EntisAIM: Classifying Private Market Funds for Sustainable Development Investments

Consistent, Scalable, and High-Quality Solutions for Aligning Private Investments with Sustainability Goals

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Summary

The growing focus on sustainable investments in private markets presents unique challenges for investors. While solutions for public market investments are well-established, private equity, private debt, infrastructure, and real estate funds still lack effective and consistent tools to meet evolving stakeholder, including regulatory demands. Particularly for asset owner who require a holistic view on the sustainability attributes of their portfolio, having comprehensive coverage of investments independent on their wrapper is key. This is especially relevant as many investors view the private market space as the key area of investment in which capital can be directed to sustainability solutions. With the application of the SDI Taxonomy to private markets investments, this now becomes possible.

This whitepaper introduces the Sustainable Development Investment (SDI) taxonomy—a globally recognized framework for identifying investments aligned with the United Nations Sustainable Development Goals (SDGs)—and its transformative application to private market holdings. Built on our generic AI platform, EntisAIM is a dedicated solution for private market funds. It enables

consistent, scalable, and high-quality classification of private companies, addressing key challenges such as:

- Consistent measurement of SDG contributions
- Cross-asset aggregation, allocation, selection and reporting
- Enhancing the exit value of portfolio companies with SDI-aligned classifications.
- Opportunity for active ownership to demonstrate and improve sustainability attributes

Our initial application—classifying 4420 private companies—showed that over 20% of firms were found to have contributions to the SDGs according to the SDI Taxonomy, surpassing expectations and equipping fund managers with actionable insights to achieve their goals.

This paper demonstrates how EntisAIM delivers speed, accuracy, and transparency, turning sustainability classifications into meaningful investment insights that fit today's requirements. For fund managers navigating private markets, this is an opportunity to align your holdings with sustainability goals and maximize portfolio impact.

Context: **A Total Portfolio Perspective**

Private markets—encompassing private equity, private debt, infrastructure, and real estate—are becoming pivotal for sustainable investment strategies. Asset owners increasingly view these asset classes as critical for deploying capital to address sustainability challenges. This is driven by:

- The need for holistic portfolio reporting, where private markets are integrated with public investments for total portfolio oversight.
- A rising demand for thematic products focusing on sustainability, making consistent classification frameworks across asset classes indispensable.
- A growing recognition of private markets' unique potential to drive impact through active ownership, direct engagement, and company-level transformations.

However, private markets present unique challenges:

- Fragmented and inconsistent data: Private companies lack standardized reporting, complicating sustainability assessments.
- Complexity of applying frameworks: Classifying investments using established taxonomies like SDI requires consistent application of hundreds of detailed criteria, which is nearly impossible to achieve manually.
- Scale and speed requirements: With portfolios often spanning thousands of companies, traditional methods are costly, error-prone, and slow.

The SDI taxonomy has become a global standard for identifying contributions to the SDGs in public markets. Extending its application to private markets provides asset owners with a consistent, cross-asset framework for managing sustainability across their total portfolio.

The Challenge of Consistent Taxonomy Application

Applying a detailed taxonomy, such as the SDI framework, to private markets requires analyzing thousands of companies against hundreds of precise, rule-based criteria. Each rule specifies strict inclusion and exclusion thresholds, making manual application by human analysts challenging and prone to error.

Key Challenges:

- **Volume:** Evaluating thousands of companies across global, multi-asset portfolios is resource-intensive.
- **Complexity:** Taxonomies like SDI include over 100 meticulously defined categories, each requiring precise application.
- **Consistency:** Maintaining uniform, auditable application across asset classes and regions is difficult, even for experienced teams.

Why It Matters:

Inconsistent or erroneous classifications can undermine trust and create risks, including:

- Challenges in meeting evolving regulatory and stakeholder reporting requirements.
- Reputational risks, such as accusations of greenwashing.
- Reduced reliability of data used for portfolio analysis and decision-making.

A scalable, automated solution ensures consistent, high-quality classification across private and public markets, empowering asset owners and managers to maintain a holistic and credible portfolio view.

Solution and Benefits

EntisAIM: Transforming Private Markets Classification

EntisAIM enables the consistent, scalable application of the SDI taxonomy to private market holdings. Its key features include:

- **Speed and scalability**: >90% faster than manual methods, making classification of thousands of companies feasible within weeks.
- **Consistent rule application**: Ensures that taxonomy criteria are strictly followed, minimizing errors and increasing reliability.
- **Cross-asset compatibility**: Applies the same framework used in public markets, allowing seamless integration of sustainability metrics across the entire portfolio.
- **Global reach**: Works across countries, sectors, and languages, leveraging advanced data processing to handle diverse inputs.
- **Quality and transparency**: Reduces subjectivity by combining AI-driven insights with human validation, ensuring data quality and audit readiness

To deliver these benefits, the solution follows a structured process: from data collection and preparation, through AI-driven classification, to human oversight.

Driving quality and consistency - How It Works

| Data Collection | Scrapes sources such as company websites to gather company-specific information |
Data Preparation	Normalizes formats, removes inconsistencies, and translates content for standardized analysis. .
AI-Driven Classification	Applies the SDI taxonomy to identify alignment with SDGs, leveraging AI to ensure consistent and scalable scoring.
Human oversight	Analysts validate AI outputs to handle edge cases and ensure accuracy

Underneath this process sits a robust, purpose-built technical infrastructure that forms the foundation of the solution. It collects, ingests, extracts and normalizes company information. From there, state-of-the-art language models and semantic embeddings are applied to map companies against the SDI taxonomy. This advanced pipeline ensures classifications are not only scalable, but also explainable and auditable — each outcome is supported by traceable evidence, confidence scoring, and a structured review process.
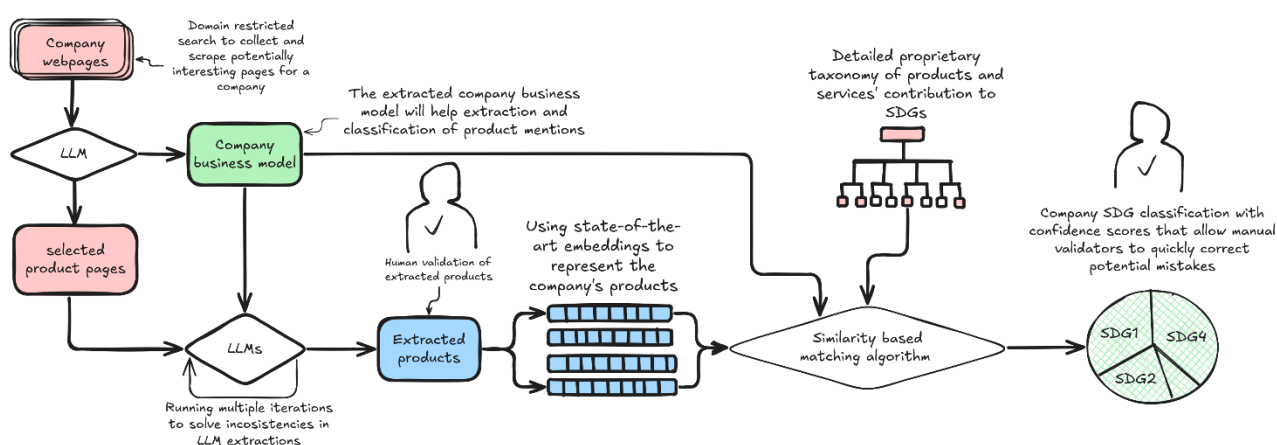
Proven Results: A Case Study

In collaboration with a major Dutch pension fund, we applied the SDI taxonomy to a portfolio of over 4420 private companies. Key findings include:

- **High success rates**: Over 20% of companies were SDI-aligned, significantly exceeding expectations.
- **Efficiency**: Classified 1,000 companies each two weeks, demonstrating speed and scalability.
- **Sufficient data availability**: Found reliable text data for robust classification, even for smaller private firms.
- **Insights by sector and SDG**: Enabled detailed analysis of sustainability contributions across industries and goals, providing actionable insights for fund managers.

a) Fraction of companies that score positively per SDG*
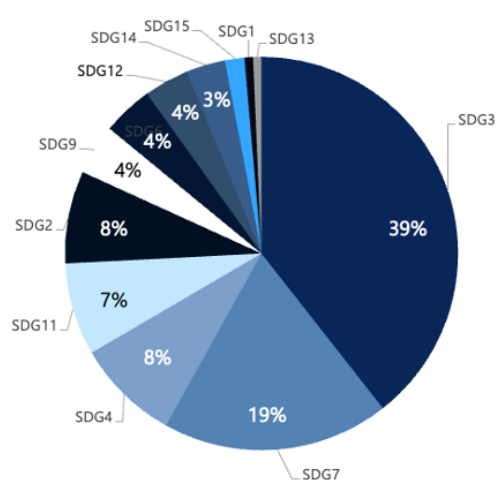
*Note: a company can contribute to multiple SDGs. Number based on counts, not weighted by revenue

b) Examples of products per SDG offered by the private companies in the PE portfolio

SDG		
SDG 1	No Poverty	Financial inclusion
SDG 2	Zero Hunger	Biological fertilizers and pest control, Precision agriculture, Food safety solutions
SDG 3	Good Health	Diagnostic imaging equipment, Prescription pharmaceuticals, Telehealth services, PPE and protective equipment for professionals
SDG 4	Quality Education	Primary and secondary education services, Educational products other than publishing, Non-curricular education services
SDG 6	Clean Water	Providing clean drinking water (other than consumer products), Water treatment chemicals, Construction of clean water facilities
SDG 7	Affordable and Clean Energy	Renewable energy generation (solar, wind, hydro), Smart grid, Electric and zero-emission vehicles
SDG 9	Industry, Innovation, and Infrastructure	Carbon capture and storage, Public transport infrastructure, Telecom infrastructure
SDG 11	Sustainable Cities and Communities	Sustainable building materials, Fire protection solutions, Vehicle catalysts
SDG 12	Responsible Consumption and Production	Closed loop recycling, Compostable or biobased plastics, Waste management and recycling
SDG 13	Climate Action	Flood control engineering
SDG 14	Life Below Water	Wastewater treatment facilities, Water treatment chemicals
SDG 15	Life on Land	Ecosystem restoration, Soil remediation, Certified paper packaging

Figure 1 Figure: SDG Alignment in Private Companies a) Proportion of Companies Aligned with Each SDG: Distribution of companies showing significant alignment across the SDGs, highlighting the breadth of sustainability engagement in private markets. b) Examples of SDG-Related Product Categories: Illustrating the thematic granularity and diversity of private company contributions to each Sustainable Development Goal (SDG).

Call to Action: Unlock the Potential of Private Markets

Private markets offer unparalleled opportunities for driving sustainability impact. By leveraging the SDI taxonomy through our AI-powered platform, asset managers and owners can:

- Meet growing demands for regulatory and stakeholder reporting.
- Enhance portfolio value by identifying and demonstrating sustainability contributions.
- Integrate sustainability metrics seamlessly across their total portfolio.

Take the first step toward transforming your private market holdings. Contact us to learn how our platform can help align your investments with global sustainability goals.