

Carbon Neutral Farming Market Forecasts to 2032 – Global Analysis By Farming Type (Livestock Farming, Crop Farming, Aquaculture, Agroforestry and Other Farming Types), Carbon Neutral Strategy, Technology, End User and By Geography

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Abstracts

According to Statistics MRC, the Global Carbon Neutral Farming Market is growing at a CAGR of 15.2% during the forecast period. Carbon neutral farming is the agricultural practices that aim to balance the amount of carbon dioxide emitted with the amount removed from the atmosphere, ultimately achieving net-zero carbon emissions. This is done through techniques such as using renewable energy, enhancing soil carbon storage, reducing synthetic fertilizer use, and adopting sustainable land management. By integrating methods like crop rotation, agroforestry, and organic farming, carbon neutral farming helps combat climate change, improves soil health, and promotes biodiversity, while supporting long-term food security and environmental sustainability.

Market Dynamics:

Driver:

Growing focus on climate change mitigation

The market is witnessing growing emphasis on climate change mitigation, driven by rising environmental concerns and regulatory pressures. Farmers and agribusinesses are adopting sustainable practices like carbon sequestration, precision agriculture, and renewable energy integration. These efforts aim to reduce greenhouse gas emissions while enhancing soil health and productivity. Consumer demand for eco-friendly products further accelerates this transition, positioning carbon-neutral farming as a key

solution to combat climate change.

Restraint:

Lack of standardized regulations and frameworks

The lack of standardized regulations and frameworks in the market creates significant challenges, including inconsistency in measurement, verification, and reporting of carbon emissions. This hinders farmers' ability to access carbon credits and discourages investment from stakeholders unsure of long-term returns. Without clear guidelines, the credibility of carbon neutral claims is weakened, slowing the adoption of sustainable practices and undermining the market's potential to drive meaningful climate action.

Opportunity:

Adoption of regenerative farming techniques

The adoption of regenerative farming techniques is gaining momentum in the market as producers seek sustainable solutions to combat climate change. These practices, including cover cropping, reduced tillage, and rotational grazing, enhance soil health, increase carbon sequestration, and reduce emissions. With growing consumer demand for eco-friendly food and government incentives supporting sustainable agriculture, regenerative farming is becoming a cornerstone strategy in achieving long-term carbon neutrality in the agricultural sector.

Threat:

Potential for reduced yields in the short term

The potential for reduced yields in the short term poses a major challenge to the adoption of carbon neutral farming practices. Transitioning to methods like reduced chemical use or regenerative techniques can initially lower productivity, impacting farmers' income and food supply. This short-term loss may discourage adoption, especially among smallholders with limited financial buffers, ultimately slowing the market's growth and delaying the environmental benefits of sustainable agricultural practices.

Covid-19 Impact

The COVID-19 pandemic disrupted global agricultural systems, affecting the market. Lockdowns and travel restrictions led to labor shortages, supply chain interruptions, and market closures, impacting farmers' ability to adopt sustainable practices. However, the crisis also accelerated interest in local and sustainable food sources, prompting a shift in consumer behavior towards eco-friendly products. This dual impact has both challenged and catalyzed the transition to carbon-neutral agriculture.

The aquaculture segment is expected to be the largest during the forecast period

The aquaculture segment is expected to account for the largest market share during the forecast period. Innovations such as Skretting Italy's carbon-neutral aquafeed portfolio, which utilizes responsibly sourced ingredients and compensates for remaining emissions through carbon credits, exemplify this shift. Additionally, the adoption of renewable energy-powered aerators in aquaculture operations further minimizes reliance on fossil fuels. These efforts collectively contribute to a more sustainable and climate-resilient aquaculture sector.

The regenerative agriculture segment is expected to have the highest CAGR during the forecast period

Over the forecast period, the regenerative agriculture segment is predicted to witness the highest growth rate. Techniques such as cover cropping, no-till farming, crop rotation, and agroforestry not only restore ecosystems but also improve resilience to climate impacts and reduce dependency on synthetic inputs. The sector is projected to generate a €500 billion carbon credit market, incentivizing farmers to adopt these sustainable practices. With increasing policy support and corporate investment, regenerative agriculture is poised to be a cornerstone of sustainable food systems.

Region with largest share:

During the forecast period, the Asia Pacific region is expected to hold the largest market share driven by increasing environmental awareness, government incentives, and the adoption of sustainable agricultural practices. Countries like India, Vietnam, and Australia are leading the transition through initiatives such as regenerative agriculture, precision irrigation, and carbon offset programs. This growth is further supported by investments in agri-tech and carbon credit systems, positioning the region as a key player in global sustainable agriculture.

Region with highest CAGR:

Over the forecast period, the North America region is anticipated to exhibit the highest CAGR. Farmers are adopting carbon sequestration techniques, regenerative agriculture, and precision farming to reduce emissions. Government initiatives and incentives support this transition, encouraging eco-friendly practices. Despite challenges like high costs and verification complexities, the market is expanding with technological advancements and corporate investments. As demand for sustainable food production rises, carbon-neutral farming is expected to play a crucial role in shaping North America's agricultural future.

Key players in the market

Some of the key players profiled in the Carbon Neutral Farming Market include McDonald's, Astarta Holding, Symbrosia, Agarwood Eco Capital, Auga Group, Australian Farming Services, Zero Carbon Farms, Growlink, Mitsui & Co., AeroFarms, Carbon Farming Foundation, Future Farming Collective, Sustainable Agriculture Initiative, Carbon Neutral Ag, Regenerative Agriculture Alliance and Cool Farm Alliance.

Key Developments:

In March 2025, A new project called "Routes to Regen" has been launched by members of the Sustainable Markets Initiative, including McDonald's and several other companies, to examine ways to scale regenerative farming practices globally.

Mitsui & Co., Ltd., a Berkeley, California-based startup developing E-Jet® fuel, a synthetic sustainable aviation fuel (SAF) made from clean energy, water, and CO₂. Synthetic fuels are liquid fuels produced through chemical and catalytic reactions. The ingredients are green hydrogen, which is made by electrolyzing water using clean energy, and CO₂.

Farming Types Covered:

Livestock Farming

Crop Farming

Aquaculture

Agroforestry

Other Farming Types

Carbon Neutral Strategy Covered:

Carbon Offsetting

Carbon Insetting

Emission Reduction Technologies

Regenerative Agriculture

Organic & Sustainable Inputs

Technologies Covered:

Precision Agriculture

Remote Sensing & AI

Renewable Energy Solutions

Carbon Monitoring Tools

End Users Covered:

Farmers & Producers

NGOs & Environmental Groups

AgriTech Companies

Government & Regulatory Bodies

Food & Beverage Corporations

Other End Users

Regions Covered:

North America

US

Canada

Mexico

Europe

Germany

UK

Italy

France

Spain

Rest of Europe

Asia Pacific

Japan

China

India

Australia

New Zealand

South Korea

Rest of Asia Pacific

South America

Argentina

Brazil

Chile

Rest of South America

Middle East & Africa

Saudi Arabia

UAE

Qatar

South Africa

Rest of Middle East & 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 2024, 2025, 2026, 2028, and 2032
- 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

2 PREFACE

- 2.1 Abstract
- 2.2 Stake Holders
- 2.3 Research Scope
- 2.4 Research Methodology
 - 2.4.1 Data Mining
 - 2.4.2 Data Analysis
 - 2.4.3 Data Validation
 - 2.4.4 Research Approach
- 2.5 Research Sources
 - 2.5.1 Primary Research Sources
 - 2.5.2 Secondary Research Sources
 - 2.5.3 Assumptions

3 MARKET TREND ANALYSIS

- 3.1 Introduction
- 3.2 Drivers
- 3.3 Restraints
- 3.4 Opportunities
- 3.5 Threats
- 3.6 Technology Analysis
- 3.7 End User Analysis
- 3.8 Emerging Markets
- 3.9 Impact of Covid-19

4 PORTERS FIVE FORCE ANALYSIS

- 4.1 Bargaining power of suppliers
- 4.2 Bargaining power of buyers
- 4.3 Threat of substitutes
- 4.4 Threat of new entrants
- 4.5 Competitive rivalry

5 GLOBAL CARBON NEUTRAL FARMING MARKET, BY FARMING TYPE

- 5.1 Introduction
- 5.2 Livestock Farming
 - 5.2.1 Dairy
 - 5.2.2 Cattle
 - 5.2.3 Poultry
 - 5.2.4 Swine
- 5.3 Crop Farming
 - 5.3.1 Cereals & grains
 - 5.3.2 Oilseeds & pulses
 - 5.3.3 Fruits & vegetables
- 5.4 Aquaculture
- 5.5 Agroforestry
- 5.6 Other Farming Types

6 GLOBAL CARBON NEUTRAL FARMING MARKET, BY CARBON NEUTRAL STRATEGY

- 6.1 Introduction
- 6.2 Carbon Offsetting
 - 6.2.1 Tree Planting
 - 6.2.2 Renewable Energy Credits
- 6.3 Carbon Insetting
 - 6.3.1 On-Farm Renewable Energy
 - 6.3.2 Soil Carbon Sequestration
- 6.4 Emission Reduction Technologies
 - 6.4.1 Precision Farming
 - 6.4.2 Methane-Reducing Feed Additives
 - 6.4.3 Low-Emission Fertilizers
- 6.5 Regenerative Agriculture
 - 6.5.1 No-Till Farming
 - 6.5.2 Cover Cropping
 - 6.5.3 Crop Rotation
- 6.6 Organic & Sustainable Inputs
 - 6.6.1 Biofertilizers
 - 6.6.2 Biopesticides

7 GLOBAL CARBON NEUTRAL FARMING MARKET, BY TECHNOLOGY

- 7.1 Introduction
- 7.2 Precision Agriculture
 - 7.2.1 Drones
 - 7.2.2 IoT Sensors
 - 7.2.3 GPS & GIS
- 7.3 Remote Sensing & AI
- 7.4 Renewable Energy Solutions
 - 7.4.1 Solar-Powered Irrigation
 - 7.4.2 Biogas Digesters
- 7.5 Carbon Monitoring Tools
 - 7.5.1 Carbon Footprint Tracking Software
 - 7.5.2 Lifecycle Assessment Tools

8 GLOBAL CARBON NEUTRAL FARMING MARKET, BY END USER

- 8.1 Introduction
- 8.2 Farmers & Producers
- 8.3 NGOs & Environmental Groups
- 8.4 Agritech Companies
- 8.5 Government & Regulatory Bodies
- 8.6 Food & Beverage Corporations
- 8.7 Other End Users

9 GLOBAL CARBON NEUTRAL FARMING MARKET, BY GEOGRAPHY

- 9.1 Introduction
- 9.2 North America
 - 9.2.1 US
 - 9.2.2 Canada
 - 9.2.3 Mexico
- 9.3 Europe
 - 9.3.1 Germany
 - 9.3.2 UK
 - 9.3.3 Italy
 - 9.3.4 France
 - 9.3.5 Spain
 - 9.3.6 Rest of Europe
- 9.4 Asia Pacific

- 9.4.1 Japan
- 9.4.2 China
- 9.4.3 India
- 9.4.4 Australia
- 9.4.5 New Zealand
- 9.4.6 South Korea
- 9.4.7 Rest of Asia Pacific
- 9.5 South America
 - 9.5.1 Argentina
 - 9.5.2 Brazil
 - 9.5.3 Chile
 - 9.5.4 Rest of South America
- 9.6 Middle East & Africa
 - 9.6.1 Saudi Arabia
 - 9.6.2 UAE
 - 9.6.3 Qatar
 - 9.6.4 South Africa
 - 9.6.5 Rest of Middle East & Africa

10 KEY DEVELOPMENTS

- 10.1 Agreements, Partnerships, Collaborations and Joint Ventures
- 10.2 Acquisitions & Mergers
- 10.3 New Product Launch
- 10.4 Expansions
- 10.5 Other Key Strategies

11 COMPANY PROFILING

- 11.1 McDonald's
- 11.2 Astarta Holding
- 11.3 Symbrosia
- 11.4 Agarwood Eco Capital
- 11.5 Auga Group
- 11.6 Australian Farming Services
- 11.7 Zero Carbon Farms
- 11.8 Growlink
- 11.9 Mitsui & Co.
- 11.10 AeroFarms

- 11.11 Carbon Farming Foundation
- 11.12 Future Farming Collective
- 11.13 Sustainable Agriculture Initiative
- 11.14 Carbon Neutral Ag
- 11.15 Regenerative Agriculture Alliance
- 11.16 Cool Farm Alliance

List Of Tables

LIST OF TABLES

Table 1 Global Carbon Neutral Farming Market Outlook, By Region (2024-2032) (\$MN)

Table 2 Global Carbon Neutral Farming Market Outlook, By Farming Type (2024-2032) (\$MN)

Table 3 Global Carbon Neutral Farming Market Outlook, By Livestock Farming (2024-2032) (\$MN)

Table 4 Global Carbon Neutral Farming Market Outlook, By Dairy (2024-2032) (\$MN)

Table 5 Global Carbon Neutral Farming Market Outlook, By Cattle (2024-2032) (\$MN)

Table 6 Global Carbon Neutral Farming Market Outlook, By Poultry (2024-2032) (\$MN)

Table 7 Global Carbon Neutral Farming Market Outlook, By Swine (2024-2032) (\$MN)

Table 8 Global Carbon Neutral Farming Market Outlook, By Crop Farming (2024-2032) (\$MN)

Table 9 Global Carbon Neutral Farming Market Outlook, By Cereals & grains (2024-2032) (\$MN)

Table 10 Global Carbon Neutral Farming Market Outlook, By Oilseeds & pulses (2024-2032) (\$MN)

Table 11 Global Carbon Neutral Farming Market Outlook, By Fruits & vegetables (2024-2032) (\$MN)

Table 12 Global Carbon Neutral Farming Market Outlook, By Aquaculture (2024-2032) (\$MN)

Table 13 Global Carbon Neutral Farming Market Outlook, By Agroforestry (2024-2032) (\$MN)

Table 14 Global Carbon Neutral Farming Market Outlook, By Other Farming Types (2024-2032) (\$MN)

Table 15 Global Carbon Neutral Farming Market Outlook, By Carbon Neutral Strategy (2024-2032) (\$MN)

Table 16 Global Carbon Neutral Farming Market Outlook, By Carbon Offsetting (2024-2032) (\$MN)

Table 17 Global Carbon Neutral Farming Market Outlook, By Tree Planting (2024-2032) (\$MN)

Table 18 Global Carbon Neutral Farming Market Outlook, By Renewable Energy Credits (2024-2032) (\$MN)

Table 19 Global Carbon Neutral Farming Market Outlook, By Carbon Insetting (2024-2032) (\$MN)

Table 20 Global Carbon Neutral Farming Market Outlook, By On-Farm Renewable Energy (2024-2032) (\$MN)

Table 21 Global Carbon Neutral Farming Market Outlook, By Soil Carbon Sequestration (2024-2032) (\$MN)

Table 22 Global Carbon Neutral Farming Market Outlook, By Emission Reduction Technologies (2024-2032) (\$MN)

Table 23 Global Carbon Neutral Farming Market Outlook, By Precision Farming (2024-2032) (\$MN)

Table 24 Global Carbon Neutral Farming Market Outlook, By Methane-Reducing Feed Additives (2024-2032) (\$MN)

Table 25 Global Carbon Neutral Farming Market Outlook, By Low-Emission Fertilizers (2024-2032) (\$MN)

Table 26 Global Carbon Neutral Farming Market Outlook, By Regenerative Agriculture (2024-2032) (\$MN)

Table 27 Global Carbon Neutral Farming Market Outlook, By No-Till Farming (2024-2032) (\$MN)

Table 28 Global Carbon Neutral Farming Market Outlook, By Cover Cropping (2024-2032) (\$MN)

Table 29 Global Carbon Neutral Farming Market Outlook, By Crop Rotation (2024-2032) (\$MN)

Table 30 Global Carbon Neutral Farming Market Outlook, By Organic & Sustainable Inputs (2024-2032) (\$MN)

Table 31 Global Carbon Neutral Farming Market Outlook, By Biofertilizers (2024-2032) (\$MN)

Table 32 Global Carbon Neutral Farming Market Outlook, By Biopesticides (2024-2032) (\$MN)

Table 33 Global Carbon Neutral Farming Market Outlook, By Technology (2024-2032) (\$MN)

Table 34 Global Carbon Neutral Farming Market Outlook, By Precision Agriculture (2024-2032) (\$MN)

Table 35 Global Carbon Neutral Farming Market Outlook, By Drones (2024-2032) (\$MN)

Table 36 Global Carbon Neutral Farming Market Outlook, By IoT Sensors (2024-2032) (\$MN)

Table 37 Global Carbon Neutral Farming Market Outlook, By GPS & GIS (2024-2032) (\$MN)

Table 38 Global Carbon Neutral Farming Market Outlook, By Remote Sensing & AI (2024-2032) (\$MN)

Table 39 Global Carbon Neutral Farming Market Outlook, By Renewable Energy Solutions (2024-2032) (\$MN)

Table 40 Global Carbon Neutral Farming Market Outlook, By Solar-Powered Irrigation

(2024-2032) (\$MN)

Table 41 Global Carbon Neutral Farming Market Outlook, By Biogas Digesters

(2024-2032) (\$MN)

Table 42 Global Carbon Neutral Farming Market Outlook, By Carbon Monitoring Tools

(2024-2032) (\$MN)

Table 43 Global Carbon Neutral Farming Market Outlook, By Carbon Footprint Tracking Software (2024-2032) (\$MN)

Table 44 Global Carbon Neutral Farming Market Outlook, By Lifecycle Assessment Tools (2024-2032) (\$MN)

Table 45 Global Carbon Neutral Farming Market Outlook, By End User (2024-2032) (\$MN)

Table 46 Global Carbon Neutral Farming Market Outlook, By Farmers & Producers (2024-2032) (\$MN)

Table 47 Global Carbon Neutral Farming Market Outlook, By NGOs & Environmental Groups (2024-2032) (\$MN)

Table 48 Global Carbon Neutral Farming Market Outlook, By Agritech Companies (2024-2032) (\$MN)

Table 49 Global Carbon Neutral Farming Market Outlook, By Government & Regulatory Bodies (2024-2032) (\$MN)

Table 50 Global Carbon Neutral Farming Market Outlook, By Food & Beverage Corporations (2024-2032) (\$MN)

Table 51 Global Carbon Neutral Farming Market Outlook, By Other End Users (2024-2032) (\$MN)

Note: Tables for North America, Europe, APAC, South America, and Middle East & Africa Regions are also represented in the same manner as above.

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