

# 9h AIEE Energy Symposium 2025

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# The EU Taxonomy & the Power of Simple, Scalable Climate Technologies

From compliance to value creation through high-albedo solutions



# The EU Taxonomy: A New Common Language

The EU Taxonomy represents a fundamental shift in how Europe approaches sustainable finance. As a central pillar guiding both public and private capital toward genuinely sustainable activities, it functions as more than a checklist—it's a comprehensive technical, political, and financial framework actively reshaping Europe's energy transition.



## Technical Framework

Defines clear, science-based criteria for sustainable economic activities across all sectors



## Financial Instrument

Channels investment toward activities that demonstrably contribute to climate objectives



## Accountability System

Requires companies and investors to measure and transparently demonstrate sustainability performance

# From Commitments to Demonstrable Impact

The Taxonomy marks a decisive departure from aspirational sustainability statements to rigorous, evidence-based accountability. Organizations must now prove their environmental contributions through measurable criteria spanning climate mitigation, adaptation, and the "Do No Significant Harm" principle.

This transformation extends far beyond reporting requirements—it fundamentally reshapes industrial strategy, investment decisions, and financial market operations across the European economy.

01

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## Measure & Report

Document verifiable impact through standardized metrics and transparent disclosure

02

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## Establish Baseline

Quantify current environmental performance with verified data

03

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## Implement Solutions

Deploy technologies aligned with Taxonomy technical screening criteria





# ESG Alignment & Data Transparency

The EU Taxonomy demands absolute consistency between corporate governance principles and operational execution. Generic sustainability claims no longer suffice—organizations must demonstrate alignment through transparent data reporting, third-party verification, and methodological rigor that withstands scrutiny.

## Governance Integration

Board-level oversight of sustainability strategy aligned with Taxonomy objectives

Executive accountability for measurable climate performance

## Operational Execution

Implementation of Taxonomy-compliant technologies and processes

Real-time monitoring of environmental KPIs across operations

## Verified Reporting

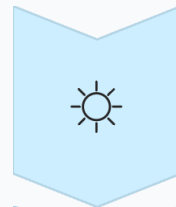
Auditable data systems enabling transparent disclosure

Third-party validation of climate impact claims

# Simple, Accessible, High-Impact Solutions

## Solutions

High-albedo technologies exemplify the most effective approach to Taxonomy compliance: solutions that are simultaneously simple to deploy, cost-effective to scale, and capable of delivering measurable climate impact.



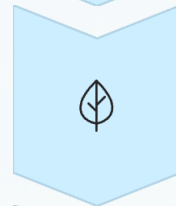
### Surface Reflectance

Increases solar radiation reflection, reducing absorbed heat



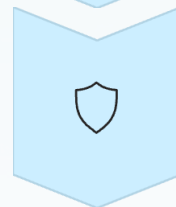
### Temperature Reduction

Lowers ambient and surface temperatures in urban environments



### Energy Savings

Decreases cooling demands and associated emissions



### Climate Resilience

Enhances adaptation capacity for cities and agriculture

These technologies fully align with EU Taxonomy criteria for both climate mitigation and adaptation while supporting urban resilience, agricultural productivity, and energy efficiency—all with rapid deployment timelines and minimal infrastructure requirements.



# Real-World Experience & Proven Results



Field deployments across Europe have generated compelling evidence of high-albedo technology performance. Projects consistently demonstrate measurable temperature reductions, decreased energy consumption for cooling, and enhanced building performance—all quantifiable against Taxonomy KPIs.

**3-7°C**

## Surface Temperature Reduction

Measured decrease on treated surfaces during peak summer conditions

**20-35%**

## Cooling Energy Savings

Reduction in HVAC energy consumption for conditioned spaces

**8-12%**

## PV Output Increase

Enhanced solar panel efficiency, especially for bifacial modules, through retro-reflective membranes

These immediate, measurable benefits translate directly into Taxonomy-compliant performance metrics, providing the verifiable data required for sustainable finance access and regulatory reporting.



# A Competitive Advantage for Europe

High-albedo solutions represent more than environmental performance—they constitute a strategic competitive advantage in the evolving landscape of sustainable finance and climate regulation.

## Taxonomy Alignment

Science-based solutions meeting technical screening criteria for climate objectives



## Finance Access

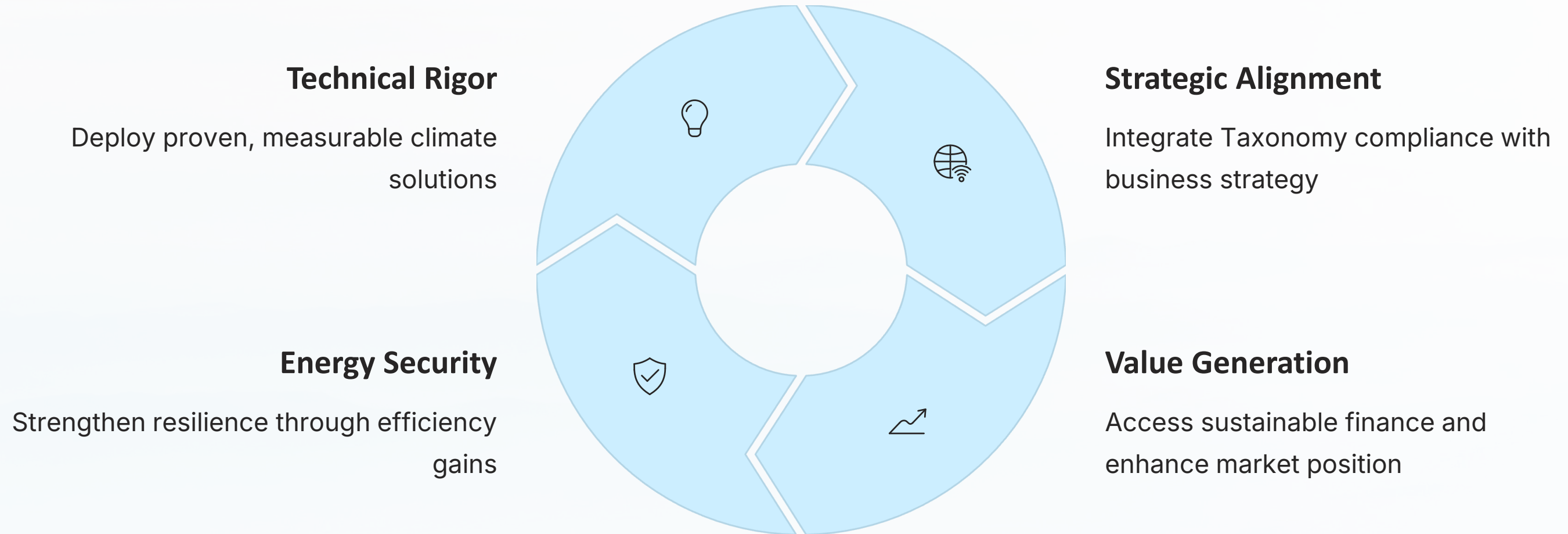
Unlocks green bonds, sustainability-linked loans, and institutional investment

## Market Position

Increases competitiveness and regulatory credibility in European markets

Organizations implementing high-efficiency, Taxonomy-aligned climate technologies position themselves to capture emerging opportunities in Europe's transition to a sustainable economy while meeting increasingly stringent disclosure requirements.

# Turning Compliance into Value Creation



The convergence of technical excellence with sophisticated understanding of European policy frameworks transforms regulatory compliance from obligation into opportunity. Organizations that master this intersection accelerate climate resilience, attract sustainable investment, and build durable competitive advantages in energy security and operational efficiency.

# Blockchain Integration for Albedo-Based Carbon Offset Measurement

Integrating real-time albedo metrics into blockchain infrastructure creates unprecedented transparency and accountability for carbon offset calculations. This combination addresses inherent challenges of credibility and accountability in carbon offsetting, providing an immutable record of carbon reduction efforts.



## Carbon Offset Calculation via Albedo Enhancement

- On-site albedo readings (local meteorological data)
- Satellite-derived reflectance data



## Real-Time Data Synchronization

- Continuous FTP intercommunication
- Ensures transparent, traceable updates



## Blockchain Benefits

- Immutability of reflectance and temperature-reduction records
- Verifiable, time-stamped proof of carbon offsets

This system enables automatic execution of transactions when predefined conditions are met, meaning that once a company achieves a set emission reduction goal, the corresponding carbon credits are automatically transferred, reducing administrative burden and ensuring real-time responsiveness.



## On-site & Satellite Data



## Real-Time Sync



## Blockchain Storage



## Carbon Credit Validation & Automated MRV

- ❑ Auditable carbon credit tokens aligned with EU Taxonomy and voluntary markets through automated MRV (Monitoring, Reporting, Verification) with smart contracts that provide real-time monitoring, reporting and validation of data while optimizing workflows and bringing credibility, accountability and transparency into the process.



# And It All Starts with Albedo...



## Simple & Accessible

An underutilized climate tool requiring minimal infrastructure, ready for immediate deployment across urban and agricultural environments



## Measurable & Compliant

Delivers immediate, quantifiable benefits that align perfectly with EU Taxonomy technical screening criteria and reporting requirements



## Foundation for Growth

Establishes the basis for next-generation sustainable investments, enabling organizations to build comprehensive climate strategies on proven, scalable technology