

Electronic Toll Collection (ETC) Market Opportunity, Growth Drivers, Industry Trend Analysis, and Forecast 2024 to 2032

https://marketpublishers.com/r/EC7FC65505A4EN.html

Date: November 2024

Pages: 200

Price: US\$ 4,850.00 (Single User License)

ID: EC7FC65505A4EN

Abstracts

The Global Electronic Toll Collection (ETC) Market, valued at USD 7.5 billion in 2023, is set to expand at an 11.9% CAGR from 2024 to 2032. This growth is fueled by strong governmental support, particularly in Europe, where authorities are actively promoting ETC systems. By facilitating electronic tolling, governments aim to improve traffic flow, reduce congestion, and lower environmental impacts. To encourage the adoption of ETC, they are providing subsidies, financial incentives, and policies that motivate both toll operators and drivers to transition to digital systems.

Additionally, the integration of advanced technologies is playing a critical role in propelling the ETC market. As transportation networks become more digitized and connected, ETC systems are incorporating modern tech solutions such as RFID, IoT, and AI. These enhancements enable seamless, contactless toll payments, increasing convenience for drivers while improving traffic management and lowering operational costs for toll operators. This alignment with digital transportation trends is accelerating the adoption of ETC, supporting substantial market growth.

The ETC market is segmented by technology, including RFID, DSRC, GPS/GNSS, and Video Analytics. In 2023, the RFID segment held over 29% of the market share and is projected to surpass USD 6.8 billion by 2032. RFID technology is widely preferred due to its ability to provide quick, contactless toll payments, meeting the rising demand for easy and touch-free payment solutions. Governments and toll authorities worldwide are pushing for enhanced road infrastructure and cashless payment methods, where RFID stands out as a reliable and adaptable option.

Furthermore, RFID-based ETC systems allow travelers to use a single RFID tag across



different toll networks, enhancing convenience and simplifying toll processes. These systems offer efficient, cost-effective, and user-friendly toll collection solutions, making RFID a prominent choice in the ETC market.

The market is also segmented by subsystems, including Automatic Vehicle Classification (AVC), Violation Enforcement System (VES), and Automatic Vehicle Identification System (AVIS). In 2023, AVIS accounted for about 45% of the market share, driven by its efficiency in tolling, congestion reduction, and automation. AVIS utilizes technologies such as RFID and license plate recognition to automate vehicle identification, supporting the rising demand for hands-free and contactless tolling.

The U.S. market led in 2023 with over 69% of the ETC market share and is expected to exceed USD 6.3 billion by 2032. The region's commitment to smart city initiatives and infrastructure modernization, alongside the adoption of advanced tolling technologies, strengthens the market's growth potential by improving traffic management and enhancing user experiences.



Contents

Report Content

CHAPTER 1 METHODOLOGY & SCOPE

- 1.1 Research design
 - 1.1.1 Research approach
 - 1.1.2 Data collection methods
- 1.2 Base estimates and calculations
 - 1.2.1 Base year calculation
 - 1.2.2 Key trends for market estimates
- 1.3 Forecast model
- 1.4 Primary research & validation
- 1.4.1 Primary sources
- 1.4.2 Data mining sources
- 1.5 Market definitions

CHAPTER 2 EXECUTIVE SUMMARY

2.1 Industry synopsis, 2021 - 2032

CHAPTER 3 INDUSTRY INSIGHTS

- 3.1 Industry ecosystem analysis
 - 3.1.1 Technology providers
 - 3.1.2 Government bodies
 - 3.1.3 System integrators
 - 3.1.4 Payment & financial institutions
 - 3.1.5 Telecommunications & network providers
- 3.2 Supplier landscape
- 3.3 Profit margin analysis
- 3.4 Technology & innovation landscape
- 3.5 Key news & initiatives
- 3.6 Regulatory landscape
- 3.7 Impact forces
 - 3.7.1 Growth drivers
 - 3.7.1.1 More advanced technologies are being used in transportation.
 - 3.7.1.2 European governments are increasingly backing electronic toll collection.



- 3.7.1.3 Growing preference for cashless payments.
- 3.7.1.4 Rising awareness of road accidents and road traffic
- 3.7.2 Industry pitfalls & challenges
 - 3.7.2.1 Technologies are being introduced in developing nations
 - 3.7.2.2 High installation and maintenance costs
- 3.8 Growth potential analysis
- 3.9 Porter's analysis
- 3.10 PESTEL analysis

CHAPTER 4 COMPETITIVE LANDSCAPE, 2023

- 4.1 Introduction
- 4.2 Company market share analysis
- 4.3 Competitive positioning matrix
- 4.4 Strategic outlook matrix

CHAPTER 5 MARKET ESTIMATES & FORECAST, BY TECHNOLOGY, 2021 - 2032 (\$BN)

- 5.1 Key trends
- 5.2 RFID
- **5.3 DSRC**
- 5.4 GPS/GNSS
- 5.5 Video analytics
- 5.6 Others

CHAPTER 6 MARKET ESTIMATES & FORECAST, BY TYPE, 2021 - 2032 (\$BN)

- 6.1 Key trends
- 6.2 Automatic Vehicle Classification (AVC)
- 6.3 Violation Enforcement System (VES)
- 6.4 Automatic Vehicle Identification System (AVIS)
- 6.5 Others (Back office & services)

CHAPTER 7 MARKET ESTIMATES & FORECAST, BY PAYMENT METHOD, 2021 - 2032 (\$BN)

- 7.1 Key trends
- 7.2 Prepaid



- 7.3 Hybrid
- 7.4 Postpaid

CHAPTER 8 MARKET ESTIMATES & FORECAST, BY APPLICATION, 2021 - 2032 (\$BN)

- 8.1 Key trends
- 8.2 Urban zones
- 8.3 Highways

CHAPTER 9 MARKET ESTIMATES & FORECAST, BY REGION, 2021 - 2032 (\$BN)

- 9.1 Key trends
- 9.2 North America
 - 9.2.1 U.S.
 - 9.2.2 Canada
- 9.3 Europe
 - 9.3.1 UK
 - 9.3.2 Germany
 - 9.3.3 France
 - 9.3.4 Spain
 - 9.3.5 Italy
 - 9.3.6 Russia
 - 9.3.7 Nordics
- 9.4 Asia Pacific
 - 9.4.1 China
 - 9.4.2 India
 - 9.4.3 Japan
 - 9.4.4 South Korea
 - 9.4.5 ANZ
 - 9.4.6 Southeast Asia
- 9.5 Latin America
 - 9.5.1 Brazil
 - 9.5.2 Mexico
 - 9.5.3 Argentina
- 9.6 MEA
 - 9.6.1 UAE
 - 9.6.2 South Africa
 - 9.6.3 Saudi Arabia



CHAPTER 10 COMPANY PROFILES

- 10.1 Arya Omnitalk
- 10.2 Atlantia S.p.A.
- 10.3 Cubic Corporation
- 10.4 EFKON GmbH
- 10.5 Far Eastern Electronic Toll Collection Co. (FETC)
- 10.6 FEIG ELECTRONIC GmbH
- 10.7 Honeywell International Inc.
- 10.8 JENOPTIK
- 10.9 Kapsch Group
- 10.10 Mitsubishi Heavy Industries Machinery Systems, Ltd.
- 10.11 Perceptics, LLC
- 10.12 Q-Free ASA
- 10.13 QuaLiX
- 10.14 Siemens AG
- 10.15 Star Systems International
- 10.16 TECSIDEL, S.A.
- 10.17 Thales Group
- 10.18 Toshiba Corporation
- 10.19 TransCore
- 10.20 Xerox Corporation



I would like to order

Product name: Electronic Toll Collection (ETC) Market Opportunity, Growth Drivers, Industry Trend

Analysis, and Forecast 2024 to 2032

Product link: https://marketpublishers.com/r/EC7FC65505A4EN.html

Price: US\$ 4,850.00 (Single User License / Electronic Delivery)

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

Service:

info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page https://marketpublishers.com/r/EC7FC65505A4EN.html