



ANMD-MRS1-010 · Advanced Agriculture Technologies

Polyhouse Shade-Net Monitoring Kits

A Global Sustainability Due Diligence & Market Research Study

History 2020–2024 · Base Year 2025 · Forecast 2025–2032 · Outlooks 2035 / 2040 / 2050 · Currency US\$

WHY THIS REPORT

Polyhouse shade-net monitoring kits meter the protected-cultivation microclimate in real time, turning guesswork into data-driven decisions that cut inputs and protect yield. This decision-grade study sizes the global market three ways — value, kits and monitored area (m²) — across kit type, automation level and application, across seven regions and four scenarios to 2032, with outlooks to 2050.

SUSTAINABILITY & SDG IMPACT — THE ANMD LENS

Sustainability is this report's backbone, not an afterthought. Beyond yield, monitoring kits deliver measurable input savings, early stress detection and resource-efficient protected cultivation, while reduced inputs and crop loss strengthen the natural-capital story.

Mapped Sustainable Development Goals:

| | | | | |
|-----------------------------|--|---------------------------------|-------------------------------|-------------------------------|
| SDG 2 Zero Hunger | SDG 12 Responsible Consumption | SDG 13 Climate Action | SDG 15 Life on Land | SDG 17 Partnerships |
|-----------------------------|--|---------------------------------|-------------------------------|-------------------------------|

Measurable sustainability outcomes assessed:

- Input savings from data-driven microclimate management
- Early crop-stress detection and reduced crop loss
- Resource-efficient protected cultivation
- Electronics embodied carbon and kit end-of-life circularity as material risks

Framework alignment: Double materiality mapped to GRI, SASB, ISSB, TCFD, TNFD, CSRD and the EU Taxonomy, with greenwashing and SDG-washing screens applied throughout.

WHAT'S INSIDE AT A GLANCE

| | | | |
|------------------------------------|-------------------------------|----------------------------------|-------------------------------|
| 53 Chapters | 9 Report Parts | 7 Regions Covered | 40+ Country Markets |
| 2025–32 Forecast Horizon | 4 Forward Scenarios | 25+ Companies Profiled | 5 SDGs Mapped |

REPORT COVERAGE

Geographic scope: North America, Europe, Asia Pacific, Latin America, Africa, Middle East and Rest of World — with named country intelligence. Asia Pacific leads on polyhouse expansion and the smart-farming push (India, China, Vietnam, Thailand); other regions assessed on their own merits.



MARKET OVERVIEW

From early adoption to commercial scale — where real-time monitoring protects the protected-cultivation crop.

The polyhouse shade-net monitoring kits market is moving from early adoption to mainstream commercial scale. Demand is driven by intensifying water, input-cost and climate pressure on protected cultivation, supported by maturing incentives across Asia Pacific, Europe and North America. The market is read three ways — value, kits and monitored area (m²) — and forecast under four scenarios, each region reported separately.

- Asia Pacific is the volume leader — India, China, Vietnam and Thailand, on polyhouse expansion and the smart-farming push
- Europe scales on protected-cultivation intensity and precision monitoring
- North America accelerates on controlled-environment and high-value horticulture
- Resource-and-yield economics is the differentiator — input savings plus protected yield, increasingly with service and data revenue

REGIONAL OUTLOOK

Across seven reporting regions, the report separates early commercialisation leaders from high-growth and emerging markets — each profiled in full rather than aggregated into Rest of World.

| Region | Stage | Lead Markets & Drivers |
|---------------|---------------|---|
| Asia Pacific | Volume leader | India, China, Vietnam, Thailand — polyhouse expansion, smart-farming push |
| Europe | Scaling | Spain, Netherlands, Italy — protected cultivation, precision monitoring |
| North America | Accelerating | United States, Mexico — high-value horticulture, CEA |
| Latin America | Emerging | Brazil, Colombia — protected horticulture, export crops |
| Africa | Frontier | Kenya, South Africa, Morocco — protected cultivation, water security |
| Middle East | Frontier | UAE, Saudi Arabia — desert protected agriculture |

KEY MARKET DRIVERS & RESTRAINTS

| Drivers | Restraints |
|--|---|
| <ul style="list-style-type: none"> • Protected-cultivation + input-efficiency convergence • Input savings & early stress detection • Policy support (polyhouse & smart-farming schemes) • Crop-loss reduction & yield economics • IoT, sensor & AI-analytics technology gains | <ul style="list-style-type: none"> • Kit & gateway CAPEX vs manual judgement • Sensor calibration, drift & connectivity • Power, data-rights & rural-connectivity gaps • Electronics & semiconductor cost inflation • Farmer adoption, financing & skills barriers |



SEGMENTATION SNAPSHOT

| | |
|----------------------------|--|
| By Kit Type | Temp-humidity · soil · light / PAR · multi-parameter IoT |
| By Automation Level | Manual read · telemetry-connected · AI-analytics |
| By Application | Vegetables · flowers · nursery · high-value horticulture |
| By End User | Farmers · cooperatives / FPOs · agri-corporates · public schemes |
| By Component | Sensors · gateways · controllers · software · dashboards |
| By Scale | Smallholder · commercial · multi-site |

TABLE OF CONTENTS — PARTS & CHAPTERS

The full report is organised into nine parts across 53 chapters, listed below. Detailed sub-headings, country tables and directories are provided in the full report.

Part I — Report Foundation, Discovery and Strategic Intelligence

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- › Chapter 2. Industry Discovery Summary — Polyhouse Shade-Net Monitoring Kits
- › Chapter 3. Executive Intelligence and Decision Dashboard
- › Chapter 4. Strategic Findings, Materiality and Investment Verdict Preview

Part II — Market Intelligence, Sizing, Forecasting and Segmentation

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- › Chapter 6. Market Dynamics
- › Chapter 7. Global Market Size and Forecast, 2020–2032
- › Chapter 8. Market Segmentation Analysis
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Part IX — Annexes, Directories and Reference Material

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- › Chapter 48. Corporate Directory and Company Intelligence Annex
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COMPETITIVE & INVESTMENT SNAPSHOT

The competitive field spans specialist agtech-monitoring providers, established sensor manufacturers, and regional integrators. Deal activity — distribution partnerships, technology licensing and demonstration programmes — signals a market consolidating around bankable, repeatable designs.

Representative players profiled in the full report:

Pessl Instruments GmbH (METOS) · Sensoterra B.V. · CropX Technologies Ltd. · Wolkus Technology Solutions Pvt. Ltd. (Fasal) · Sencrop SAS · and 20+ further profiled players across sensing, gateways and analytics.

Investment intelligence: venture, infrastructure, development, climate and blended finance, green bonds and sustainability-linked loans — culminating in a bankability assessment and a Go / No-Go / Conditional-Go investment verdict.

KEY QUESTIONS THIS REPORT ANSWERS

- ? How large is the global polyhouse shade-net monitoring kits market, and how fast will it grow to 2032?
- ? Which regions, countries and segments offer the strongest risk-adjusted opportunity?
- ? How do resource-and-yield economics change returns versus conventional methods?



- ? Who leads, and where is the competitive and patent white space?
- ? Is the investment case bankable — and under what conditions?
- ? How does the technology align with the SDGs and emerging disclosure regulation?

WHY ANMD — THE DIFFERENCE

Most market studies stop at units and revenue. This report is built as a sustainability due diligence instrument — fusing market sizing with ESG, SDG, climate, water and natural-capital intelligence and a decision-ready bankability verdict in a single architecture.

- › Triangulated sizing — every market read three ways so value, volume and area views reconcile rather than conflict.
- › Region-honest forecasting — Latin America, Africa and the Middle East reported in full, never hidden inside Rest of World, every forecast resolved to the 2025 base year.
- › Integrated evidence base — company, patent and project databases linked to the analysis, with published-filing patents and FTO treated as an indicator, not a legal conclusion.
- › No-fabrication discipline — every estimate carries a data-confidence rating and disclosed sources; gaps are flagged for further diligence, never filled with invented numbers.
- › Anti-greenwashing rigour — SDG-washing and greenwashing screens plus claim-substantiation checks built into the ESG and project analysis.
- › Decision-first structure — 9 Parts and 53 Chapters culminating in stakeholder playbooks and a clear Go / No-Go / Conditional-Go investment verdict.

WHO SHOULD BUY THIS REPORT

Investors and infrastructure / PE funds, equipment and component manufacturers, system integrators, growers, agribusinesses and cooperatives, research institutions, policymakers, and corporate strategy and ESG teams.

Access the Full Report

The complete report delivers all 53 chapters in full, with every sub-heading, country table, company and patent directory, forecast model and due diligence checklist.

Purchase at www.anewmarketdynamics.com · Standard & Premium licences · Single-Site (SSL) and Global-Site (GSL) options at checkout.

Want the Complete Detailed Table of Contents?

This prospectus lists the nine parts and 53 chapters. The complete detailed table of contents — every sub-heading, country table, exhibit, company and patent directory and annex — is available on request to registered users. To receive it, register with your official company email at www.anewmarketdynamics.com. The full detailed table of contents will be sent directly to your registered company email address.