

VALUATION RISK AI ASSISTANT VELTIS®

The most accurate way to integrate sustainability into valuations and comply with the new ECM/599/2025 Order





Innovative Methodology for Sustainable Valuation

Our Goal

This slides present the methodology developed through an AI Assistant for the quantitative integration of climate and environmental risks into real estate asset valuation, in accordance with the European regulatory framework.

Regulatory Compliance

The AI Assistant complies with the requirements established in the Order ECM/599/2025, quantitatively integrating sustainability and climate and environmental risks into real estate asset valuation.



European Regulatory Framework

ECM Order

Requires valuations to incorporate information related to present and future physical and transitional risks.

European Taxonomy

Establishes clear criteria for classifying environmentally sustainable economic activities.

ECB Guide

Provides guidelines on climate and environmental risks for financial entities.

We have developed the Valuation Risk AI Assistant Veltis® to comply with these requirements through a methodology based on data from official sources that allow analyzing the asset's exposure to different risks.

Key Features of the Veltis AI Assistant

01

Comprehensive regulatory alignment

Designed in accordance with Order ECM/599/2025, the European Taxonomy, and the BCE Guide 2020, integrating climate and environmental risks relevant to the real estate sector.

02

Advanced and prospective modeling

Combines historical data and climate projections (RCP 4.5, RCP 8.5 scenarios) to generate dynamic indicators that reflect current and future exposure in short-term (2011-2040), medium-term (2041-2070), and long-term (2071-2100) periods.

03

Asset-level analysis scale

Georeferencing system for plots and buildings with micro-spatial resolution, allowing specific risk estimation for each property.

04

Verifiable scientific sources

Feeds on information from official local, state, and international sources (AEMET, IGN, MITECO, EEA, Copernicus, Tecnalia), ensuring data traceability.



Key System Features



Indicator Standardization

The 17 main risks are expressed on a common quantitative standardized scale from 0 to 100, generating the overall Physical Risk Score and the Climate Sustainability Rating (A-E).



Adjusted Economic Value

When comparing assets with similar levels of sustainability-related risks, the average value obtained will be corrected for the sustainability component.



Dynamic and Adaptive Nature

Risks are modeled as non-static variables, updating based on data availability and changes in the territory or human action.

Benefits and Contributions of the AI Assistant

Total Regulatory Compliance

Aligns real estate valuation with European sustainability and climate risk standards.

Reliability and Transparency

All results are traceable, auditable, and based on scientific sources.

Operational Integration

The Climate Sustainability Rating can be directly incorporated into appraisal reports, internal credit risk models, or supervisory reporting (Pillar 3, CSRD, TCFD).

Prospective Vision

The model not only measures current risk but also the future risk of the asset under plausible climate scenarios.

Competitive Advantage

Allows anticipating regulatory and financial impacts, contributing to advanced ESG risk management in the real estate sector.

Five Key Requirements

For Complying with Sustainability in Valuations



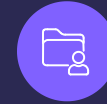
Alignment with BCE and European Taxonomy

Risk indicators to incorporate



Appropriate Scale

Working with asset-level risks



Reliable Sources

Use of verifiable information



Homogenization

Standardized and comparable data

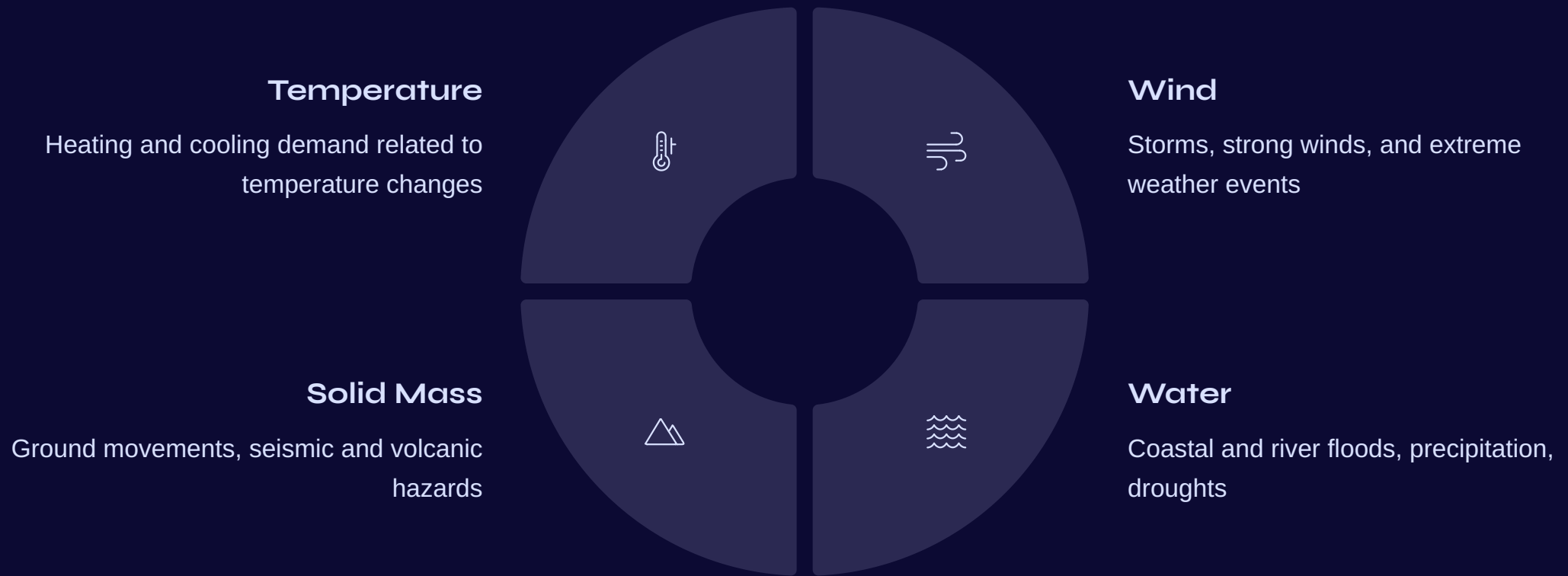


Corrected Value

Determine a risk-adjusted value

Alignment with European Taxonomy

Delegated Regulation (EU) 2021/2139 classifies physical risks according to their nature (temperature, wind, water, or solid mass) and their character (chronic or acute). Veltis has carried out a sectoral adaptation process in collaboration with Tecnalía.



Indicators Aligned with Environmental Objectives

The Veltis Climate Sustainability Rating assesses the degree to which a real estate asset contributes to the environmental objectives established in the Taxonomy Regulation (EU) 2020/852.

17

Main Indicators

Climate and environmental risks

144

Sub-indicators

Of risks for precise exposure estimation

6

Environmental objectives

Of the European Taxonomy Regulation

Examples of Sub-indicators

- **Air pollution:** 14 sub-indicators (PM2.5, PM10, arsenic, cadmium, nickel, lead, CO, etc.)
- **Water pollution:** 23 chemical and biological sub-indicators, ecological and chemical status of water bodies
- **Forest fire:** 33 sub-indicators including Frequency (IFI), Severity (IGI) and Causality (ICI) Indices



Working with Risks at the Appropriate Scale

Limitations of the Traditional Zonal Approach



Spatial Heterogeneity

The orography of a province can be very diverse. The provincial average dilutes the real risk of each property.



Microclimates

Local factors such as altitude, orientation, or natural barriers change the probability of climatic phenomena.

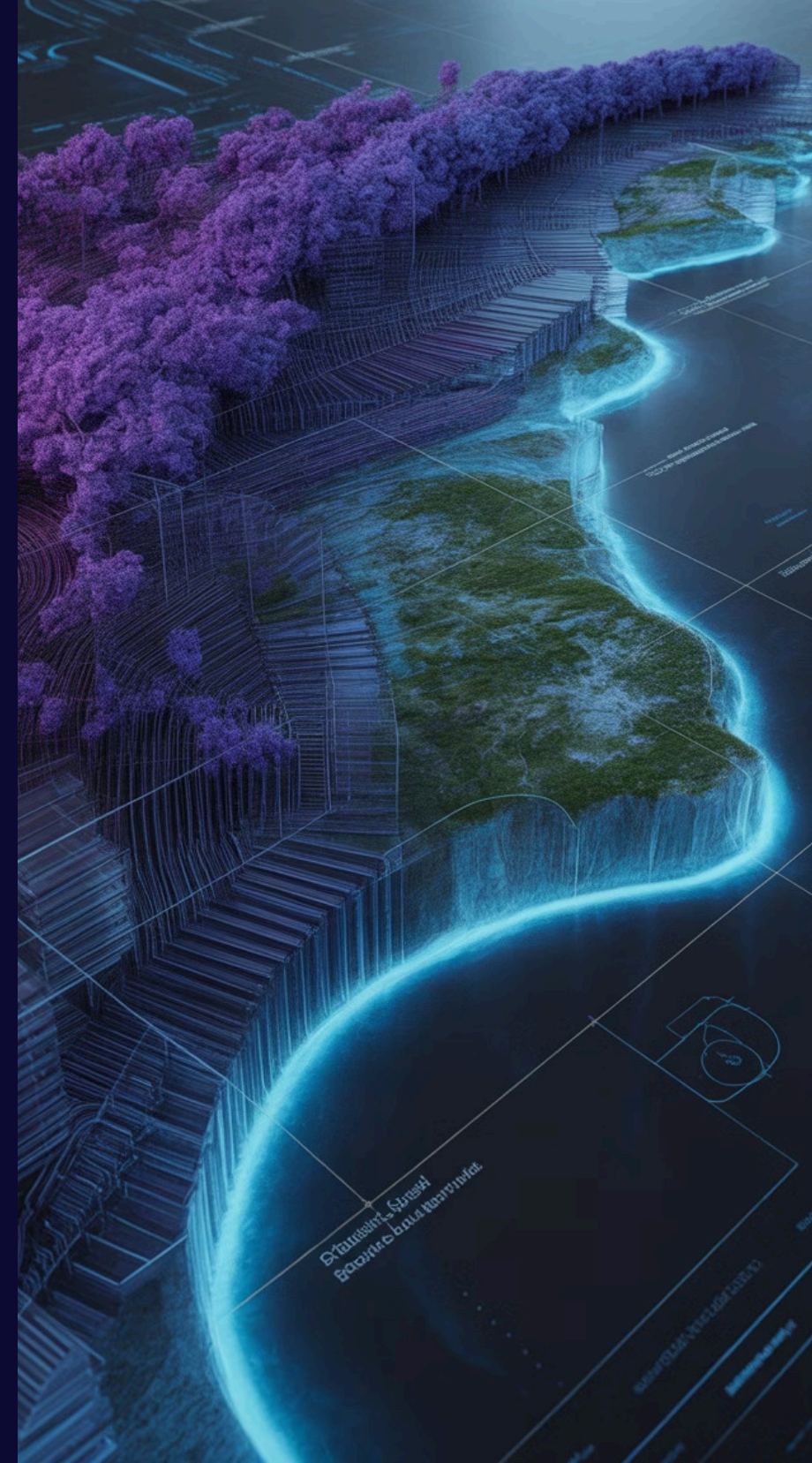


Statistical Bias

Averages tend to hide extreme risks (rare but high-impact events).

Veltis Approach: Asset-Level Modeling

The Veltis Rating model works with geospatial data sources, identifying the impact of risks on a specific asset using coordinates, cadastral reference, or address.



Leveraging Reliable Information Sources

The Veltis Rating model combines public, scientific, and private information, developing its own data architecture that translates climate-related and environmental risks into metrics applicable to the impact on a real estate asset.

International Sources

Joint Research Centre (JRC), Climate Adapt,
US Geological Survey (USGS), Copernicus
programme

National Sources

AEMET, IGN, MITECO, CSIC, river basin
authorities, regional water agencies

Scientific Collaboration

Tecnalia, one of Europe's largest climate
change research centers

Data Homogenization

Normalized Scaling of Indicators

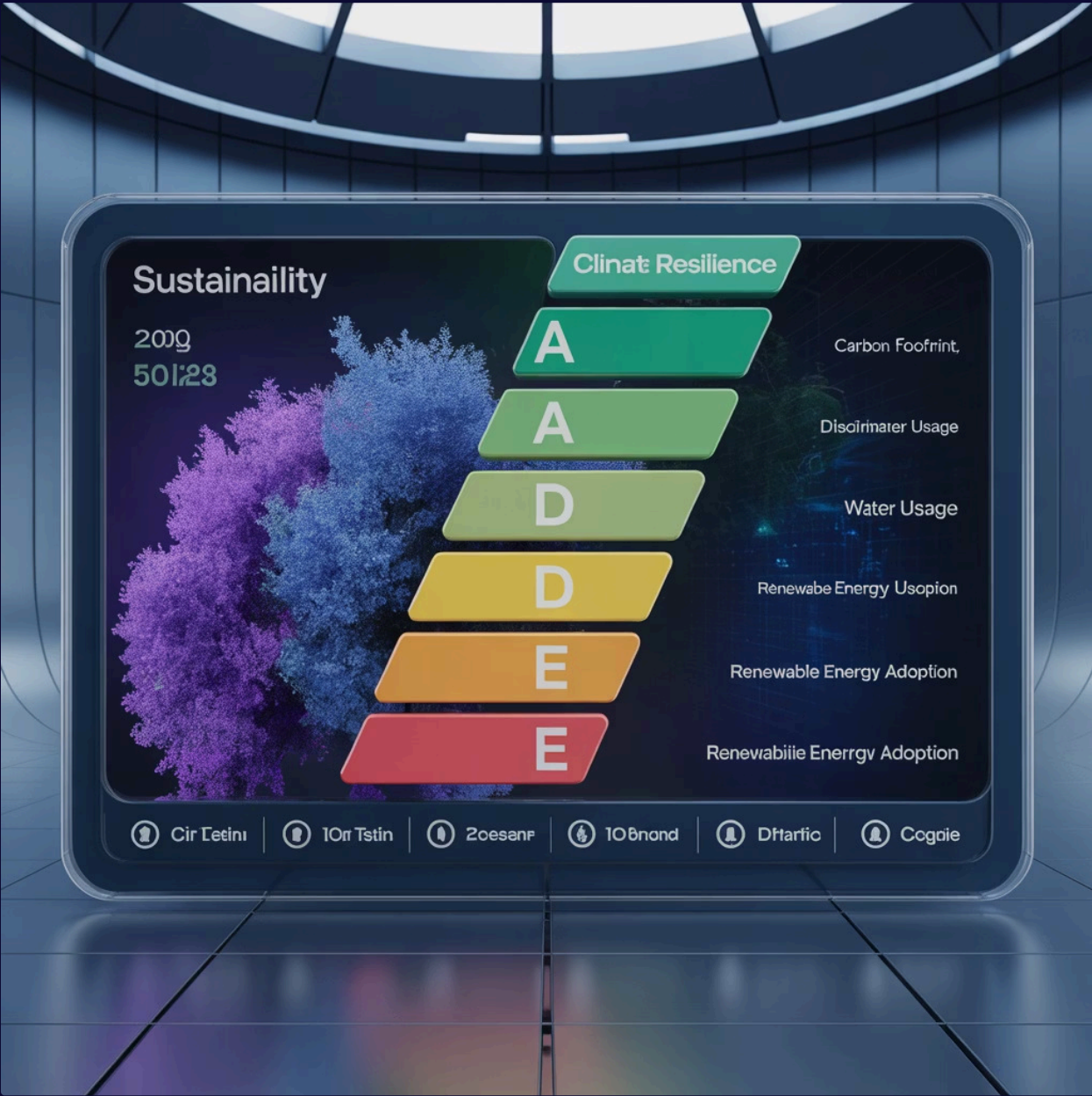
Each of the 17 main risk indicators is translated to a numerical scale from 0 to 100, where 0 represents the lowest exposure level or no risk, and 100 the highest exposure level or extreme risk.



Climate Sustainability Rating

The CSR is expressed on a five-category scale (A–E), comprehensively summarizing exposure to relevant climate and environmental risks.

- **A - Very sustainable:** High resilience, minimal exposure
- **B - Sustainable:** Good adaptive capacity
- **C - Medium:** Moderate, manageable risks
- **D - Vulnerable:** High exposure, relevant impact
- **E - Very vulnerable:** Critical exposure or severe impact





Determining a Value Adjusted for Physical Risks

We have developed a Climate Sustainability Coefficient (Veltis CSC) to adjust for physical risks the asset value initially established by the appraiser using conventional appraisal techniques.

01

Base Value

Obtained in accordance with traditional comparison or update methodologies as per Order ECO/805/2003

02

Comparable Analysis

The appraiser obtains an average price of comparables based on similar characteristics. Veltis indicates if they are similar in terms of physical risks

03

Risk Adjustment

If comparables are not similar in terms of risks, Veltis indicates assets comparable in physical risks to readjust the value

04

Adjusted Value

The difference between both values will be the correction coefficient applied to adjust the value corrected for physical risks

Risks are Dynamic, Not Static

Climate and environmental risks evolve over time. They are not fixed magnitudes, but dynamic variables that change due to the effects of climate, the natural regeneration of ecosystems, human actions, and the adaptation of territories.

Natural Evolution

Cyclical or regressive behaviors derived from the nature's own dynamics

Prospective Valuation

A living model that reflects the dynamic reality of the territory and allows for well-founded valuations



Human Intervention

Hydraulic works, infrastructures, urban changes, or reforestation projects

Continuous Updates

New observations, records of recent climatic events, infrastructure updates

European Sectoral Data Space

REAL ESTATE CLIMATE RISK & VALUE DATA SPACE VELTIS

All this information is integrated into the first European sectoral data space specific to the real estate sector and its risks, advised by CRED (Data Spaces Reference Center) of the Ministry of Digital Transformation of the Government of Spain.

Sovereignty and Trust

Participants maintain control over their data, ensuring its sovereignty and fostering an environment of mutual trust

Governance

Clear rules on how data is shared, accessed, and used, ensuring interoperability and quality

Security

Technical mechanisms to protect data against unauthorized access, ensuring privacy and regulatory compliance

Interoperability

Designed to be compatible with other infrastructures and data spaces, facilitating information exchange on a larger scale

Value Generation

Enables value creation through collaboration and joint use of data, driving digitalization and innovation

The objective is to provide real estate sector operators (banks, insurers, investment funds, consultants, developers, appraisers, PropTech, FinTech, InsurTech, individuals, or public administrations) with a data space where they can find quality information related to the real estate sector, climate, risks, and value.