WHAT WE WILL DO AND HOW

RESIST project overview

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Facts

- **Funded**: EU Mission *Adaptation to Climate Change*
- **Total budget**: ~ 26.5 m€, EU funding ~ 25.0 m€
- **Consortium**: 56 partners from the EU, Norway and Ukraine
- **Planned start date**: 1 January 2023
- **Duration**: 5 years

Management

- **Strategic Coordinator**: SINTEF Digital, Norway
- **Operational Coordinator**: INOVA+, Portugal
- **Ethics requirements management**: ESF, France
- **External relations management**: ERRIN, Belgium
RESIST will strengthen the resilience, accelerate the transformation and increase adaptive capacity of 12 climate-vulnerable regions in Europe, implementing 4 Large-Scale Demonstrators of resilient innovations for Climate Change Adaptation at air, water and soil level with quintuple-helix partnerships, and promote transfer of know-how and innovative solutions to 8 Twin Regions through both physical mutual-learning activities and innovative immersive digital twins.
LSD Southwest Finland

Droughts, floods, soil erosion
- NBS demonstrations for stormwater retention in 3 major demonstration sites:
  - the Rauvola bay - a nature reserve
  - the Oriketo industrial area – technical solutions and analyses of stormwater quality and quantity
  - a rural sub-catchment of the Paattistenjoki river – implementation of NBS and water management practices
- Regulatory measures - requirements for buildings, green spaces, etc.
- Digital applications - Graphical Digital Twin
- Capacity, engagement and motivation of multiple stakeholders

Normandy (France)

Floods, droughts, heatwaves, soil erosion
- Water management solutions at the level of the river basins, including an upstream-downstream and a land-sea logic
- Cost-benefit analysis of NBS
- Digital applications - decision-making tools, Graphical Digital Twin

Eastern Macedonia and Thrace (Greece)

Floods, soil erosion
- Collection costs-benefits data on NBS for water retention for hydrological modelling and scenario simulations
- Application development for flood warning systems and water quality status
- Development of a roadmap for using NBS in flood retention, water quality and scarcity management
### LSD Central Denmark

**Floods, soil erosion**

- **Infrastructure demonstration in 4 demonstration sites**
  - Implementation of a dense network of IoT data loggers to measure the groundwater level in the coastal towns of Juelsminde and Thyborøn and in an urban area with summer houses
  - Construction of 2 demonstration buildings that can withstand flooding and use these installations for a dialogue with citizens in Horsens
- **Governance mechanisms** - learning, adaptability, barriers, etc.
- **Digital applications** – decision making tools (early warning), Graphical Digital Twin
- **Capacity, engagement and motivation of multiple stakeholders**

### Blekinge (Sweden)

**Floods, ground water, marine ecosystem**

- Capacity, engagement and motivation of multiple stakeholders
- Data collection, development of decision-making tools and increased policy coherence

### Zemgale (Latvia)

**Floods**

- Capacity, engagement and motivation of multiple stakeholders
- Data collection, development of decision-making tools and increased policy coherence
**LSD Catalonia (Spain)**

Floods, droughts, heatwaves, wildfires

- Disaster management solutions demonstrated in Blanes and Terrassa municipalities
- Digital applications
  - Multi-hazard early warning system
  - Impact-based Site-Specific Warning services
  - Training modules – visualisations, Graphical Digital Twin
- Capacity, engagement and motivation of multiple stakeholders

**Puglia (Italy)**

Floods, droughts, heatwaves, coastal erosion

- Impact-based Site-Specific Warning services
- Innovative solutions applied in tourism sector

**Baixo Alentejeo (Portugal)**

Droughts, heatwaves, wildfires

- Water and forest management solutions
- New energy sources
- Reskilling of the regional workforce
LSD Central Portugal
Droughts, heatwaves, wildfires, soil erosion

- **Demonstrations implemented** in Coimbra and Medio Tejo municipalities
- **Novel solutions** for promoting better land use, forest management and the bio-circularity of green bio-waste
- **Collection and transportation of local biomass** and **conversion** of it to renewables gases, including hydrogen in Medio Tejo
- **Digital applications** - Graphical Digital Twin
- **Capacity, engagement and motivation of multiple stakeholders** - participatory and governance models in landscape management

Vesteralen (Norway)

Floods

- **AR and VR** technology to showcase the impact of climate change and impact of planned solutions
- **Graphical Digital Twin**
- **Capacity, engagement and motivation of multiple stakeholders**

Extremadura (Spain)

Droughts, heatwaves, wildfires

- **Fire management solutions**
- **Capacity, engagement and motivation of multiple stakeholders**
Factcheck

- 4 demonstrators in 4 more experienced and vulnerable EU regions in terms of Climate Change Adaptation (Southwest Finland, Central Denmark, Catalonia and Centro Portugal, the latter a ERDF less developed region)
- 8 less experienced regions as Twinning Regions (2 per demonstrator, out of which 1 per demonstrator from less developed regions)
- 16m€ allocated for regional demonstrators and twinning regions
- 12m citizens directly outreached in demonstrators and another 10m citizens outreached through 8 twinning regions
- 3% of EU territory covered by novel Digital Twins in line with DestinE
- 12 letters of intent from 12 regional authorities in the EU to continue to fund project activities beyond its end
- +100 new and innovative solutions - adaptation products, regulations, policies and methods validated in one Sustainability Plan
- 25m€ of private venture capital funding available within the project partnership to fund business results from start-ups
- 50% gender balance in terms of allocated staff resources
LSDs & links between them

- Relations between the LSD and envisaged level of collaboration / synergies and mutual contributions
- Three level collaboration model:
  - A) Internal between quintuple-helix members at LSD, and with target groups
  - B) Vertical, with twinning regions
  - C) Horizontal, with other LSDs, and with support from transversal partners

All 3 are essential for success!
**Links between WPs**

**WP1**
- Climate Adaptation Framework, Ethics and Gender Framework, Graphical Digital Twin

**WP2**
- Networking and mutual-learning, innovation and exploitation activities, scalability plans for demonstrated solutions, generation of public and private funds and collaboration with entrepreneurial ecosystems

**WP4**
- Promotion of wide stakeholder engagement and increase of region’s massive community resilience to climate change
Climate change and gender inequalities

Women, gender-diverse and trans people are more likely to be affected by CC-caused hazards than men, particularly in rural, vulnerable areas where they may have less access to resources and assistance and are less likely to actively participate in policy planning and recovery efforts.

RESIST adopts an intersectional approach to gender, understanding it as non-binary and intersected with other social, cultural, and economic dimensions.
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