

Carbon Neutral Farming - A Global and Regional Analysis: Focus on Carbon Neutral Farming, Startup Landscape, Government Regulations, and Innovation Analysis

https://marketpublishers.com/r/C7A3407AED3BEN.html

Date: August 2023

Pages: 85

Price: US\$ 2,800.00 (Single User License)

ID: C7A3407AED3BEN

Abstracts

Introduction of Carbon Neutral Farming

A series of agricultural practices known as 'carbon farming' boost soil's capacity to store atmospheric carbon. These procedures are typical in regenerative agriculture, organic farming, and other methods of food production. During photosynthesis, plants capture carbon dioxide from the atmosphere and store it. When plants die, the carbon is either released back into the atmosphere or is deposited in the soil. The carbon farming techniques sequester carbon in the soil, whereas the conventional methods release CO2.

Regulatory Landscape

The implementation of carbon neutral farming practices can pose financial challenges for farmers, as it often involves significant upfront costs associated with acquiring new technologies and infrastructure. Furthermore, the adoption of precision farming techniques requires investments in specialized equipment and training. However, despite these initial financial barriers, it is crucial to provide support for the adoption of carbon neutral farming practices due to their long-term advantages, such as enhanced crop yields and improved environmental sustainability.

Governments play a vital role in providing the necessary policy frameworks, financial incentives, and technical support to enable farmers to transition to sustainable and climate-resilient agriculture. By actively promoting and implementing carbon neutral



farming practices, governments contribute significantly to mitigating climate change and building a more sustainable future for agriculture and the planet. The regulatory landscape surrounding global carbon neutral farming varies across countries and regions.

How Can This Report Add Value to an Organization?

Primary Research

The primary sources involve the carbon neutral farming industry experts and stakeholders such as data suppliers, platform developers, and service providers. Respondents such as vice presidents, CEOs, marketing directors, and technology and innovation directors have been interviewed to verify this research study's qualitative and quantitative aspects.

The key data points taken from primary sources include:

understanding the competitive landscape

validation of the numbers of various markets for market type

Secondary Research

This research study involves the usage of extensive secondary research, directories, company websites, and annual reports. It also makes use of databases, such as Hoovers, Bloomberg, Businessweek, and Factiva, to collect useful and effective information for an extensive, technical, market-oriented, and commercial study of the global market. In addition to the data sources, the study has been undertaken with the help of other data sources and websites, such as www.fao.org and www.worldbank.org

Secondary research was done to obtain crucial information about the industry's value chain, revenue models, the market's monetary chain, the total pool of key players, and the current and potential use cases and applications.



Contents

1 CARBON NEUTRAL FARMING AND ITS IMPACTS ON AGRICULTURE

- 1.1 Outlook
 - 1.1.1 Market Definition
- 1.1.2 Carbon Farming
 - 1.1.2.1 Carbon Farming: Subcategories
 - 1.1.2.2 Challenges for Carbon Farming
 - 1.1.2.3 Carbon Sinks
- 1.2 Business Models for Carbon Farming
 - 1.2.1 Action-Based Carbon Farming Models
 - 1.2.1.1 Key Features of Action-Based Carbon Farming Models
 - 1.2.1.2 Case Study: Action-Based Carbon Farming Model
 - 1.2.2 Result-Based Carbon Farming Models
 - 1.2.2.1 Key Features of Result-Based Carbon Farming Models
 - 1.2.2.2 Case Study: Result-Based Carbon Farming Model
 - 1.2.3 Hybrid Carbon Farming Models
 - 1.2.3.1 Key Features of Hybrid Carbon Farming Models
 - 1.2.3.2 Case Study: Hybrid Carbon Farming Model

2 REGULATORY FRAMEWORK

- 2.1 12. List of Regulations: Regional and Country Level
 - 2.1.1 North America
- 2.1.1.1 Government Initiatives and Regulatory Landscape in the Carbon Neutral Farming in North America
 - 2.1.2 South America
- 2.1.2.1 Government Initiatives and Regulatory Landscape in the Carbon Neutral Farming in South America
 - 2.1.3 Asia-Pacific
- 2.1.3.1 Government Initiatives and Regulatory Landscape in the Carbon Neutral Farming in Asia-Pacific
 - 2.1.4 Europe
- 2.1.4.1 Government Initiatives and Regulatory Landscape in Carbon Neutral Farming in Europe
 - 2.1.5 Middle East and Africa
- 2.1.5.1 Government Initiatives and Regulatory Landscape in the Carbon Neutral Farming in Middle East and Africa



- 2.1.6 U.K.
- 2.1.6.1 Government Initiatives and Regulatory Landscape in the Carbon Neutral Farming in the U.K.
 - 2.1.7 China
- 2.1.7.1 Government Initiatives and Regulatory Landscape in Carbon Neutral Farming in China

3 STARTUP AND INNOVATION LANDSCAPE

- 3.1 Startup Landscape in Carbon Neutral Farming
 - 3.1.1 Carbon Credit: Scope in Agriculture
- 3.2 Funding Landscape
- 3.3 Role of Renewable Energy in Carbon Neutral Farming
- 3.4 Innovation Ecosystem
 - 3.4.1 Sustainable Agrochemicals
 - 3.4.2 Carbon Neutrality Programs and Initiatives by Startups
 - 3.4.3 Carbon Credits Distribution Model
 - 3.4.4 Others

4 CASE STUDIES AND SUCCESSFUL IMPLEMENTATION REVIEW

- 4.1 Case Study and Successful Implementation Review
 - 4.1.1 Case Study 1 Implementation of Regulation
 - 4.1.2 Case Study 2 Startup Positioning
 - 4.1.3 Case Study 3 Innovative Technology
 - 4.1.4 Case Study 4 Sustainable Product

5 CONCLUSION AND RECOMMENDATIONS

- 5.1 Conclusion
 - 5.1.1 Agrivoltaics (AV)
 - 5.1.2 Agroforestry
 - 5.1.3 Algae-Based Farming
 - 5.1.4 Biochar
 - 5.1.5 Carbon Offset Markets
 - 5.1.6 Efficient Paddy Cultivation
 - 5.1.7 Methane Mitigation in Livestock
 - 5.1.7.1 Global Methane Pledge
 - 5.1.8 Silvopasture



5.2 Recommendations

- 5.2.1 For Farmers
 - 5.2.1.1 Integrating Renewable Energy
 - 5.2.1.2 Growing Cover Crops and Practicing Crop Rotation
 - 5.2.1.3 Adopting Smart Irrigation Practices
 - 5.2.1.4 Implementing Agroforestry
 - 5.2.1.5 Incorporating Carbon Credit and Carbon Off-Setting Programs
- 5.2.2 For Policy Makers
 - 5.2.2.1 Boosting Education and Awareness Programs
 - 5.2.2.2 Fostering Research and Development
 - 5.2.2.3 Incentivizing Sustainable Farming Practices
 - 5.2.2.4 Providing Market Access and Certification
 - 5.2.2.5 Promoting Collaborations and Partnerships
 - 5.2.2.6 Introducing Regulatory Standards
- 5.2.3 For Startups and Agriculture Companies
- 5.2.3.1 Promoting Precision Farming
- 5.2.3.2 Implementing Sustainable Farming Solutions
- 5.2.3.3 Encouraging the Concept of Carbon Markets and Certification Programs
 - 5.2.3.3.1 Circular Economy Initiatives
- 5.2.3.4 Spreading Education and Awareness
- 5.2.3.5 Fostering Innovative Farming Methods
- 5.2.3.6 Financing: Key Points to Focus
 - 5.2.3.6.1 For Startups
- 5.2.3.6.2 For Investors

6 RESEARCH METHODOLOGY

- 6.1 Data Sources
 - 6.1.1 Primary Data Sources
 - 6.1.2 Secondary Data Sources



List Of Figures

LIST OF FIGURES

- Figure 1: Benefits of Carbon Neutral Farming
- Figure 2: GHG Emission from Agriculture in 2020 and Incremental Emissions by 2050, by Emission Source
- Figure 3: Carbon Farming Sub-categories
- Figure 4: Innovations in Carbon Neutral Farming
- Figure 5: Methods and Practices to Achieve Carbon Neutrality in Agriculture
- Figure 6: Recommendations for Carbon Neutrality in Agriculture
- Figure 7: Region-wise Green House Gas (GHG) Emissions from the Agriculture Sector, 2020
- Figure 8: Share of Industries in Green House Gas (GHG) Emissions in the U.S., 2021
- Figure 9: GHG Emission from Agriculture in 2020 and Incremental Emissions by 2050, by Emission Source
- Figure 10: Subcategories of Carbon Farming
- Figure 11: Carbon Farming Mitigation Potential among European Nations
- Figure 12: Challenges Hindering the Mitigation Potential of Carbon Farming
- Figure 13: Concept of Carbon Sequestration
- Figure 14: Projected Annual Amount of Carbon Sequestration by the MGNREGS Scheme
- Figure 15: Percentage Share of Carbon Credit by Sector, 2021
- Figure 16: African Development Bank (AfDB) Climate Technology Funding, by Sector, 2021
- Figure 17: U.S. Venture Capital Funding in Carbon Neutral Farming Startups, 2017-2021
- Figure 18: Challenges faced by Carbon Credit Management Systems
- Figure 19: Implementation of Regulation in Kerala, India
- Figure 20: Startup Positioning of Grassroots Carbon
- Figure 21: Innovative Technology by Arise IIP
- Figure 22: Sustainable Product by Corteva
- Figure 23: Nitrogen Fertilizer used Per Hectare of Farmland, 2019-2020
- Figure 24: Carbon Neutral Farming: Recommendations for Farmers
- Figure 25: Carbon Neutral Farming: Recommendations for Policy Makers
- Figure 26: Carbon Neutral Farming: Recommendations for Startups and Agriculture Companies
- Figure 27: Suggested Funding Strategy for Carbon Neutral Sector Startups
- Figure 28: Carbon Neutral Farming: Research Methodology





List Of Tables

LIST OF TABLES

- Table 1: Effectiveness of MRV Methods on Different Ways to Implement Carbon Farming
- Table 2: Case Study: Action-based Carbon Farming Model
- Table 3: Case Study: Result-based Carbon Farming Model
- Table 4: Case Study: Hybrid Carbon Farming Model
- Table 5: Government Initiatives and Regulatory Landscape in the Carbon Neutral Farming in North America
- Table 6: Government Initiatives and Regulatory Landscape in the Carbon Neutral Farming in South America
- Table 7: Government Initiatives and Regulatory Landscape in the Carbon Neutral Farming in Asia-Pacific
- Table 8: Government Initiatives and Regulatory Landscape in the Carbon Neutral Farming in Europe
- Table 9: Government Initiatives and Regulatory Landscape in the Carbon Neutral Farming in the Middle East and Africa
- Table 10: Government Initiatives and Regulatory Landscape in the Carbon Neutral Farming in the U.K.
- Table 11: Government Initiatives and Regulatory Landscape in the Carbon Neutral Farming in China
- Table 12: Few Companies in Carbon Neutral Farming Space and Their Products
- Table 13: Investments Raised by Top Carbon Neutral Farming Startups, as of July 2023
- Table 14: Case Study- Sustainable Agrochemicals
- Table 15: Case Study- Sustainable Agrochemicals
- Table 16: Case Study- Carbon Credits
- Table 17: Strategies to Mitigate Methane Emissions from Livestock



I would like to order

Product name: Carbon Neutral Farming - A Global and Regional Analysis: Focus on Carbon Neutral

Farming, Startup Landscape, Government Regulations, and Innovation Analysis

Product link: https://marketpublishers.com/r/C7A3407AED3BEN.html

Price: US\$ 2,800.00 (Single User License / Electronic Delivery)

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

Service:

info@marketpublishers.com

Payment

First name:

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page https://marketpublishers.com/r/C7A3407AED3BEN.html

To pay by Wire Transfer, please, fill in your contact details in the form below:

Last name:	
Email:	
Company:	
Address:	
City:	
Zip code:	
Country:	
Tel:	
Fax:	
Your message:	
	**All fields are required
	Custumer signature

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at https://marketpublishers.com/docs/terms.html

To place an order via fax simply print this form, fill in the information below and fax the completed form to +44 20 7900 3970

