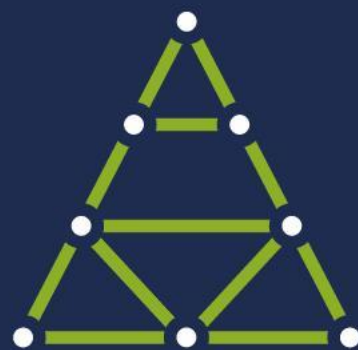
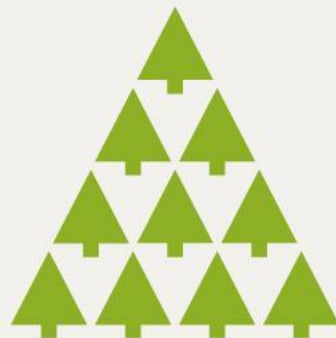


XIII European Mountain Convention

Shaping the future of mountain economies

15 - 18 October 2024 | Puigcerdà - Catalonia



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Danijel Bertović

CEO, Sensum Ltd.

**Climatig - How much
will climate change
cost you?**

danijel.bertovic@sensum.hr

Where did the initiative take the place?

Climatig initiative take the place in county of Primorje and Gorski kotar in **Croatia**

- from the very beginning Sensum company has focused on the development of sustainable business, especially on R&D projects related to climate change and circular economy in Croatia
- it strives to realize innovative models of the circular economy, with the aim of implementing them in the wider local community
- main challenge was climate changes that affect public and private organisations



How did the initiative trigger a creative contribution from the actors involved?

- In Sensum we started to work on Joint SECAP within Interreg Italy-Croatia project; where we was subcontracted as external expert for development of SECAP and Risk Assessment Analysis for the municipalities in Croatia
- Then we realised that risk and vulnerability parts of the documents are insufficient due to lack of certain data and long term predictions
- That was the main trigger to create new digital tool that can help us in preparation of these strategic documents as well in better understanding of future climate risks
- After that Sensum receive more ERDF funds for development of this tool through different calls – PoC, Innovation of new established SME's



The PROBLEM



HOW TO MEASURE FUTURE CLIMATE-RELATED PHYSICAL RISKS BY SPECIFIC LOCATION?



HOW TO ASSESS THE VALUE OF MY PORTFOLIO ASSETS IN THE FUTURE?



HOW TO CALCULATE RESERVE PLANNING ASSUMPTIONS FOR CLIMATE RISK AND DELIVER ACCURATE ESG REPORTING?



HOW TO DECIDE WHAT LOCATIONS WILL BE MORE SUITABLE OR PROFITABLE FOR INVESTMENT?



HOW BEST TO MITIGATE AGAINST DISASTERS AND PLAN POTENTIAL COSTS?



The CLIMATIG SOLUTION

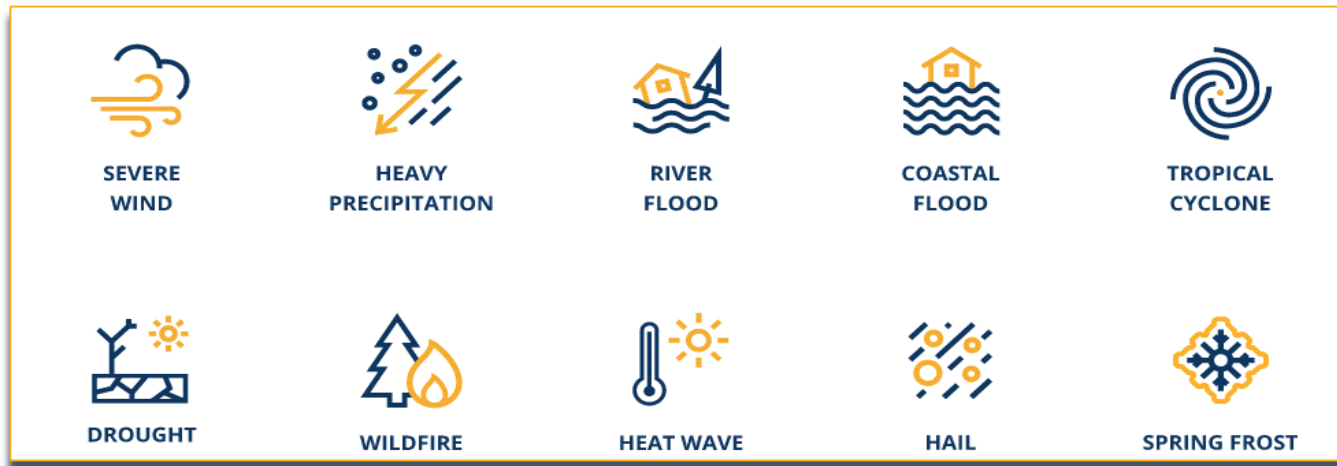


THE MOST precise climate risk calculation to a resolution of 10 meters

WIDER SET OF PERILS than anyone else in the market

AFFORDABLE solution serving both commercial and individual **HIGH NET WORTH** clients

HIGHER DEGREE OF TIME GRANULARITY from 1991 up to the year 2100



2 NEW MEASUREMENT UNITS



CLIMATIG SCORE

CS – of asset's climate risk



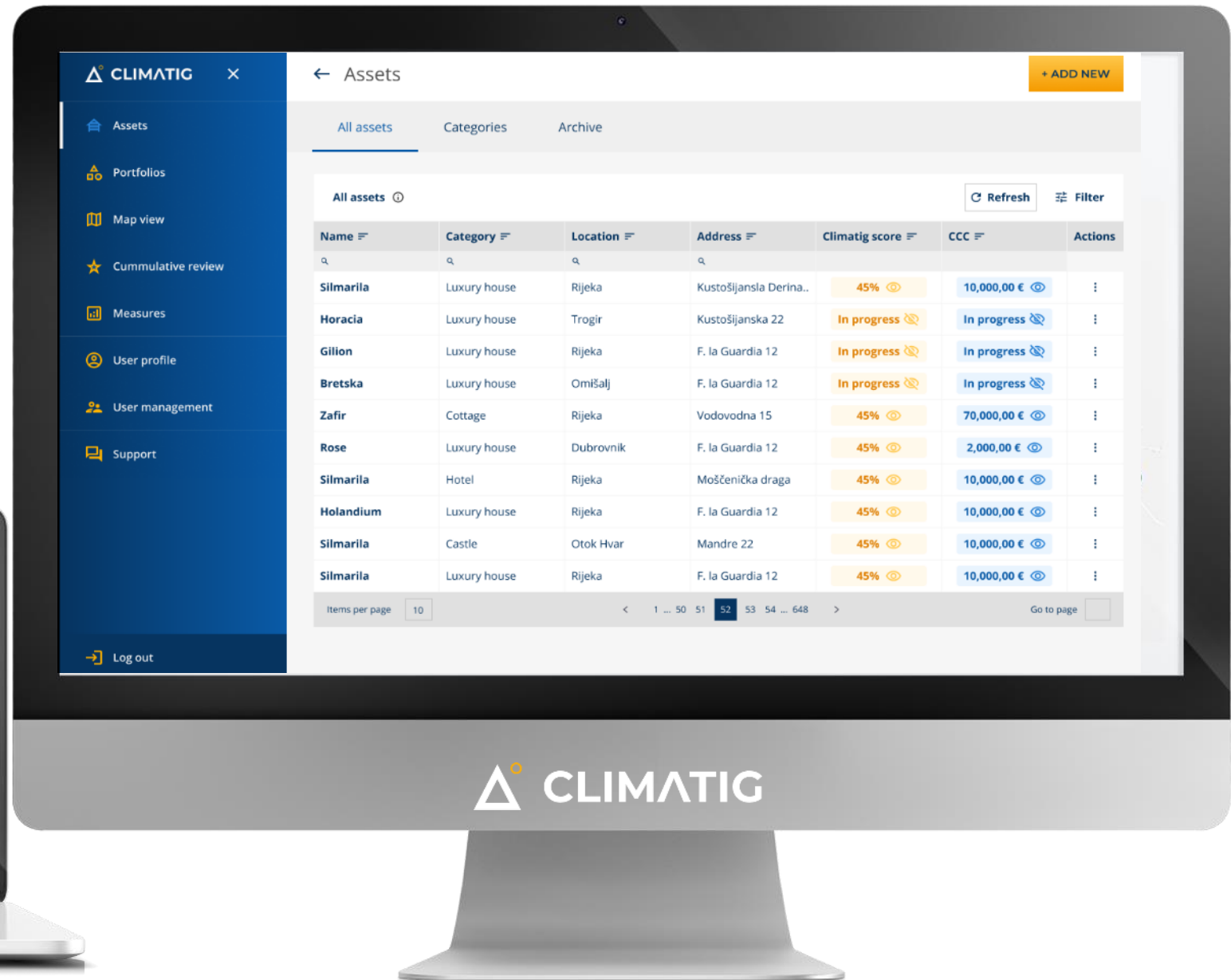
CLIMATIG COST

CC – of asset's economic value



How it look like

- **CLIMATIG** is fully operative with a robust application
- Our B2B and B2C clients use app through SaaS or API

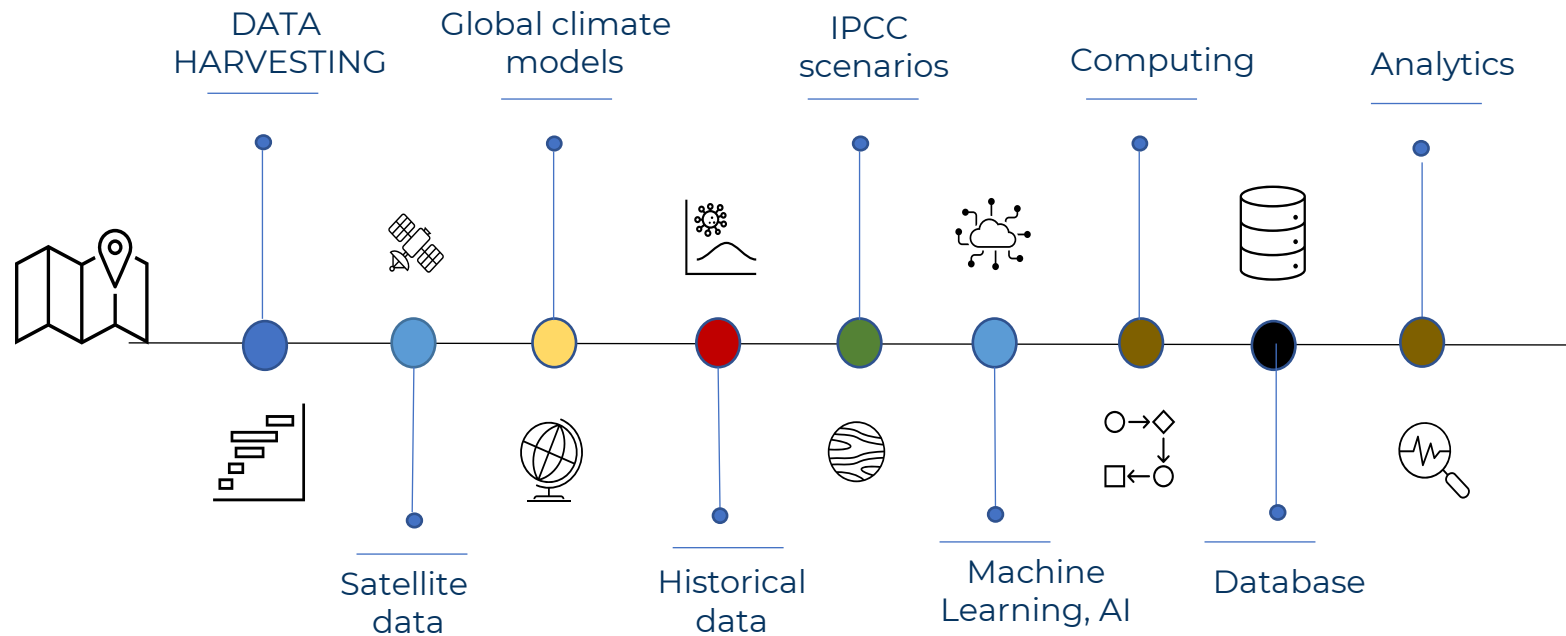


HOW DOES IT WORK?



BACKGROUND IP

CLIMATIG uses data from climate models (MPI, JRC, DHMZ), for multiple scenarios (RCP4.5, RCP 8.5), satellite data (ESA, DEM, OSM) and historical reanalysis from ERA5 (CERRA) **to create our own climate physical risk prediction models** for all hazards. We then calculate the costs that could arise due to climate change. We create our own datasets using high-computing machine learning to train models using user generated data sources on the historical course of events at micro locations.



HOW DOES IT WORK – LET’S FIND OUT



Climate risk tool!

Link: app.climatig.com

Protect your assets and make informed, science-based decisions with **CLIMATIG**

In 2 different IPCC climate scenarios, **RCP4.5 & RCP8.5**, gain access to **100+ climate indices and high-resolution satellite data products** as well as an extensive array of **economic indicators** ... and more coming.

Calculate 10 different physical climate risks:



Source:
<https://letrainjaune.fr/>



PREVIOUS B2B USE CASES



CLIMATE RISK STRESS TEST

- PVaR calculation for portfolio stress testing.
- Identification of vulnerabilities
- Regulatory compliance and reporting



NEW INFRASTRUCTURE INVESTMENTS

- Underwriting risk assessment
- Investment feasibility off-shore windmill electricity power plant



PORTFOLIO MANAGEMENT

- Risk mitigation strategies
- ESG integration
- Scenario Analysis for resilience



Sep 2023; selected from 120 applicants to join Cohort 11



June 2023, announced by UNEP FI as Climate Risk Tool



How to tap into the potential of digitalisation?

Lessons learned & recommendations



- Start with small team
- Engaging all possible EU funds in early phase of innovation
- Adjustment of activities to different calls
- Engage different partners (non-profit, public, private)
- Networking



How to tap into the potential of digitalisation?



Key benefits of transformative power of digitalisation for mountain economies?

- Raising SMEs competitiveness
- New market niches (Climate Fintech)
- No market boundaries
- New employment in local communities (but hard to find appropriate experts)



Gràcies
Gracias
Thank you
Merci

