

POLYTECHNIC OF TORINO  
FACULTY OF ARCHITECTURE 1  
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*Honors theses*

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**Territorial planning in connection to the risks of relevant accidents**

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My final thesis deals with the problems linked to the territorial and urban planning in relation to the risk of a relevant accident within industrial areas.

The present or future positioning of an industrial plant within a certain territory forces decisions and choices on an urbanite level other than financial. These choices must be thought over carefully, considering the interaction with other already existing environmental characteristics.

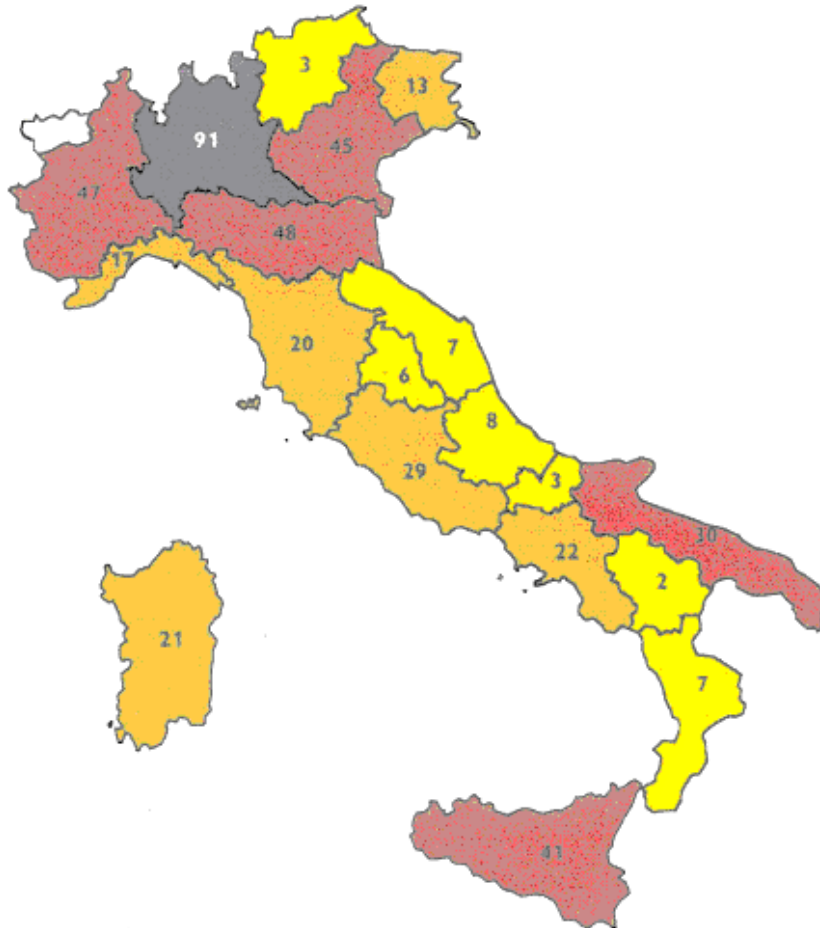


Starting by analyzing existing risk cases, we studied the final effects, which derive from the way urban decisions are being taken. The outcome was the study of a methodology for the better evaluation of territorial and environmental compatibility, with the intention to determine compatible ways of use in the presence of an industrial plant.

The sources of the risks considered, derive not only from the use and elaboration of dangerous substances by the plantation, but also from the transportation of the products either by car, rail, sea or through pipes.

The state of rules and regulations regarding urban and safety measurements of industrial plants presents the latest European instructions, who came into force in Italy, like the Order of 9th May 2001 "*Minimum safety requirements in matters of urban and territorial planning for plant zones prone to a high risk of relevant accidents*" as published recently and informs of the new procedures regarding the adjustment of urban instruments and the compatibility evaluation between the territory and the environment of an industrial plant..

In order to understand the extension of the risk imposed on the territory by the industrial plants, three cases were studied, that of the city of Trieste, of Piombino and of Ravenna.



The numbers of industrial areas with the risk of relevant accidents in Italy  
(from "Il rischio muto" – Costruire N 204, Maggio 2000)

For each of the following sources of risk, industrial plants, roads, railways, canals and pipes, the level of danger brought upon the environment was summarized in

one map; the showings of which in an environmental context should provide the starting point for a planning intervention.

In the case of the city of Ravenna, risk and urban analysts collaborated perfectly together to the advantage of safety and the final results are now obvious. The development of risk studies creates concrete foundations for a correct territorial planning that takes into consideration real risk cases and interferes by proposing adjustments and solutions in order to lessen the above risk. It is of prime importance though for the achievement of such an objective the involvement of local authorities by means of studying and carrying out the project. In the case of Ravenna there is a successful example.

The existence of a productive line alters the characteristics of the natural environment in which it is placed, but it also creates job opportunities and increases the local economy. Therefore the relative social and financial variables of a human society, such as population density, building typology and area sensitivity/vulnerability require special attention by planners, economists, sociologists and environmentalists.

In the case of existing plants or new establishments of proven risk, it is required to have ways which evaluate which uses should be avoided in the surround uninhabited yet area and which to accept/tolerate in the case of an already existing habitation.

The new Article places the base and proposes such instructions as to the way the planning and management of industrial areas in the new world should be done, with a view that does not stop to the community borders but extends to a wider field. It arrives to the point of identifying the country planning, proposing protection methods and ways against risk and relieving from the impact considering the various uses of the environment itself in relation to the prevailing residential, industrial or infrastructure vocation.

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