

Global Gallium Market 2026

Market size, segmentation, competitive landscape and outlook

2021-2031

Moving forward, together



Every one of us has, at some point, heard the line from *Alice in Wonderland*: “It takes all the running you can do, to keep in the same place. If you want to get somewhere else, you must run at least twice as fast.” Cliché as the quote has become, our world is changing at extraordinary speed. And yet, to my mind, it matters not only to run fast, but — more importantly — to know where you are running.

We see ourselves as the navigator, ready at the right moment to point out the correct course. By providing current, timely information for the decisions that matter, we aim to protect our clients from missteps and to help them find new opportunities.

It matters to us that you are satisfied with the work we have done. If you have any questions about this report, we will be glad to answer them.

ANDREY SHEVCHENKO, Managing Partner

© shev.io — All rights reserved.

Disclaimer

This report was prepared by shev.io solely for information purposes. shev.io does not guarantee the accuracy and completeness of all information contained in the report, as the data in some sources may have been distorted inadvertently or deliberately. The information presented in this report must not be construed, directly or indirectly, as containing recommendations for further business action. All opinions and estimates contained in this report reflect the authors' judgement as at the date of publication and may be changed without notice.

shev.io accepts no liability for any loss or damage arising from any third party's use of the information contained in this report, including published opinions or conclusions, or for consequences caused by the incompleteness of the information presented. The information presented in this report is obtained from open sources. Additional information may be provided on request.

This document, or any part of it, may not be distributed without the written permission of shev.io, nor reproduced by any means.

© shev.io — All rights reserved.

Terms of use

This report is provided to the user under a **non-exclusive, non-transferable, limited licence** solely for internal use within the purposes for which the report was lawfully acquired.

The user **may not**, in whole or in part, transfer, sell, gift, publish or otherwise distribute the report to third parties, nor pass it to any other legal entities, partner organisations or external teams (including affiliated companies). It is prohibited to place the report (or fragments of it) in the public domain (websites, social networks, messengers, file-sharing services, open-link cloud storage) or to provide access through third-party services where this allows third parties to review the materials.

If the report is purchased by a **company**, its use is permitted **only by that company's employees** for internal tasks. Passing the report to contractors, consultants, freelancers, agencies and any external parties is prohibited.

All exclusive rights to the report — including its structure, texts, data selection, visualisations, tables, charts and design elements — belong to the rights holder (shev.io) or are used on lawful grounds. The user receives the right to use the report only within these terms.

Without shev.io's written consent it is prohibited to create derivative products based on the report, to use it as part of a commercially distributed product or service, or to remove or alter copyright notices.

The use of **short quotations** and fragments is permitted **only in internal documentation** (internal memos, reports, presentations, working correspondence), provided the meaning and context are preserved and the source is credited: *shev.io*. Any publication or use of the materials in places accessible to third parties is permitted only with shev.io's prior written consent.

© shev.io — All rights reserved.

Market at a glance

This demo shows the **form and depth** of the report — real narrative with the detailed figures and tables masked as “XXX”. When you order the report, every figure is finalised and verified for your copy, and the full report is delivered within 24–72 hours.

Indicator	Value
Market size (2025)	USD 1.1 bn
Forecast (2031)	USD 2.1 bn
CAGR (2021-2031)	11.3%
Study period	2021-2031
Largest region	Asia-Pacific · 68.5%
Fastest-growing region	North America · 14.8%
Market concentration	High
Licence	Individual / Company

The global gallium market reached USD XXX billion in 2025 and is forecast to reach USD XXX billion by 2031, expanding at an XX% CAGR. Demand is accelerating as gallium nitride power electronics, radio-frequency infrastructure, photonics and defence systems move into higher-volume production. Asia-Pacific held XX% of market value in 2025, reflecting its concentration of primary refining and compound-semiconductor manufacturing. Export controls, government-backed diversification projects and limited recovery from bauxite and zinc circuits are reshaping contracting, inventories and regional price premiums.

© shev.io — All rights reserved.

Table of contents

1 Introduction

1.1 Study Scope and Objectives

1.2 Gallium Market Definition

1.3 Units, Currency and Study Period

1.4 Inclusions and Exclusions

2 Research Methodology

2.1 Research Design and Data Triangulation

2.2 Primary Interview Programme

2.3 Secondary Research Sources

2.4 Market Sizing and Forecast Model

2.5 Assumptions and Quality Control

3 Executive Summary

3.1 Market Size and Forecast Highlights

3.2 Leading Segments and Regions

3.3 Strategic Findings and Opportunity Matrix

4 Global Gallium Market Dynamics

4.1 Gallium Market Trends

4.2 Market Drivers

4.2.1 GaN Power Electronics Scale-up

4.2.2 5G, Satellite and Defence RF Demand

4.2.3 AI Data-centre Power Density

4.2.4 Government-backed Supply Diversification

4.3 Market Restraints

4.3.1 Primary Supply Concentration

4.3.2 By-product Production Constraints

4.3.3 Qualification and Price Barriers

4.4 Porter's Five Forces Analysis

4.5 Value Chain and Price Formation

5 Gallium Market Size and Forecast

5.1 Historical Market Value and Volume, 2021-2025

5.2 Market Forecast, 2026-2031

5.3 Production Capacity and Utilization

5.4 Price and Supply-Demand Scenarios

6 Gallium Market by Material Form and Purity

6.1 High-purity Gallium Metal

© shev.io — All rights reserved.

6.2 Gallium Arsenide Precursor
6.3 Gallium Nitride Precursor
6.4 Gallium Oxide and Other Compounds
7 Gallium Market by Application
7.1 Semiconductors
7.2 Optoelectronics and Photonics
7.3 Photovoltaics
7.4 Alloys and Thermal Applications
7.5 Research and Other Applications
8 Gallium Market by End-use Industry
8.1 Consumer Electronics
8.2 Telecommunications
8.3 Aerospace and Defence
8.4 Automotive and E-mobility
8.5 Data Centres and Industrial Power
8.6 Solar, Medical and Other Industries
9 Gallium Market by Supply Source
9.1 Primary Recovery from Bauxite and Alumina
9.2 Primary Recovery from Zinc Residues
9.3 New-scrap Recycling and Secondary Refining
9.4 Other Industrial Residues
10 Gallium Market Regional Analysis
10.1 North America
10.1.1 United States
10.1.2 Canada
10.1.3 Mexico
10.1.4 Rest of North America
10.2 Europe
10.2.1 Germany
10.2.2 United Kingdom
10.2.3 France
10.2.4 Greece
10.2.5 Rest of Europe
10.3 Asia-Pacific
10.3.1 China
10.3.2 Japan
10.3.3 South Korea
10.3.4 Taiwan

© shev.io — All rights reserved.

10.3.5 Australia
10.3.6 Rest of Asia-Pacific
10.4 Latin America
10.4.1 Brazil
10.4.2 Argentina
10.4.3 Rest of Latin America
10.5 Middle East and Africa
10.5.1 Saudi Arabia
10.5.2 United Arab Emirates
10.5.3 South Africa
10.5.4 Rest of Middle East and Africa
11 Gallium Market Competitive Landscape
11.1 Market Concentration and Estimated Company Share
11.2 Capacity, Purity and Strategic Positioning
11.3 Partnerships, Projects and Recent Developments
11.4 Company Profiles
11.4.1 Aluminum Corporation of China Limited
11.4.2 Nanjing Jinmei Gallium Co., Ltd.
11.4.3 Dowa Electronics Materials Co., Ltd.
11.4.4 Indium Corporation
11.4.5 5N Plus Inc.
11.4.6 Vital Materials Co., Limited
11.4.7 Metlen Energy & Metals S.A.
11.4.8 Rio Tinto Group
11.4.9 Alcoa Corporation
11.4.10 Sojitz Corporation
12 Regulation, Trade Controls and Strategic Policy
12.1 China Export-control Framework
12.2 EU Critical Raw Materials Act
12.3 North American Funding and Trade Measures
13 Gallium Market Opportunities and Outlook
13.1 Supply Diversification Opportunities
13.2 Recycling and Circular Supply
13.3 Technology and Regional Opportunity Matrix
13.4 Strategic Recommendations

© shev.io — All rights reserved.

List of tables

Table 1. Global Gallium Market Headline Indicators, 2021, 2025 and 2031

Table 2. Gallium Market Forecast by Value and Volume, 2021-2031

Table 3. Executive Opportunity Matrix by Application and Region

Table 4. Gallium Market Drivers: Evidence, Beneficiaries and Forecast Relevance

Table 5. Gallium Market Restraints: Exposure and Mitigation Strategies

Table 6. Gallium Opportunities by Feedstock, Technology and Commercial Readiness

Table 7. Driver Impact Scores by Geography and Horizon

Table 8. Restraint Impact Scores by Geography and Horizon

Table 9. Base, Accelerated-Demand and Constrained-Supply Scenario Assumptions

Table 10. Global Gallium Market Value by Year, 2021-2031

Table 11. Global Gallium Supply-Demand Balance by Year, 2021-2031

Table 12. Primary and Secondary Gallium Volume by Year, 2021-2031

Table 13. Gallium Price Realization by Purity Grade, 2021-2031

Table 14. Gallium Production Capacity and Utilization by Producing Country, 2025 and 2031

Table 15. Gallium Market Value and Volume by Material Form, 2021-2031

Table 16. Gallium Market Share and CAGR by Material Form, 2025-2031

Table 17. Gallium Market Value and Volume by Application, 2021-2031

Table 18. Gallium Application Share and CAGR, 2025-2031

Table 19. Application Demand by Required Purity and Compound Route

Table 20. Gallium Market Value by End-use Industry, 2021-2031

Table 21. Gallium Market Volume by End-use Industry, 2021-2031

Table 22. Gallium Market Value and Volume by Supply Source, 2021-2031

Table 23. Supply Source Economics, Recovery Routes and Commercial Readiness

Table 24. North America Gallium Market by Country, Application and Year

Table 25. Europe Gallium Market by Country, Application and Year

Table 26. Asia-Pacific Gallium Market by Country, Application and Year

Table 27. Latin America Gallium Market by Country, Application and Year

Table 28. Middle East and Africa Gallium Market by Country, Application and Year

Table 29. Regional Gallium Market Share, CAGR and Import Dependence, 2025-2031

Table 30. Gallium Market Structure, Estimated Company Shares and Concentration

Table 31. Aluminum Corporation of China Limited Company Profile

Table 32. Nanjing Jinmei Gallium Co., Ltd. Company Profile

Table 33. Dowa Electronics Materials Co., Ltd. Company Profile

Table 34. Indium Corporation Company Profile

Table 35. 5N Plus Inc. Company Profile

© shev.io — All rights reserved.

Table 36. Vital Materials Co., Limited Company Profile

Table 37. Metlen Energy & Metals S.A. Company Profile

Table 38. Rio Tinto Group Company Profile

Table 39. Alcoa Corporation Company Profile

Table 40. Sojitz Corporation Company Profile

Table 41. Gallium Export Controls, Tariffs and Strategic-Material Designations

Table 42. Government-Funded Gallium Projects and Policy Support by Country

Table 43. Gallium Market Base, Upside and Downside Forecasts, 2025-2031

Table 44. Announced Gallium Projects, Capacity, Timing and Development Status

Table 45. Strategic Opportunities by Customer Group, Entry Route and Investment Horizon

Table 46. Market value by year, USD bn

Table 47. Year-over-year value change

Table 48. Drivers — impact on forecast

Table 49. Restraints — impact on forecast

Table 50. Value by material Form and Purity, USD bn

Table 51. Value by application, USD bn

Table 52. Value by end-use Industry, USD bn

Table 53. Value by supply Source, USD bn

Table 54. Market value by region, USD bn

Table 55. Market value by leading country, USD bn

Table 56. Leading companies

© shev.io — All rights reserved.

List of figures

Figure 1. Global Gallium Market Value, 2021-2031

Figure 2. Gallium Market Growth Contribution by Application, 2025-2031

Figure 3. Gallium Demand Growth Index by Technology, 2021-2031

Figure 4. Primary Gallium Production Concentration by Country, 2025

Figure 5. Directional CAGR Impact of Gallium Market Drivers

Figure 6. Directional CAGR Impact of Gallium Market Restraints

Figure 7. Gallium Market Value and Year-on-Year Growth, 2021-2031

Figure 8. Primary Gallium Production and Capacity, 2021-2031

Figure 9. Gallium Price Index by Purity Grade, 2021-2031

Figure 10. Gallium Market Share by Material Form and Purity, 2025

Figure 11. Gallium Market Share by Application, 2025

Figure 12. Application CAGR Comparison, 2025-2031

Figure 13. Gallium Market Share by End-use Industry, 2025

Figure 14. Gallium Supply Source Mix, 2025 and 2031

Figure 15. Gallium Market Share by Region, 2025

Figure 16. Gallium Market CAGR by Region, 2025-2031

Figure 17. Regional Gallium Supply-Demand Position, 2025 and 2031

Figure 18. Estimated Gallium Supplier Market Share, 2025

Figure 19. Competitive Positioning by Purity Capability and Supply Integration

Figure 20. Gallium Trade Policy Timeline, 2023-2026

Figure 21. Gallium Market Forecast under Three Supply-Demand Scenarios, 2025-2031

Figure 22. Gallium Opportunity Attractiveness by Technology and Region

Figure 23. Value share by material Form and Purity, 2025

Figure 24. Value share by application, 2025

Figure 25. Growth rate by region, 2025-2031

© shev.io — All rights reserved.

Executive summary

The global gallium market reached USD XXX billion in 2025 and is forecast to reach USD XXX billion by 2031, expanding at an XX% CAGR. Demand is accelerating as gallium nitride power electronics, radio-frequency infrastructure, photonics and defence systems move into higher-volume production. Asia-Pacific held XX% of market value in 2025, reflecting its concentration of primary refining and compound-semiconductor manufacturing. Export controls, government-backed diversification projects and limited recovery from bauxite and zinc circuits are reshaping contracting, inventories and regional price premiums.

Indicator	Value
Market size 2025	XXX
Forecast 2031	XXX
CAGR	XXX
Largest region	XXX
Fastest region	XXX

Key findings

- Global gallium market value reached USD XXX billion in 2025 and will rise to USD XXX billion by 2031.
- Worldwide primary low-purity gallium production reached approximately 900 metric tons in 2025, according to the U.S. Geological Survey.
- China supplied XX% of worldwide primary low-purity gallium production in 2025.
- Worldwide primary gallium production capacity stood near XXX metric tons in 2025, including approximately XXX metric tons in China.
- The average U.S. import unit value for gallium metal increased XX% in 2025 to USD XXX per kilogram.
- U.S. reported gallium consumption was approximately 19 metric tons in 2025, with net import reliance remaining at XX%.
- Semiconductor applications generated XX% of gallium market value in 2025, led by GaAs radio-frequency devices and rapidly expanding GaN power electronics.
- Asia-Pacific accounted for XX% of global market value in 2025, while North America is forecast to grow fastest at XX% through 2031.

© shev.io — All rights reserved.

Market size and forecast

Market value by year, USD bn

Indicator	2026	2027	2028	2029	2030	2031	CAGR
Market value, USD bn	XXX	XXX	XXX	XXX	XXX	XXX	XXX
Market volume	XXX	XXX	XXX	XXX	XXX	XXX	XXX
Production	XXX	XXX	XXX	XXX	XXX	XXX	XXX
Imports	XXX	XXX	XXX	XXX	XXX	XXX	XXX
Exports	XXX	XXX	XXX	XXX	XXX	XXX	XXX
Apparent consumption	XXX	XXX	XXX	XXX	XXX	XXX	XXX

Source: XXX

Year-over-year value change

Indicator	2027	2028	2029	2030	2031	CAGR
Market value	X%	X%	X%	X%	X%	X%
Production	X%	X%	X%	X%	X%	X%
Imports	X%	X%	X%	X%	X%	X%
Exports	X%	X%	X%	X%	X%	X%

Source: XXX

© shev.io — All rights reserved.

Global Gallium Market Trends and Growth Drivers

Gallium demand is being pulled by two semiconductor transitions at once: continued expansion of GaAs in high-frequency communications and the rapid adoption of GaN in high-efficiency power conversion. These applications require high-purity, qualified material, so market value is growing faster than primary tonnage and premiums increasingly reflect provenance, reliability and impurity control.

Supply responds differently from most technology metals because gallium is a by-product rather than the principal economic output of a mine. Recovery decisions depend on the configuration and economics of alumina or zinc refineries, creating a structural lag between higher gallium prices and new production. This mechanism reinforces the value of projects integrated with operating host-metal facilities.

Geopolitical intervention is changing the industry's commercial architecture. Export licensing, national critical-mineral strategies, public project funding and strategic customer inventories are moving the market toward bilateral offtake contracts and geographically differentiated prices rather than a single globally fungible spot market.

Growth drivers

GaN power electronics scale-up

GaN devices are gaining share in fast chargers, data-centre power supplies, photovoltaic inverters and electric-vehicle power architectures because they switch faster and reduce conversion losses. Higher device volumes translate directly into demand for high-purity gallium and GaN precursor material, with data-centre and mobility applications supporting premium-grade consumption.

5G, satellite and defence RF demand

GaAs and GaN remain critical materials for high-frequency power amplifiers, radar, electronic warfare and satellite communications. Network densification and higher defence procurement raise demand for qualified gallium inputs whose performance cannot be readily replicated by silicon in the most demanding radio-frequency applications.

AI data-centre power density

AI computing clusters require increasingly efficient power conversion from grid connection through server-level voltage regulation. GaN adoption in high-frequency power supplies reduces energy losses and component size, making gallium exposure a strategic consideration for power-system and cloud-infrastructure suppliers.

Public investment in supply diversification

Governments in the United States, Canada, Australia and the European Union are financing extraction trials, demonstration plants and strategic-material projects. These programmes reduce development risk for recovery from alumina liquor, zinc residues and industrial waste while accelerating the emergence of bankable non-Chinese supply.

© shev.io — All rights reserved.

Photonics and optoelectronics expansion

Gallium compounds support LEDs, laser diodes, photodetectors and high-efficiency multijunction solar cells. Growth in optical communications, sensing, medical lasers and aerospace photovoltaics sustains a diversified demand base beyond power and radio-frequency semiconductors.

Inventory and offtake reconfiguration

Export licensing and geopolitical exposure are prompting customers to increase safety stocks and negotiate multi-year contracts with qualified suppliers. The shift strengthens near-term purchasing and improves revenue visibility for new refining and recycling projects.

Restraints

Primary supply concentration

China accounted for XX% of primary low-purity output in 2025, leaving global availability exposed to licensing, trade policy and domestic production decisions. Supply interruptions create regional premiums and can defer expansion by compound-semiconductor manufacturers unable to secure qualified material.

By-product production constraint

Gallium is recovered mainly from bauxite-processing liquor and, to a lesser extent, zinc residues, so output responds to alumina and zinc-refining economics rather than gallium prices alone. Low concentrations and added circuit complexity can prevent recovery even when gallium demand is strong.

Qualification and purity barriers

Semiconductor customers require stable impurity profiles and extensive process qualification before accepting a new source. Commercial ramp-up therefore trails mechanical completion of new refining capacity, limiting the speed at which announced projects can relieve shortages.

Price opacity and investment risk

Gallium lacks a deep, transparent exchange-traded market, and spot transactions can diverge sharply by purity and geography. Uncertain long-run pricing complicates project finance for recovery plants that must compete with by-product supply from established Chinese refineries.

© shev.io — All rights reserved.

Gallium Market Driver and Restraint Impact on the Forecast

Drivers — impact on forecast

Driver	Impact on CAGR	Geography	Horizon
GaN power electronics scale-up	XXX	XXX	XXX
5G, satellite and defence RF demand	XXX	XXX	XXX
AI data-centre power density	XXX	XXX	XXX
Public investment in supply diversification	XXX	XXX	XXX
Photonics and optoelectronics expansion	XXX	XXX	XXX
Inventory and offtake reconfiguration	XXX	XXX	XXX

Source: XXX

Restraints — impact on forecast

Restraint	Impact on CAGR	Geography	Horizon
Primary supply concentration	XXX	XXX	XXX
By-product production constraint	XXX	XXX	XXX
Qualification and purity barriers	XXX	XXX	XXX
Price opacity and investment risk	XXX	XXX	XXX

Source: XXX

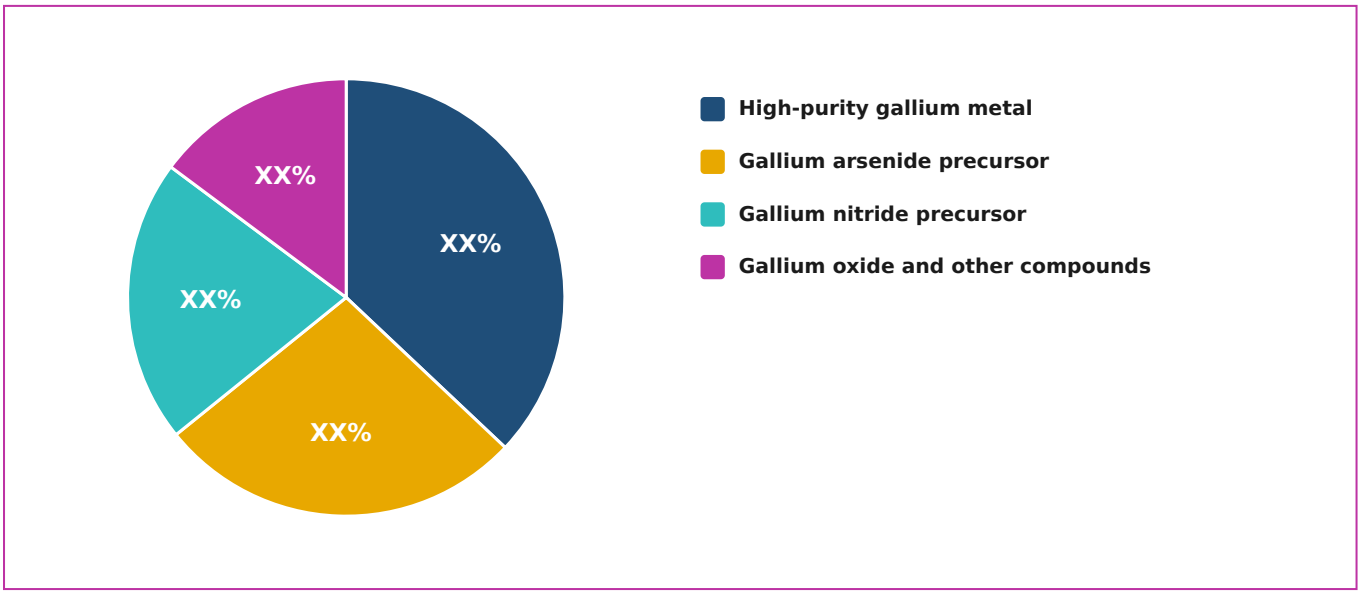
© shev.io — All rights reserved.

Gallium Market Segmentation by Purity, Application and End Use

By Material Form and Purity

High-purity metal commands the largest value share because semiconductor customers require tightly controlled impurity profiles and qualified refining routes. Gallium arsenide precursor retains a substantial base in radio-frequency and photonic devices, while gallium nitride precursor grows fastest as power electronics scale. Gallium oxide remains an emerging category supported by ultra-wide-bandgap research and early device commercialization.

Value share by material Form and Purity, 2025



Source: XXX

Value by material Form and Purity, USD bn

Segment	2026	2027	2028	2029	2030	2031	Share 2025	CAGR
High-purity gallium metal	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
Gallium arsenide precursor	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
Gallium nitride precursor	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
Gallium oxide and other compounds	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX

Source: XXX

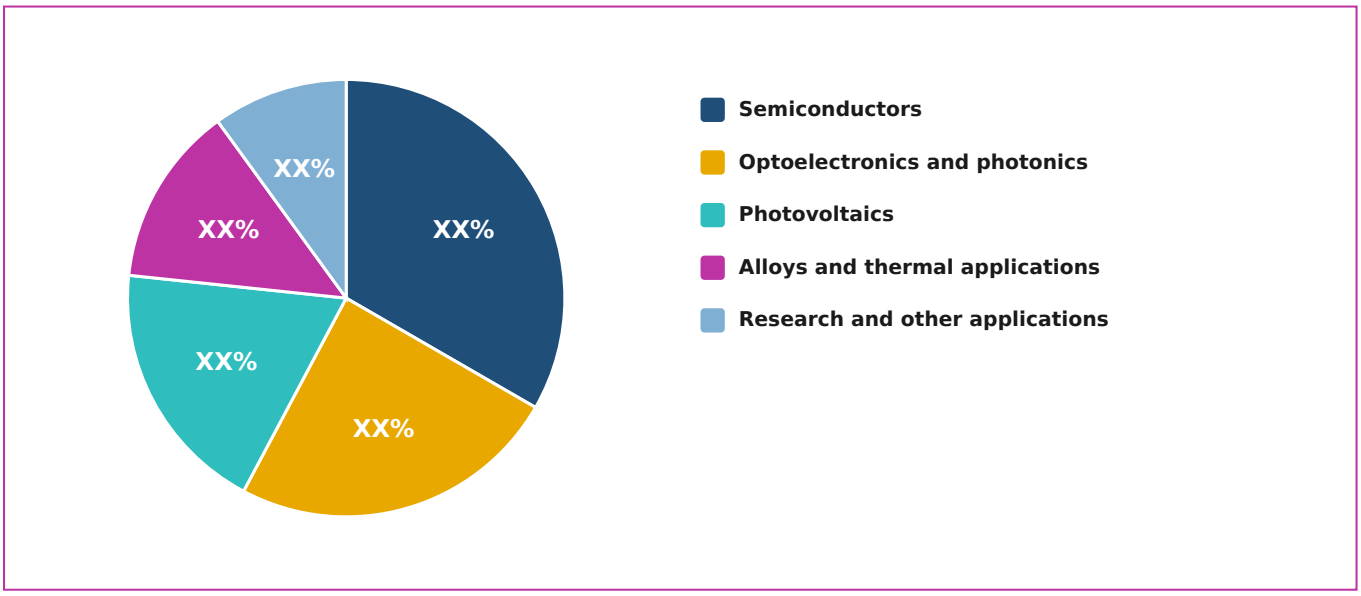
By Application

Semiconductors lead through GaAs radio-frequency devices and rapidly expanding GaN power conversion. Optoelectronics provide a stable demand base across LEDs, lasers and detectors, while photovoltaic

© shev.io — All rights reserved.

consumption is concentrated in high-efficiency multijunction cells for space and specialized terrestrial systems. Research, alloys and thermal-interface applications remain smaller but support high unit values in specialized grades.

Value share by application, 2025



Source: XXX

Value by application, USD bn

Segment	2026	2027	2028	2029	2030	2031	Share 2025	CAGR
Semiconductors	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
Optoelectronics and photonics	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
Photovoltaics	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
Alloys and thermal applications	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
Research and other applications	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX

Source: XXX

By End-use Industry

Consumer electronics remains the largest end-use category through chargers, displays, radio-frequency front ends and optoelectronics. Telecommunications benefits from base-station densification, satellite links and higher-frequency infrastructure, while aerospace and defence provides resilient demand and stringent qualification barriers. Data-centre and industrial power applications record the fastest expansion as GaN moves into higher-power architectures.

© shev.io — All rights reserved.

Value by end-use Industry, USD bn

Segment	2026	2027	2028	2029	2030	2031	Share 2025	CAGR
Consumer electronics	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
Telecommunications	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
Aerospace and defence	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
Automotive and e-mobility	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
Data centres and industrial power	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
Solar, medical and other industries	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX

Source: XXX

By Supply Source

Bayer-process liquor remains the principal source because gallium accumulates during repeated alumina-refining cycles and can be recovered alongside an established host-metal operation. Zinc-processing residues provide a smaller alternative feedstock with project-specific metallurgy. Secondary material from GaAs manufacturing scrap grows fastest as customers prioritize closed-loop recovery, traceability and reduced exposure to primary supply disruption.

Value by supply Source, USD bn

Segment	2026	2027	2028	2029	2030	2031	Share 2025	CAGR
Primary recovery from bauxite and alumina	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
Primary recovery from zinc residues	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
New-scrap recycling and secondary refining	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
Other industrial residues	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX

Source: XXX

© shev.io — All rights reserved.

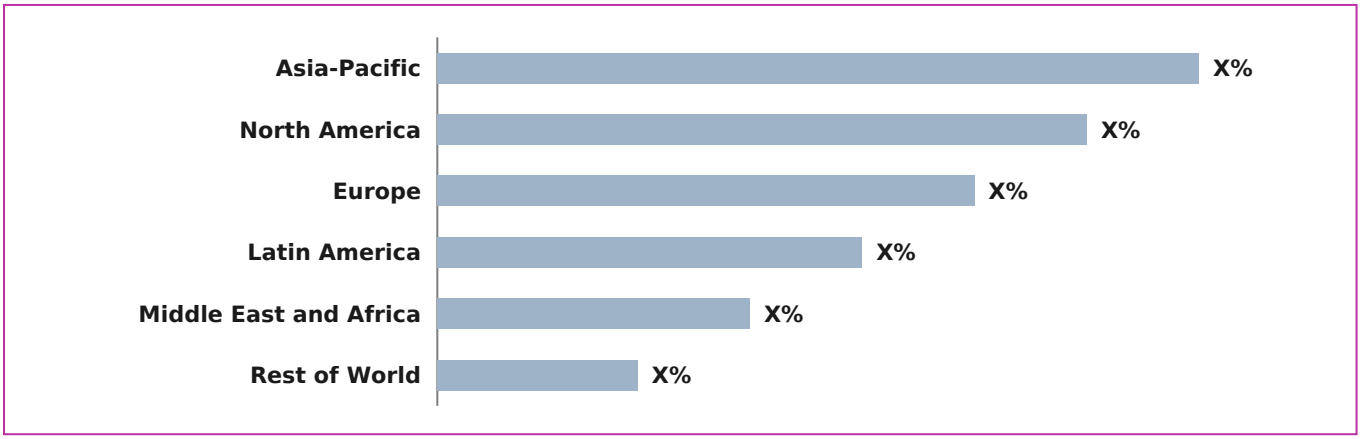
Gallium Market Regional Analysis and Country Outlook

Asia-Pacific generated XX% of global gallium market value in 2025. China anchors the region through its dominant primary low-purity output, alumina-refining base and integrated GaAs, GaN, LED and electronics supply chains, while Japan and South Korea contribute high-purity refining, substrates and compound-semiconductor manufacturing. Regional growth will remain strong, although export licensing and strategic stock management increasingly separate domestic Chinese pricing from international contract markets.

North America is forecast to expand at XX% annually through 2031, the fastest regional rate. U.S. demand is supported by defence electronics, satellite communications, AI data-centre power systems and domestic semiconductor investment, while Canada is emerging as a prospective primary source through Rio Tinto and Indium Corporation's Quebec recovery programme. The region's XX% U.S. import reliance in 2025 creates a strong policy and customer incentive for recycling, recovery from industrial residues and long-term offtake.

Europe is moving from import dependence toward regional recovery and processing under the Critical Raw Materials Act. Metlen's integrated Greek project targets gallium recovery alongside bauxite and alumina operations, while established European compound-semiconductor producers sustain demand for high-purity inputs. Australia is also becoming strategically important: the Alcoa-Sojitz Wagerup project is designed for 100 metric tons of annual output and could materially change non-Chinese supply after commissioning.

Growth rate by region, 2025-2031



Source: XXX

© shev.io — All rights reserved.

Market value by region, USD bn

Region	2026	2027	2028	2029	2030	2031	Share 2025	CAGR
Asia-Pacific	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
North America	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
Europe	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
Latin America	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
Middle East and Africa	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
Rest of World	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX

Source: XXX

Market value by leading country, USD bn

Country	2025	2031	Share 2025	CAGR
United States	XXX	XXX	XXX	XXX
Germany	XXX	XXX	XXX	XXX
United Kingdom	XXX	XXX	XXX	XXX
Belgium	XXX	XXX	XXX	XXX
Netherlands	XXX	XXX	XXX	XXX
Japan	XXX	XXX	XXX	XXX
China	XXX	XXX	XXX	XXX
Mexico	XXX	XXX	XXX	XXX

Source: XXX

© shev.io — All rights reserved.

Gallium Market Competitive Landscape and Company Share

The gallium supply chain is highly concentrated at the primary-refining stage but more distributed across purification, recycling, precursor production and compound-semiconductor materials. Chinese alumina-linked refiners set the volume foundation, while Dowa Electronics Materials, Indium Corporation, 5N Plus, Vital Materials and other specialist suppliers compete through purity control, scrap recovery, technical service and qualified customer relationships.

Competition is shifting from spot availability toward secure, traceable and geographically diversified supply. Rio Tinto, Alcoa and Metlen are advancing recovery projects integrated with existing alumina operations, reducing feedstock and infrastructure risk. Partnerships with governments and established purification specialists are increasingly important because extraction chemistry, financing and downstream qualification must progress together.

Market concentration will remain high through the middle of the forecast, but planned capacity in Australia, Canada and Greece will reduce China's share of incremental supply after 2027. Winning suppliers will combine dependable primary recovery with 6N-to-7N purification, closed-loop recycling and long-term agreements covering price floors, qualification milestones and strategic inventories.

Leading companies

Company	HQ	Est. revenue 2025	Market share 2025	YoY
Aluminum Corporation of China Limited	XXX	XXX	XXX	XXX
Nanjing Jinmei Gallium Co., Ltd.	XXX	XXX	XXX	XXX
Dowa Electronics Materials Co., Ltd.	XXX	XXX	XXX	XXX
Indium Corporation	XXX	XXX	XXX	XXX
5N Plus Inc.	XXX	XXX	XXX	XXX
Vital Materials Co., Limited	XXX	XXX	XXX	XXX
Metlen Energy & Metals S.A.	XXX	XXX	XXX	XXX
Rio Tinto Group	XXX	XXX	XXX	XXX
Alcoa Corporation	XXX	XXX	XXX	XXX
Sojitz Corporation	XXX	XXX	XXX	XXX

Source: XXX

© shev.io — All rights reserved.

Gallium Market Forecast, Supply Scenarios and Opportunities

The market will advance from USD XXX billion in 2025 to USD XXX billion by 2031 as compound-semiconductor demand grows faster than efficiency improvements and scrap recovery. GaN power electronics will provide the strongest incremental demand, while GaAs radio-frequency and photonics applications maintain a large, technically entrenched consumption base.

The base case assumes that announced Australian, Canadian and European projects enter staged production from 2027 onward and that export licensing remains manageable but structurally restrictive. A constrained-supply scenario would lift regional price premiums and inventory demand, whereas faster project qualification would moderate prices while expanding total consumption by giving device manufacturers greater supply confidence.

Commercial success will favour projects attached to operating alumina or zinc facilities, backed by public capital and connected to an experienced high-purity refiner. Recycling will expand rapidly but will remain focused on new manufacturing scrap because gallium concentrations in end-of-life products are low and collection systems remain fragmented.

Opportunities

- Gallium recovery from Bayer-process liquor and red mud
- Recovery from zinc residues and industrial waste streams
- Closed-loop recycling of GaAs and GaN manufacturing scrap
- High-purity refining capacity outside China
- Long-term supply agreements with defence and semiconductor customers
- Gallium oxide materials for ultra-wide-bandgap power devices

> This preview shows the form and depth of the report. The full report contains every figure, segment- and country-level detail and full company profiles. On purchase all figures are finalised and verified, and the report is delivered within 24–72 hours.

© shev.io — All rights reserved.