debt-free — a weapon as Kiekert fails and Brose retrenches.
- ▶ **Mechatronic/EV content build** — forward, unproven; contested IP.

VULNERABILITY, RANKED BY SEVERITY

- ▶ **~70% single-customer concentration** — no independent growth engine; caps multiple and pricing power.
- ▶ **North America loss-making** while Strattec profits there — the loss reads as execution.
- ▶ **No global latch-share leadership** — sub-scale vs. apex generalists.
- ▶ **China stranded capacity** (43–66% util.) and a thin-float / governance discount.

Exhibit 14 · Where PHA wins and loses, by rival

Rival	PHA wins on	PHA loses on
Mitsui Kinzoku ACT	Full-door-system bundling; HMG lock-in	Global latch share / scale
Kiekert	Balance-sheet survival (Kiekert insolvent); HMG stability	Brand as "the latch leader," EU/NA share
Brose	HMG embeddedness; debt-free vs. Brose's squeeze	Global module scale; mechatronics depth
Magna	Single-OEM intimacy; Asia cost	Footprint, breadth, EV-program scale
Strattec	Net cash; HMG captive volume	NA profitability & power-access truck content
Dongwon Metal	Latch/hinge/module breadth; global plants; 2x scale	(PHA wins broadly; Dongwon overlaps on frames only)

Source: NRG synthesis; competitor figures from filings/IR [hard] and market-research vendors [MR-est]. Kiekert insolvency: MarkLines. Strattec: EDGAR STRT.

The defensible one-line read. PHA is the broadest-scope door-closure specialist in the Hyundai-Kia ecosystem — it sells the whole door-moving system, not just a latch — purchased at the cost of single-customer dependence and a global-share ceiling; and its debt-free sheet now stands out precisely as the latch incumbent collapses and the module leader retrenches. The competitive set is moving in PHA's favour; the open question is whether PHA's governance will let it press the advantage.

6 The Strategic Signal

TWO ENGINES OF DIVERSIFICATION

The strategic signal is management's deliberate answer to the lost decade: break the ~70% Hyundai-Kia dependence by running **two engines simultaneously** — a geographic engine (the US Georgia plant) and a content engine (mechanical → mechatronic closures). It is not greenfield optimism. It is a *correction* of a prior diversification (China) that went wrong, re-running the same co-location playbook in the US with EVs instead of China with ICE.

The signal is also personified. PHA renamed from Pyeonghwa Precision in March 2021 with "global and innovation" as its new vision pillars, and in April 2022 installed **CEO Heo Seung-hyun** — a Hyundai Motor / Hyundai Engineering alumnus — with an explicit "escape stagnation" mandate [thebell 2022-10-14](#). The diversification is a stated corporate strategy with a hired executive attached to it, not an analyst's inference.

Exhibit 15 · The diversification chronology: rename → professionalisation → the Georgia keystone → the back-loaded payoff



Source: DART 20260318000311; thebell 2022-10-14; Manufacturing Dive; Hyundai Newsroom. The 2026–2028 layer reflects the ~2-year order-to-revenue lag management cites.

The two engines differ in kind, and a buyer should hold them apart. The geographic engine is a **one-time, concentrated bet on a single customer's US volumes** — high-conviction, well-documented, and already in revenue, but exposed to the EV demand cycle. The content engine is a **secular, diffuse mix-shift across every customer** — more durable, but with the value capture contested by larger rivals and partly capped by in-licensed IP. The first is the catalyst; the second is the compounder.

Engine #1 – Geographic: the US Georgia plant

The keystone move, and the best-documented piece of the signal. **PHA Georgia LLC** (established July 2024) is a US\$67mn / ₩87bn, 402-job plant in Chatham County beside Hyundai's Metaplant America (HMGMA), feeding door modules, tailgate and hood latches directly onto the line, with EV applications cited for Rivian and Hyundai Genesis *Manufacturing Dive*. The anchor is large: HMGMA opened for full production in October 2024, held its grand opening on 26 March 2026, and is designed for **500,000 EV/hybrid units a year** (Ioniq 5/9, expanding to Kia/Genesis) as part of Hyundai's \$12.6bn Georgia investment

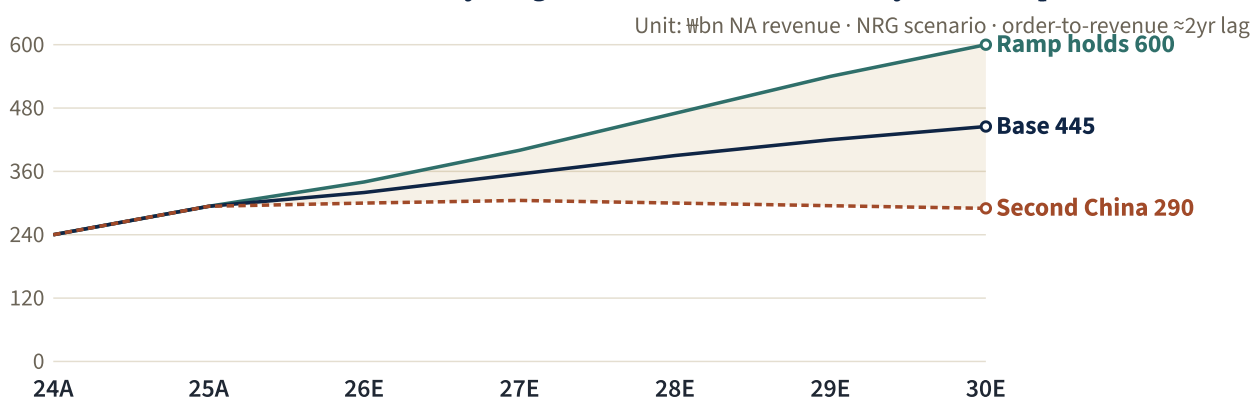
Hyundai Newsroom,

Exhibit 16 · The Georgia plant, at a glance

Dimension	Detail
Entity / established	PHA Georgia LLC · July 2024 (NA entities renamed 2023: Alabama, Michigan)
Investment / jobs	US\$67mn ≈ ₩87bn · 402 jobs · Chatham County / Savannah
Co-location	Beside Hyundai Metaplant America (HMGMA), Bryan County, GA
Products	Door modules, tailgate latches, hood latches (direct line-feed); EV apps Rivian + Genesis
Ramp / target	Operations from 2H-2024, ramping through 2027; ~₩100bn annual revenue target in ~3 years
Dual rationale	Growth lever AND Section-232 tariff hedge ("export → local production")

Source: DART 20260318000311; Manufacturing Dive; Hana Securities 2025-05-16. The ~₩100bn target is management guidance, not a disclosed order book.

Exhibit 17 · North-America revenue layering: the bet inverts the loss only if the ramp holds



Source: NRG scenario model anchored on FY2025 PHA America revenue (₩294bn) + management's ~₩100bn incremental target. Illustrative — not a forecast of disclosed figures.

Engine #1 — the evidence both ways

The evidence it is working. With the new plant live and an FX tailwind, North-America revenue grew **+24% YoY in Q1-2025**; by product, door module +17% and electronic parts +2%, offsetting latch -4% and flat hinge

Hana Securities 2025-05-16. That is exactly the content-mix shift the signal predicts — module and electronics growing while the mechanical core flattens. The tariff logic is also working in PHA's favour: capacity *inside* the US, beside the customer, converts a tariff threat into a relative advantage over export-only competitors, and the "export → local production" shift is meant to drive fixed-cost leverage and margin from 2026.

The evidence it is costly. The same NA entity is the FY2025 margin drag — ~₩294bn of revenue at a -₩4.5bn loss as a brand-new plant absorbs labour, depreciation and tariff cost before utilisation scales. The sell-side thesis explicitly assumes the FY2025 operating stall is *temporary* and that operating leverage rescues margin from 2026 DART 20260318000311; Hana Securities 2025-05-16. As of mid-2026 that assumption is unproven, and Q1-2026 group OP was still -18.8% YoY.

THE CHINA-REDUX RISK, STATED PLAINLY

If HMGMA's EV ramp disappoints — the 2025–2026 North-American EV "chasm," IRA/credit rollbacks, slower Ioniq volumes — the Georgia plant under-utilises and the -₩4.5bn loss persists instead of inverting. That is the precise failure mode of the China episode: high revenue, structural losses, stranded capacity. The entire signal's payoff is **back-loaded to 2026–2028 and hostage to one customer's US EV volumes**. A buyer underwrites this engine by underwriting HMGMA's volume curve, not PHA's.

Engine #2 — Content: mechanical latch → EV mechatronics

The second axis is content-per-vehicle, not geography — and it is the more durable half. The addressable-market math is the structural tailwind: the door latch & hinge market runs ~USD 43bn (2025) → 68.1bn (2035) at ~5.4%; the closure market ~USD 29.7bn (2024) → 52.4bn (2033) at ~5.8%; and the **e-latch market ~USD 1.86bn (2024) → 4.31bn (2033) at 10.7% — roughly 2× the mechanical base** ^{FMI; Growth Market Reports; Dataintel}. PHA's R&D pivot maps onto this almost item-for-item, and R&D/parent-revenue doubled from 2.04% to 4.18% — capital allocation visibly tilting toward the content engine.

Why EVs lift PHA's content: no engine means the front becomes a **frunk** (new latch + drive + ECU); the rear gets a power tailgate; the doors get e-latch / ghost-closing; and the EV adds a charge-port door. Each is incremental electronic content PHA can sell where an ICE car had a simple mechanical latch. This engine lifts revenue-per-car across *every* customer, captive or not — which is why it is more durable than a single-customer geographic bet. The risk, as Section 4 noted, is competitive (margin capture by IP owners), not demand.

NET READ ON THE SIGNAL

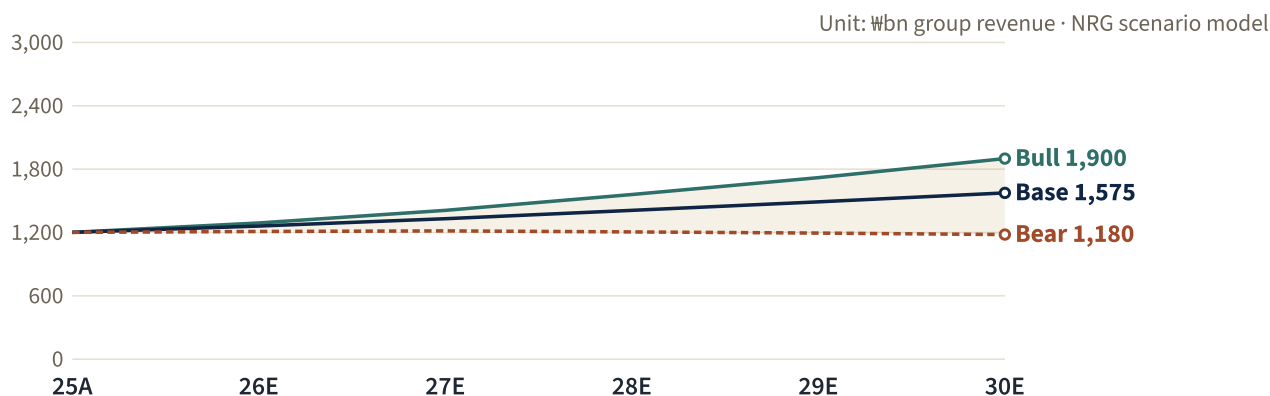
The signal is **directionally correct and partly de-risked** — the plant is built, NA revenue grew +24%, the content mix is shifting, R&D doubled. But the payoff is **back-loaded to 2026–2028 and hostage to one customer's US EV volumes**. This is a self-help re-rating with a real catalyst (Georgia, content) and a real swing factor (HMGMA volumes), not a secular winner-takes-most growth story. The value funds accumulating the stock (VIP 8.72%, Kopernik 6.19%) are paying ~0.25× book for exactly this optionality — context for a buyer, not an investment hook.

7 Outlook & Scenarios

2026–2030, ON A BUSINESS BASIS

PHA's forward path is a function of two variables: whether the Georgia ramp inverts the North-America loss, and whether the EV-startup and global-OEM names scale from supercar-grade volume to material revenue. The base case is a modest re-acceleration on the geographic engine alone; the bull case requires the content engine to scale; the bear case is a second China.

Exhibit 18 · Group revenue scenarios to 2030: a modest base, a content-driven bull, a stalled bear



Source: NRG scenario model. Base anchored on Hana Securities 2025-05-16 (₩1,261bn 2026F, ~5% CAGR 2025–27); bull/bear are NRG sensitivities. Not a price target; a business-trajectory illustration.

Bull

~₩1.9tn

Georgia ramps to full utilisation, inverting the NA loss; EV-startup names (Rivian/Tesla/Lucid) scale to mass volume; e-latch and frunk lift revenue-per-car on Hyundai-Kia's own Ioniq line. Margin recovers toward 5%+. The content engine compounds across all customers.

Base

~₩1.6tn

The geographic engine delivers a ~5% revenue CAGR (2025–27) as US/India plants leverage up; NA loss narrows but diversification stays modest. PHA re-rates as a self-help story, not a growth story. Concentration eases slightly, not decisively.

Bear

~₩1.2tn

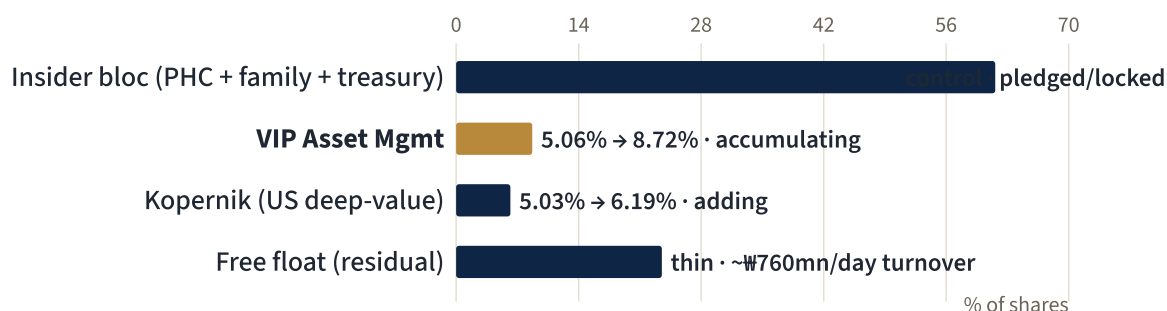
HMGMA EV volumes disappoint (the 2025–26 chasm); Georgia under-utilises and the ₩4.5bn NA loss persists; China stays stranded at 43–66%. Revenue flatlines near ₩1.2tn — a second China. The discount is validated.

The spread between bull and bear is wide because it is driven almost entirely by one exogenous variable PHA does not control: the HMGMA EV volume curve. That is the honest shape of the investment — a captive supplier's forward case is its anchor's forward case, plus a content option.

The capital-allocation and ownership context

The forward case has a governance overlay a buyer must weigh. Ownership is locked and value-investor-watched: a controlling bloc of ~61.6% (PHC family holdco-led), against which two deep-value funds have been accumulating — VIP Asset Management from 5.06% to **8.72%** and US-based Kopernik from 5.03% to **6.19%**, while Shinyoung exited DART 20260401000721; 20260206002110. The thesis they are buying is a cheap balance sheet plus a credible self-help catalyst — not a trading story.

Exhibit 19 · Ownership: value funds accumulate against a locked insider bloc and a thin free float



Source: DART 5%-holder reports (20260401000721 VIP; 20260206002110 Kopernik) + annual report ownership table (20260318000311). Free float is residual; turnover ~₩760mn/day (KRX ohlcv.csv).

One governance flag is unresolved and should be diligenced: the controlling family (Kim Sang-tae, Kim Do-yeon) filed pre-disclosure insider trade-plans on 11 May 2026, but the **direction and size are not public** — controlling-family selling into a value-fund-driven re-rating would be a negative tell DART 20260511000364 / 370. Separately, the market expresses no borrow-driven bear thesis: short interest ran 0.00–0.10% of float all year, so the ~0.3× price-to-book is a structural captive-supplier and thin-float discount, not a directional short KRX short_balance.csv. (KRX market data is contextual color here, not a valuation input.)

Outlook verdict. Across scenarios, PHA is a debt-free captive specialist whose forward value is its anchor's volume curve plus a content option, re-rated by a self-help diversification that is real but back-loaded. The base case is a modest re-acceleration; the upside needs the content engine to scale; the downside is a second China. A buyer is underwriting **HMGMA's EV ramp and PHA's willingness to deploy its idle balance sheet** — the two variables that move the band.

8 Risk Register

RANKED BY SEVERITY

The risks are concentration- and execution-shaped, not solvency-shaped — the balance sheet removes financial-distress risk entirely. They are diligenceable, and ranked here by their power to break the forward case.

- 1 **The EV demand chasm / Georgia-becomes-China.** If HMGMA's EV ramp stalls (2025–26 NA EV softness, IRA/credit rollbacks), Georgia under-utilises and the –\$4.5bn NA loss persists instead of inverting. The single biggest swing factor; back-loaded payoff DART 20260318000311.
- 2 **Concentration unbroken (~70% HMG).** If diversification stays a slide not a P&L line, PHA remains a captive cyclical re-rated only as much as its anchor — capping multiple and pricing power Newspim 2023-05-31.
- 3 **Margin capture vs. market growth.** Content growth accrues to whoever owns the e-latch IP; PHA's in-licensing (Minebea/Mitsuba royalties) and a contested e-latch field (Brose/Kiekert/Magna/Aisin) cap the upside on the content engine DART 20260318000311.
- 4 **China stranded capacity (43–66% util.).** Intensified local Chinese closure competition — the same dynamic that destabilised China-owned Kiekert — leaves PHA's China plants as stranded capital DART 20260318000311.
- 5 **Tariff-geography whipsaw.** Section-232 favours US-local but the rate path is volatile (25% → 15% → ~10%, SCOTUS/policy-dependent), and Korea-export margin is pressured Congress.gov CRS.
- 6 **Governance / thin-float discount + insider trade-plan overhang.** A 61.6% insider bloc, ~0.3× book, and 2026-05 insider trade-plans of undisclosed direction; family selling into the re-rating would be a negative tell DART 20260511000364 / 370.
- 7 **Apex-generalist & latch-champion scale gap.** Against Magna/Brose breadth and Mitsui/Minebea latch share, PHA lacks the footprint and headline share to win non-HMG OEMs on scale alone market sources.

RISK SYNTHESIS

Note what is *absent*: there is no liquidity, leverage or going-concern risk — the net-cash sheet removes it. Every live risk is a variation on one theme: **the diversification must convert before the cost of building it ossifies**. Risks 1, 2 and 6 are the deal-breakers; the rest are manageable. Underwrite the HMGMA volume curve and the insider trade-plan direction first.

Working With Nathan Research

COMPLIANT EXPERT NETWORK

Filings and press establish the *shape* of this business; they do not capture the operating detail that decides a deal — the real state of the Georgia ramp, the per-customer reality behind the ~70% number, the texture of the EV-startup programs. That detail lives with the people who engineered, sold, sourced and competed with these products — and reaching them, compliantly, is what Nathan Research does.

Nathan Research Group operates **Korea's first dedicated expert-network service, established in 2013**. We were built for the global private-equity, hedge-fund, or corporate-strategy team that has a thesis on a Korean asset and needs primary, on-the-ground diligence that public disclosure cannot supply. The Korean automotive supply chain — and the Hyundai-Kia Tier-1 ecosystem in particular — is one of our deepest benches.

Who we put in the room

For a PHA or door-closure engagement, we source, vet, and convene primary experts across the value chain:

- ▶ **Former executives & engineers** — from PHA and its domestic and global closure peers
- ▶ **OEM sourcing & platform buyers** — Hyundai-Kia and global-OEM purchasing who set door-content awards
- ▶ **Mechatronics & e-latch specialists** — latch ECU, power-closure drive and frunk-system designers
- ▶ **US/Georgia plant & HMGMA supply-base contacts** — ramp, utilisation and tariff-localisation reality
- ▶ **Tier-1 competitors & distributors** — Kiekert, Brose, Strattec, Mitsui and Korean body-parts peers
- ▶ **Regulatory & trade specialists** — Section-232 / GTR-9 pedestrian-protection and EV-incentive experts

How an engagement works

1 • Scope

We translate your thesis into a precise expert profile and question set, mapped to the diligence decisions you need to close.

2 • Source & vet

We identify, screen, and compliance-clear each expert — confirming relevance, recency, and the absence of conflicts before any call.

3 • Convene & synthesize

We arrange interviews on your timeline and, where useful, deliver written synthesis tied back to the questions in this brief.

THE QUESTIONS THIS BRIEF LEAVES OPEN — AND WE CAN HELP CLOSE

The Georgia ramp — the real utilisation curve and order book behind the ~\$100bn target, and when the ~\$4.5bn loss inverts. **The ~70% number** — the per-customer, per-program reality, and whether Rivian/Tesla/Lucid volumes are scaling or flat. **Capital & control** — the direction of the 2026-05 insider trade-plans and management's appetite to deploy the idle net cash. None is answerable from filings alone; all are diligence-able with the right primary voices.

Partner With Nathan Research

START THE CONVERSATION

If your team is evaluating **PHA Co.**, the **automotive door-closure / door-moving sector**, or the broader **Hyundai-Kia Tier-1 supply chain**, we would welcome the conversation. Tell us the decision you are trying to make – we will tell you, candidly, whether and how our network can help you make it.

What to expect when you reach out: A direct reply from a partner, not an intake form – and a scoping conversation rather than a sales call. From there: a compliant, conflict-cleared expert panel assembled to your timeline, and, where useful, written synthesis that builds directly on the analysis in this monograph.

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Compliance This brief is based solely on public disclosures and media sources. Nathan Research does not request or facilitate the exchange of material non-public information, trade secrets, confidential supplier or customer contracts, or undisclosed pricing, order-book, or per-customer volume data – and runs every engagement through a documented compliance protocol with expert attestations and client-defined restricted-topic lists, agreed before the first call.

A Appendix

SOURCES · METHODOLOGY · DATA GAPS

Evidence base & methodology

This monograph synthesises a full inventory of primary and secondary sources, assembled and cross-checked on 2026-06-16. Figures are cited inline to source; where independent sources disagreed (notably market sizing), ranges are presented with attribution rather than single-vendor point estimates. Every market share attributed to PHA is an NRG estimate (segment revenue ÷ vendor market size) and flagged as such.

Regulatory (DART, primary): annual report 2025.12 (receipt **20260318000311**, filed 2026-03-18) and its 5-year structured consolidated financial statements (fnlTtSinglAcntAll CFS); quarterly report 2026.03 (**20260515000715**, filed 2026-05-15); large-holding (5%) reports – VIP Asset Mgmt (**20260401000721**), Kopernik Global Investors (**20260206002110**), Shinyoung exit (**20260203000299**); 5%-aggregation (**20260611000416**); insider trade-plans (**20260511000364 / 370**, direction not disclosed).

Market (KRX): by_company/pha OHLCV, short_balance, short_volume, universe (1-yr, 2025-05-26 → 2026-06-15) – used only as a demand/sentiment overlay, never as a valuation input. Listed shares flat 21.0mn cross-check DART (no capital event).

Peers (SEC EDGAR): Strattec Security (NASDAQ: STRT) as the closest listed NA latch/power-access read-across. EDGAR returns 0 hits for PHA (PHA America is a private LLC).

Company & sell-side: Hana Securities (2025-05-16, US-plant note – NA +24%, ~5% CAGR 2025-27); Korea-IR-Service (2022, deploy-the-cash critique); company site (phakr.com), Komachine supplier profile; target prices treated only as third-party sentiment, never as a valuation conclusion.

News: thebell (2016–2022, lost-decade / China history), Newspim (2023, ~70% HMG estimate + EV diversification), Manufacturing Dive / theguru (Georgia plant), Hyundai Newsroom (HMGMA grand opening), MarkLines (Kiekert insolvency).

Web market research (adversarially verified): latch (Mordor, 360iResearch, FMI), module (GII, Strategic MR), hinge (Fortune BI, MRFR), power-closure / e-latch / charge-port (Dataintel, GM Insights, FMI), LV build (S&P Global Mobility), Korea parts (Expert Market Research), tariffs (Congress.gov CRS, S&P Ratings), GTR-9 (US Federal Register). Each headline number corroborated across ≥2–3 publishers where possible; single-source or contradicted figures flagged and presented as ranges.

DATA GAPS A BUYER MUST CLOSE IN PRIMARY DILIGENCE

(1) Exact Hyundai-Kia % of revenue – ~70% is a ~2023 company-sourced web estimate, not an audited DART figure. **(2)** Per-customer / per-product revenue split – not disclosed; Tesla/Lucid/Rivian are program-level, not contract-confirmed; treated as trajectory, not material-today revenue. **(3)** Insider trade-plan direction/size (2026-05-11) – not retrievable. **(4)** Georgia plant utilisation / 2026 order book – not disclosed; the ~\$100bn 3-year target is management guidance. **(5)** PHA's global latch/module market share – no hard figure exists; all ranks are NRG estimates. **(6)** "Global #1 door module" is a within-Hyundai-Kia / specialist ranking, not a global-share claim against Magna/Brose.

Glossary

Door-moving / closure system – the mechanisms that open, close, lock, lift and motorise a vehicle's doors, hood, trunk and tailgate. **Latch** – the mechanism fixed to the door that engages the body-mounted striker to hold/release the closure. **E-latch** – electrified latch replacing the mechanical cable with electric-signal control (flush handles, soft-close). **Striker** – the body-side anchor the latch grabs. **Door module** – a pre-assembled door-inner carrier bundling latch, regulator, wiring and seals as one bolt-on unit. **Frunk** – front trunk, the EV-only front storage compartment requiring its own latch + drive + ECU. **PTG / PSD** – power tailgate / power sliding door. **AHLS** – Active Hood Lift System (pedestrian-impact safety actuator). **HMGMA** – Hyundai Motor Group Metaplant America (the Georgia EV plant). **HMG** – Hyundai Motor Group (Hyundai + Kia). **Tier-1** – a direct OEM supplier. **Section 232** – the US statute under which auto-parts tariffs were imposed. **GTR-9** – UN pedestrian head-protection technical regulation. **PBV** – purpose-built vehicle. **OPM** – operating margin. **CFS** – consolidated financial statements.

Korean-term glossary (for DART cross-reference)

피에이치에이 (PHA) – the company, formerly 평화정공 (Pyeonghwa Precision). 피에이치씨 (PHC) – the family holding company, 51.63% largest shareholder. 허승현 (Heo Seung-hyun) – CEO, sole representative director (appointed Apr 2022). 김상태 (Kim Sang-tae) – Chairman / de-facto controlling shareholder. 사업보고서 (saeop bogoseo) – Annual Report. 분기보고서 (bunggi bogoseo) – Quarterly Report. 유형자산의 취득 (yuhyeong jasan-ui chwideuk) – acquisition of PP&E (capex). 자기주식 (jagi jusik) – treasury stock. 대구 (Daegu) – HQ (Seongseo); 외동·아산 (Oedong·Asan) – Korean plants. 정체탈출 (jeongche talchul) – "escape stagnation," the CEO's stated mandate.

SCOPE & DISCLAIMER

This is a business-analysis and market-research document prepared to support due-diligence; it is **not** investment advice, not a solicitation, and contains **no price target or valuation conclusion**. Sell-side targets and value-fund positioning are reported only as third-party sentiment. KRX short-interest and price data are contextual color, not valuation inputs. Forward scenarios are illustrative analytical constructs, not forecasts of record. The ~70% Hyundai-Kia revenue share and all PHA market-share figures are estimates, flagged in-text. Prepared by Nathan Research Group, Seoul, 2026-06-16.