

# **Reusable Launch Vehicles & Rocket Recovery Market Forecasts to 2034 - Global Analysis By Vehicle Type (Orbital Reusable Launch Vehicles (RLVs), Suborbital Reusable Launch Vehicles (RLVs), Partially Reusable Launch Vehicles and Fully Reusable Launch Vehicles), Recovery Method, Component Recovered, Propulsion Technology, Application, End User and By Geography**

<https://marketpublishers.com/r/R2ED88FE81C0EN.html>

Date: September 2026

Pages: 200

Price: US\$ 4,150.00 (Single User License)

ID: R2ED88FE81C0EN

## **Abstracts**

According to Statistics MRC, the Global Reusable Launch Vehicles & Rocket Recovery Market is accounted for \$9.5 billion in 2026 and is expected to reach \$25.2 billion by 2034 growing at a CAGR of 13.0% during the forecast period. Reusable Launch Vehicles & Rocket Recovery encompasses technologies that enable rockets and spacecraft to return safely after missions and undergo preparation for subsequent launches. The field incorporates controlled reentry, precision guidance, landing mechanisms, refurbishment processes, and reusable propulsion and structural systems. Improvements in autonomous navigation, heat protection, engine management, and recovery infrastructure are strengthening reusable launch capabilities. Various recovery techniques, including powered vertical landings and aerodynamic returns, contribute to more adaptable space operations. These technologies promote efficient launch practices, minimize discarded hardware, and advance the development of sustainable commercial space transportation.

According to NASA, Falcon 9 is a reusable two-stage rocket, and reusability allows SpaceX to reflly the most expensive parts of the rocket, helping reduce the cost of access to space. This directly supports the economic and technological rationale behind reusable launch vehicles.

## Market Dynamics:

### Driver:

#### **Growing demand for cost-efficient space access**

Increasing demand for affordable and flexible space transportation is strongly supporting the Reusable Launch Vehicles & Rocket Recovery Market. Conventional expendable launch vehicles generally require major hardware components to be replaced following each mission, contributing to higher operating expenses. Reusable platforms can recover and refurbish important rocket hardware for future launches, creating opportunities to improve overall mission economics. Growing satellite deployment, commercial space operations, government activities, and scientific exploration are increasing requirements for reliable launch services. Consequently, the pursuit of lower launch costs, greater operational flexibility, and higher mission frequency is accelerating the adoption of reusable launch technologies.

### Restraint:

#### **High development and operational costs**

The substantial investment required to develop and operate reusable launch systems can restrict growth in the Reusable Launch Vehicles & Rocket Recovery Market. Reusable rockets depend on sophisticated propulsion, thermal protection, guidance, landing, structural, and recovery technologies, all of which require extensive research and testing. Following recovery, launch hardware may also need inspection, maintenance, and refurbishment to ensure flight readiness. These activities increase financial and operational demands for launch providers, particularly newer companies with limited resources. Therefore, significant development expenditure, maintenance requirements, and infrastructure costs can slow the wider adoption of reusable launch technologies.

### Opportunity:

#### **Expansions of commercial space launch services**

Growing commercial launch activity offers substantial opportunities for the Reusable Launch Vehicles & Rocket Recovery Market. Rising satellite deployments, private missions, cargo services, and new space applications are increasing the need for reliable launch systems capable of supporting repeated operations. Reusable vehicles can address this demand through the recovery and refurbishment of essential hardware, helping launch providers improve utilization and operational flexibility. The continued development of private-sector space programs and launch infrastructure is

creating new possibilities for companies developing reusable vehicles, recovery systems, refurbishment solutions, and related services across the global space industry.

## **Threat:**

### **Intense competition and technological race**

Strong competition across the aerospace industry poses a significant threat to the Reusable Launch Vehicles & Rocket Recovery Market. Space companies and government organizations are pursuing improvements in reusable vehicles, propulsion, autonomous control, landing capabilities, and recovery systems. The rapid pace of innovation may require companies to make continuous investments to remain technologically competitive. Firms that fail to advance their technologies could lose market position and commercial opportunities. At the same time, competitive pressure may encourage lower launch prices and greater research expenditure, which can challenge profitability and influence the long-term strategies of reusable launch providers.

### **Covid-19 Impact:**

COVID-19 created temporary challenges for the Reusable Launch Vehicles & Rocket Recovery Market through supply-chain interruptions, manufacturing delays, restricted workforce availability, and postponed testing and launch activities. Uncertainty across the aerospace sector also influenced investment decisions and commercial space programs. Nevertheless, government space activities and ongoing satellite requirements provided continued support for the industry. Following the easing of restrictions, companies gradually restarted production, testing, and recovery operations. Growing requirements for satellite connectivity and commercial space services subsequently strengthened market activity and renewed interest in reusable launch vehicle technologies.

### **The partially reusable launch vehicles segment is expected to be the largest during the forecast period**

The partially reusable launch vehicles segment is expected to account for the largest market share during the forecast period, supported by their ability to combine reusable components with conventional expendable elements. This configuration provides launch operators with a practical pathway toward greater reusability while avoiding some of the complexities associated with completely reusable architectures. Recovering selected stages or components can improve operational efficiency and reduce the need for replacement hardware. Their comparatively mature technology, established operating experience, and compatibility with recurring orbital missions continue to strengthen their adoption across the evolving reusable launch vehicle industry.

### **The advanced cryogenic propulsion segment is expected to have the highest**

**CAGR during the forecast period**

Over the forecast period, the advanced cryogenic propulsion segment is predicted to witness the highest growth rate. Increasing efforts to develop efficient, high-performance propulsion systems are supporting its expansion across next-generation launch vehicles. Cryogenic propulsion offers strong performance characteristics and is well suited to demanding orbital operations. Improvements in cryogenic engine design, propellant handling, thermal management, and reusable engine technologies are further enhancing its capabilities. The industry's focus on reliable, efficient, and repeatable launch operations is therefore creating favorable conditions for continued advancement of cryogenic propulsion systems.

**Region with largest share:**

During the forecast period, the North America region is expected to hold the largest market share due to its mature aerospace industry, sophisticated launch infrastructure, and substantial government and commercial space activities. The region has developed strong expertise in reusable rockets, propulsion technologies, recovery systems, and autonomous vehicle operations. The United States serves as a particularly important hub, with major companies including SpaceX, Blue Origin, and Rocket Lab contributing to market development. Rising orbital launch frequency, satellite programs, and government-supported missions are further reinforcing North America's prominent position in reusable launch vehicle activities.

**Region with highest CAGR:**

Over the forecast period, the Asia-Pacific region is anticipated to exhibit the highest CAGR as regional governments and private companies increase investments in advanced space capabilities. China and India are actively developing reusable launch systems, while Japan, South Korea, and Australia are expanding their space infrastructure and commercial activities. Growing satellite deployment requirements and increasing private-sector involvement are further supporting regional demand. Continued progress in reusable rocket technologies, launch facilities, and recovery systems is creating favourable conditions for expanding launch operations and strengthening the region's role in the reusable space transportation industry.

**Key players in the market**

Some of the key players in Reusable Launch Vehicles & Rocket Recovery Market include AgniKul Cosmos Private Limited, ArianeGroup SAS, Beijing Interstellar Glory Space Technology Ltd. (iSpace), Beijing Tianbing Technology Co., Ltd., Blue Origin, LLC, China Aerospace Science and Technology Corporation (CASC), EthereumX, Firefly Aerospace, Inc., Galactic Energy Space Technology Co., Ltd., LandSpace Technology Corporation, Lockheed Martin Corporation, Northrop Grumman Corporation, Relativity

Space, Inc., Rocket Lab USA, Inc., Sierra Nevada Corporation, Space Exploration Technologies Corp. (SpaceX), Stoke Space Technologies, Inc. and United Launch Alliance, LLC (ULA).

## **Key Developments:**

In August 2026, Northrop Grumman and Aeronix, Inc., an Aeronix Technologies Group company, launched a multimillion-dollar strategic partnership to accelerate the development of advanced space-based cryptographic systems. The collaboration builds on a successful prototype effort between the two companies, which delivered a space-based mesh networking solution for the Department of War to fast-track secure, resilient data sharing capabilities in low-earth satellite orbit networks.

In July 2026, Blue Origin and NASA signed an agreement to use the historic Thad Cochran Test Stand "B-Test Complex" at NASA Stennis Space Center in Mississippi for New Glenn second stage hotfire testing. This facility provides an additional testbed for validating our upper stage performance before flight. The B-Test Complex is part of Blue Origin's comprehensive infrastructure expansion to add more test stands to hotfire our second stages to deconflict LC-36 launch operations.

## **Vehicle Types Covered:**

Orbital Reusable Launch Vehicles (RLVs)

Suborbital Reusable Launch Vehicles (RLVs)

Partially Reusable Launch Vehicles

Fully Reusable Launch Vehicles

## **Recovery Methods Covered:**

Propulsive Landing

Winged Horizontal Landing

Parachute-Assisted Recovery

Ocean Splashdown & Marine Recovery

## **Component Recovereds Covered:**

First Stage Booster Recovery

Second Stage Recovery

Engine & Propulsion Module Recovery

## **Propulsion Technologies Covered:**

Liquid Propellant Engines

Hybrid Propulsion Systems

Solid Propellant Boosters

Advanced Cryogenic Propulsion

## **Applications Covered:**

Satellite Deployment

Space Tourism & Suborbital Flights

Cargo Resupply to Space Stations

Deep Space Exploration Missions

## **End Users Covered:**

Government Space Agencies

Commercial Space Companies

Defense & Military Applications

Research Institutions & Universities

## **Regions Covered:**

North America

United States

Canada

Mexico

Europe

United Kingdom

Germany

France

Italy

Spain

Netherlands

Belgium

Sweden

Switzerland

Poland

Rest of Europe

Asia Pacific

China

Japan

India

South Korea

Australia

Indonesia

Thailand

Malaysia

Singapore

Vietnam

Rest of Asia Pacific

South America

Brazil

Argentina

Colombia

Chile

Peru

Rest of South America

Rest of the World (RoW)

Middle East

Saudi Arabia

United Arab Emirates

Qatar

Israel

Rest of Middle East

Africa

South Africa

Egypt

Morocco

Rest of Africa

## **What our report offers:**

Market share assessments for the regional and country-level segments

Strategic recommendations for the new entrants

Covers Market data for the years 2023, 2024, 2025, 2026, 2027, 2028, 2030, 2032 and 2034

Market Trends (Drivers, Constraints, Opportunities, Threats, Challenges,

Investment Opportunities, and recommendations)

Strategic recommendations in key business segments based on the market estimations

Competitive landscaping mapping the key common trends

Company profiling with detailed strategies, financials, and recent developments

Supply chain trends mapping the latest technological advancements

## **Free Customization Offerings:**

All the customers of this report will be entitled to receive one of the following free customization options:

### **Company Profiling**

Comprehensive profiling of additional market players (up to 3)

SWOT Analysis of key players (up to 3)

### **Regional Segmentation**

Market estimations, Forecasts and CAGR of any prominent country as per the client's interest (Note: Depends on feasibility check)

### **Competitive Benchmarking**

Benchmarking of key players based on product portfolio, geographical presence, and strategic alliances

## Contents

### **1 EXECUTIVE SUMMARY**

- 1.1 Market Snapshot and Key Highlights
- 1.2 Growth Drivers, Challenges, and Opportunities
- 1.3 Competitive Landscape Overview
- 1.4 Strategic Insights and Recommendations

### **2 RESEARCH FRAMEWORK**

- 2.1 Study Objectives and Scope
- 2.2 Stakeholder Analysis
- 2.3 Research Assumptions and Limitations
- 2.4 Research Methodology
  - 2.4.1 Data Collection (Primary and Secondary)
  - 2.4.2 Data Modeling and Estimation Techniques
  - 2.4.3 Data Validation and Triangulation
  - 2.4.4 Analytical and Forecasting Approach

### **3 MARKET DYNAMICS AND TREND ANALYSIS**

- 3.1 Market Definition and Structure
- 3.2 Key Market Drivers
- 3.3 Market Restraints and Challenges
- 3.4 Growth Opportunities and Investment Hotspots
- 3.5 Industry Threats and Risk Assessment
- 3.6 Technology and Innovation Landscape
- 3.7 Emerging and High-Growth Markets
- 3.8 Regulatory and Policy Environment
- 3.9 Impact of COVID-19 and Recovery Outlook

### **4 COMPETITIVE AND STRATEGIC ASSESSMENT**

- 4.1 Porter's Five Forces Analysis
  - 4.1.1 Supplier Bargaining Power
  - 4.1.2 Buyer Bargaining Power
  - 4.1.3 Threat of Substitutes
  - 4.1.4 Threat of New Entrants

- 4.1.5 Competitive Rivalry
- 4.2 Market Share Analysis of Key Players
- 4.3 Product Benchmarking and Performance Comparison

## **5 GLOBAL REUSABLE LAUNCH VEHICLES & ROCKET RECOVERY MARKET, BY VEHICLE TYPE**

- 5.1 Orbital Reusable Launch Vehicles (RLVs)
- 5.2 Suborbital Reusable Launch Vehicles (RLVs)
- 5.3 Partially Reusable Launch Vehicles
- 5.4 Fully Reusable Launch Vehicles

## **6 GLOBAL REUSABLE LAUNCH VEHICLES & ROCKET RECOVERY MARKET, BY RECOVERY METHOD**

- 6.1 Propulsive Landing
- 6.2 Winged Horizontal Landing
- 6.3 Parachute-Assisted Recovery
- 6.4 Ocean Splashdown & Marine Recovery

## **7 GLOBAL REUSABLE LAUNCH VEHICLES & ROCKET RECOVERY MARKET, BY COMPONENT RECOVERED**

- 7.1 First Stage Booster Recovery
- 7.2 Second Stage Recovery
- 7.3 Engine & Propulsion Module Recovery

## **8 GLOBAL REUSABLE LAUNCH VEHICLES & ROCKET RECOVERY MARKET, BY PROPULSION TECHNOLOGY**

- 8.1 Liquid Propellant Engines
- 8.2 Hybrid Propulsion Systems
- 8.3 Solid Propellant Boosters
- 8.4 Advanced Cryogenic Propulsion

## **9 GLOBAL REUSABLE LAUNCH VEHICLES & ROCKET RECOVERY MARKET, BY APPLICATION**

- 9.1 Satellite Deployment

9.2 Space Tourism & Suborbital Flights

9.3 Cargo Resupply to Space Stations

9.4 Deep Space Exploration Missions

## **10 GLOBAL REUSABLE LAUNCH VEHICLES & ROCKET RECOVERY MARKET, BY END USER**

10.1 Government Space Agencies

10.2 Commercial Space Companies

10.3 Defense & Military Applications

10.4 Research Institutions & Universities

## **11 GLOBAL REUSABLE LAUNCH VEHICLES & ROCKET RECOVERY MARKET, BY GEOGRAPHY**

11.1 North America

11.1.1 United States

11.1.2 Canada

11.1.3 Mexico

11.2 Europe

11.2.1 United Kingdom

11.2.2 Germany

11.2.3 France

11.2.4 Italy

11.2.5 Spain

11.2.6 Netherlands

11.2.7 Belgium

11.2.8 Sweden

11.2.9 Switzerland

11.2.10 Poland

11.2.11 Rest of Europe

11.3 Asia Pacific

11.3.1 China

11.3.2 Japan

11.3.3 India

11.3.4 South Korea

11.3.5 Australia

11.3.6 Indonesia

11.3.7 Thailand

- 11.3.8 Malaysia
- 11.3.9 Singapore
- 11.3.10 Vietnam
- 11.3.11 Rest of Asia Pacific
- 11.4 South America
  - 11.4.1 Brazil
  - 11.4.2 Argentina
  - 11.4.3 Colombia
  - 11.4.4 Chile
  - 11.4.5 Peru
  - 11.4.6 Rest of South America
- 11.5 Rest of the World (RoW)
  - 11.5.1 Middle East
    - 11.5.1.1 Saudi Arabia
    - 11.5.1.2 United Arab Emirates
    - 11.5.1.3 Qatar
    - 11.5.1.4 Israel
    - 11.5.1.5 Rest of Middle East
  - 11.5.2 Africa
    - 11.5.2.1 South Africa
    - 11.5.2.2 Egypt
    - 11.5.2.3 Morocco
    - 11.5.2.4 Rest of Africa

## **12 STRATEGIC MARKET INTELLIGENCE**

- 12.1 Industry Value Network and Supply Chain Assessment
- 12.2 White-Space and Opportunity Mapping
- 12.3 Product Evolution and Market Life Cycle Analysis
- 12.4 Channel, Distributor, and Go-to-Market Assessment

## **13 INDUSTRY DEVELOPMENTS AND STRATEGIC INITIATIVES**

- 13.1 Mergers and Acquisitions
- 13.2 Partnerships, Alliances, and Joint Ventures
- 13.3 New Product Launches and Certifications
- 13.4 Capacity Expansion and Investments
- 13.5 Other Strategic Initiatives

## 14 COMPANY PROFILES

- 14.1 AgniKul Cosmos Private Limited
- 14.2 ArianeGroup SAS
- 14.3 Beijing Interstellar Glory Space Technology Ltd. (iSpace)
- 14.4 Beijing Tianbing Technology Co., Ltd.
- 14.5 Blue Origin, LLC
- 14.6 China Aerospace Science and Technology Corporation (CASC)
- 14.7 EthereumX
- 14.8 Firefly Aerospace, Inc.
- 14.9 Galactic Energy Space Technology Co., Ltd.
- 14.10 LandSpace Technology Corporation
- 14.11 Lockheed Martin Corporation
- 14.12 Northrop Grumman Corporation
- 14.13 Relativity Space, Inc.
- 14.14 Rocket Lab USA, Inc.
- 14.15 Sierra Nevada Corporation
- 14.16 Space Exploration Technologies Corp. (SpaceX)
- 14.17 Stoke Space Technologies, Inc.
- 14.18 United Launch Alliance, LLC (ULA)

## List Of Tables

### LIST OF TABLES

Table 1 Global Reusable Launch Vehicles & Rocket Recovery Market Outlook, By Region (2023-2034) (\$MN)

Table 2 Global Reusable Launch Vehicles & Rocket Recovery Market Outlook, By Vehicle Type (2023-2034) (\$MN)

Table 3 Global Reusable Launch Vehicles & Rocket Recovery Market Outlook, By Orbital Reusable Launch Vehicles (RLVs) (2023-2034) (\$MN)

Table 4 Global Reusable Launch Vehicles & Rocket Recovery Market Outlook, By Suborbital Reusable Launch Vehicles (RLVs) (2023-2034) (\$MN)

Table 5 Global Reusable Launch Vehicles & Rocket Recovery Market Outlook, By Partially Reusable Launch Vehicles (2023-2034) (\$MN)

Table 6 Global Reusable Launch Vehicles & Rocket Recovery Market Outlook, By Fully Reusable Launch Vehicles (2023-2034) (\$MN)

Table 7 Global Reusable Launch Vehicles & Rocket Recovery Market Outlook, By Recovery Method (2023-2034) (\$MN)

Table 8 Global Reusable Launch Vehicles & Rocket Recovery Market Outlook, By Propulsive Landing (2023-2034) (\$MN)

Table 9 Global Reusable Launch Vehicles & Rocket Recovery Market Outlook, By Winged Horizontal Landing (2023-2034) (\$MN)

Table 10 Global Reusable Launch Vehicles & Rocket Recovery Market Outlook, By Parachute-Assisted Recovery (2023-2034) (\$MN)

Table 11 Global Reusable Launch Vehicles & Rocket Recovery Market Outlook, By Ocean Splashdown & Marine Recovery (2023-2034) (\$MN)

Table 12 Global Reusable Launch Vehicles & Rocket Recovery Market Outlook, By Component Recovered (2023-2034) (\$MN)

Table 13 Global Reusable Launch Vehicles & Rocket Recovery Market Outlook, By First Stage Booster Recovery (2023-2034) (\$MN)

Table 14 Global Reusable Launch Vehicles & Rocket Recovery Market Outlook, By Second Stage Recovery (2023-2034) (\$MN)

Table 15 Global Reusable Launch Vehicles & Rocket Recovery Market Outlook, By Engine & Propulsion Module Recovery (2023-2034) (\$MN)

Table 16 Global Reusable Launch Vehicles & Rocket Recovery Market Outlook, By Propulsion Technology (2023-2034) (\$MN)

Table 17 Global Reusable Launch Vehicles & Rocket Recovery Market Outlook, By Liquid Propellant Engines (2023-2034) (\$MN)

Table 18 Global Reusable Launch Vehicles & Rocket Recovery Market Outlook, By

Hybrid Propulsion Systems (2023-2034) (\$MN)

Table 19 Global Reusable Launch Vehicles & Rocket Recovery Market Outlook, By Solid Propellant Boosters (2023-2034) (\$MN)

Table 20 Global Reusable Launch Vehicles & Rocket Recovery Market Outlook, By Advanced Cryogenic Propulsion (2023-2034) (\$MN)

Table 21 Global Reusable Launch Vehicles & Rocket Recovery Market Outlook, By Application (2023-2034) (\$MN)

Table 22 Global Reusable Launch Vehicles & Rocket Recovery Market Outlook, By Satellite Deployment (2023-2034) (\$MN)

Table 23 Global Reusable Launch Vehicles & Rocket Recovery Market Outlook, By Space Tourism & Suborbital Flights (2023-2034) (\$MN)

Table 24 Global Reusable Launch Vehicles & Rocket Recovery Market Outlook, By Cargo Resupply to Space Stations (2023-2034) (\$MN)

Table 25 Global Reusable Launch Vehicles & Rocket Recovery Market Outlook, By Deep Space Exploration Missions (2023-2034) (\$MN)

Table 26 Global Reusable Launch Vehicles & Rocket Recovery Market Outlook, By End User (2023-2034) (\$MN)

Table 27 Global Reusable Launch Vehicles & Rocket Recovery Market Outlook, By Government Space Agencies (2023-2034) (\$MN)

Table 28 Global Reusable Launch Vehicles & Rocket Recovery Market Outlook, By Commercial Space Companies (2023-2034) (\$MN)

Table 29 Global Reusable Launch Vehicles & Rocket Recovery Market Outlook, By Defense & Military Applications (2023-2034) (\$MN)

Table 30 Global Reusable Launch Vehicles & Rocket Recovery Market Outlook, By Research Institutions & Universities (2023-2034) (\$MN)

Note: Tables for North America, Europe, APAC, South America, and Rest of the World (RoW) Regions are also represented in the same manner as above.

## I would like to order

Product name: Reusable Launch Vehicles & Rocket Recovery Market Forecasts to 2034 - Global Analysis By Vehicle Type (Orbital Reusable Launch Vehicles (RLVs), Suborbital Reusable Launch Vehicles (RLVs), Partially Reusable Launch Vehicles and Fully Reusable Launch Vehicles), Recovery Method, Component Recovered, Propulsion Technology, Application, End User and By Geography

Product link: <https://marketpublishers.com/r/R2ED88FE81C0EN.html>

Price: US\$ 4,150.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

[info@marketpublishers.com](mailto:info@marketpublishers.com)

## Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/R2ED88FE81C0EN.html>