

# Disaster Risk Reduction Insurance (DERRIS) - Climate Change Adaptation for SMEs



## AT A GLANCE

### Name

Disaster Risk Reduction Insurance (DERRIS)  
Climate Change Adaptation Project for SMEs  
and Municipalities

### Duration

September 2015 – September 2018

### Focus Area

Italy

### Target group

Small and Medium-sized Enterprises  
and municipalities

### Funds available

European Commission ('LIFE' Programme)  
Unipol Gruppo S.p.a

### The project is jointly implemented by ...

CINEAS (Academic consortium founded by the Polytechnic University of Milan), National Association of Italian Municipalities (ANCI), Local Agenda 21 Network, & Municipality of Turin

### The core objective is ...

to provide SMEs and municipalities with climate and disaster risk management knowledge and tools to improve risk awareness, assessment, prevention and reduction of risks linked to extreme climate events as well as support the implementation of adaptation plans



PSI  
Principles  
for Sustainable  
Insurance



ERRIS

Il clima cambia.  
Riduciamo i rischi.

## BACKGROUND

The Mediterranean region is expected to face particularly negative climate change impacts over the coming decades. Combined with the effects of natural resource stress and relatively lower adaptive capacity, this makes the region one of the most vulnerable areas in Europe. The projected negative impacts are mainly related to higher frequency of extreme weather events (e.g. severe rainfalls, heat waves and droughts) and reduced annual precipitation river flow. In this context, Italy expects a number of potential climate change impacts and vulnerabilities, particularly hydro-geological risks such as landslides, flash mud/debris flows, rock falls, floods and flash floods, and coastal zone erosion. According to Le-



gambiente, an Italian environmental NGO, more than 80% of municipalities and more than 500,000 companies in the country are located in areas exposed to hydro-geological risk. Major differences in terms of economic impacts of climate change could also emerge between northern and southern Italy.

The European Commission's Green Paper on the Insurance of Natural and Man-made Disasters articulates that insurers can concretely contribute to developing and implementing disaster risk management policies that build resilience to natural hazards, particularly given insurers' expertise in risk assessment. However, public authorities

and SMEs do not have sufficient understanding of and skills to manage disaster risk, and to recover from disasters. This is compounded by insufficient insurance coverage against natural hazards in Italy, and the lack of incentives to prevent and reduce disaster risk. While SMEs represent the vast majority of the Italian economy (including 80% of its workers), they do not have adequate risk assessment tools for climatic hazards and have limited resources to invest in resilience measures.

## APPROACH

The main objectives of the DERRIS project, which was launched in October 2015 in Turin and will run until 2018, are to:

- Design and implement an innovative private-public partnership on climate change adaptation and resilience involving SMEs, public administrators and the insurance industry
- Transfer climate and disaster risk management knowledge and experience from the insurance industry to SMEs and municipalities in order to create more resilient companies, strengthen local economies, and realise effective local adaptation plans



- Develop a climate risk management tool for SMEs to improve risk awareness, assessment, prevention and reduction, both at the company and district levels
- Develop and test innovative financial instruments for adaptation solutions

Unipol will use its expertise in risk management — from risk assessment to disaster recovery — to design specific tools and instruments for SMEs and municipalities to increase their risk awareness and build the resilience of industrial districts. Project activities include analysis of select districts and SMEs, building the capacity of nominated adaptation managers, and developing and implementing company and district adaptation action plans.

## Challenges

The project has encountered some challenges due to:

1. the very low level of awareness on climate change among SMEs and consequently the difficulty to engage them in the project. The first phase of the project confirmed that the awareness on climate change issues and in particular on climate risks management is very low. In several cases, considering also the size of companies, there is no internal staff with risk management knowledge. It was therefore necessary to increase activities linked to the engagement of companies (for instance with the organisation of one-to-one meetings) to better explain the contents of the project and its opportunities for companies. This also led to the decision to adopt a very simplified and user-friendly approach as far as the climate risk self-assessment tool is concerned;
2. the lack of available official climate data and perils' maps at national level: the project had to face a problem related to the low quality and lack of homogeneity of officially available environmental data and the lack of existing perils' maps related to each of the 7 climate perils considered. Whereas data are generally available at regional level, the situation is different when considering the whole Italian territory.

Data and perils' maps from different public bodies often lack homogeneity or are not comparable and data are collected in different regions with different standards so they are not directly and easily usable.

## OUTCOMES

The project's outputs will be promoted via communication platforms such as the DERRIS website, the DERRIS adaptation community, and through project partners. The main outcome of the project so far is the climate risk self-assessment tool that was released in April 2017 together with a tutorial. The project is also working on some webtraining videos to further increase the awareness of SMEs on climate risks. The project started its pilot phase in Turin, and will extend to other 10 Italian cities including Genoa, Padua, Bologna, Udine, Varese and Rovereto.

From October 2016 to April 2017, the pilot experimentation of the project was led in the City of Turin. Thirty SMEs took part to a process that foresaw some training on climate change impacts, risk prevention and management, business continuity (5 training sessions) and 2 field visits with some experts of the project to carry out a vulnerability analysis and to support the preparation of companies' adaptation action plans.

In parallel, the City of Turin is currently working on its own district adaptation plan and will organize a series of co-design workshops that will involve businesses, business organisations and other relevant local stakeholders.

Following a first test on thirty pilot companies in Turin, the climate risk self-assessment tool will be further tested on 200 additional SMEs that will participate in the project through the involvement in the project of ten new cities.

In those 10 new cities, both SMEs and the public administration will get some training and support (in particular to get SMEs to prepare their company adaptation action plan and to get municipalities to integrate some adaptation measures in public plans). The activities in Genoa is already ongoing and the activities in the new cities will start in the autumn 2017.



## LESSONS LEARNED

- ◆ **An intense and pervasive action is needed** from different players (insurers, public administration, business organisations) to raise the awareness of SMEs on the impact of climate on business continuity;
- ◆ Given **the current low level of awareness** of SMEs on climate risks the decision was made to focus on the definition of user-friendly tools to transfer the know-how on risk assessment and risk management to SMEs;
- ◆ **The role of insurers is triple** as they can support SMEs to: know and assess their risks, to manage risks and emergencies, and to manage residual risk;
- ◆ **More is needed to favour a smooth and homogeneous monitoring** and transfer of climate data between public and private players;
- ◆ **Public-private partnerships are key to draw efficient measures** to increase resilience at local level, especially in industrial areas.

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## DISCLAIMER

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