



The
Safeguarding
of the
environment

erasmus+

ENVIRONMENTAL PROBLEMS IN ITALY

PROJECT ERASMUS + KA2 – THE SAFEGUARDING OF THE ENVIRONMENT



INTRODUCTION



The environmental problems which seriously worry us are:

Air pollution due to the presence in the atmosphere of physical and chemical agents (hydrocarbons) and biological pollutants released by smelly and toxic substances

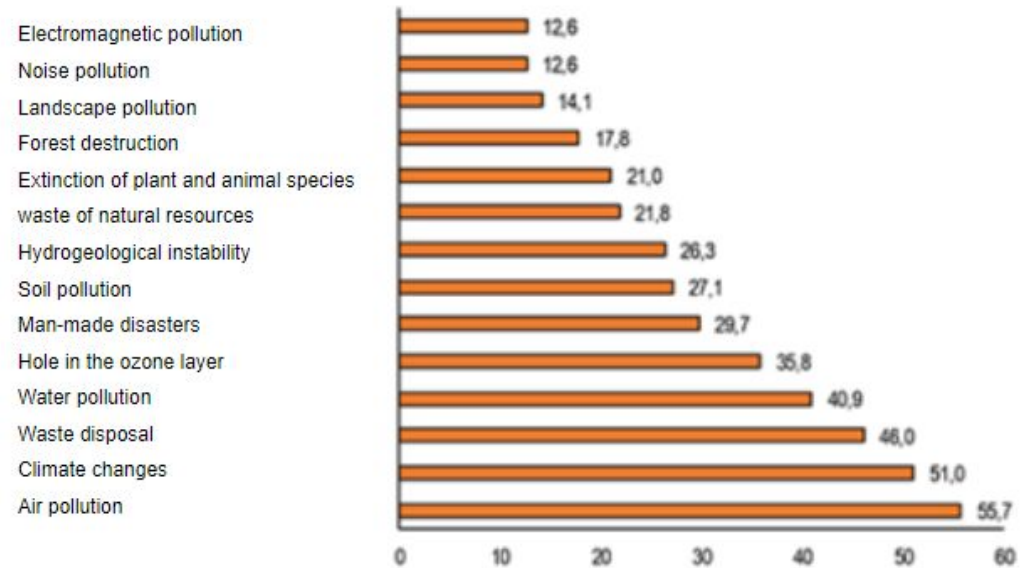
Climate Change: referring to weather patterns which affect the Earth such as temperature rises determined by global warming, sea levels and rainfall

Soil and groundwater pollution caused by waste disposal

Water pollution arising from the contamination imposed by the harmful substances coming from biological waste (the sewer system)

DATA ABOUT ITALY

What are the main environmental problems that worry Italians?



Data from ISTAT (National Statistical Institute)



AIR POLLUTION



AIR POLLUTION

Italy is the first country in Europe for deaths caused by fine dust in particular PM 2.5 (harmful fine dust).

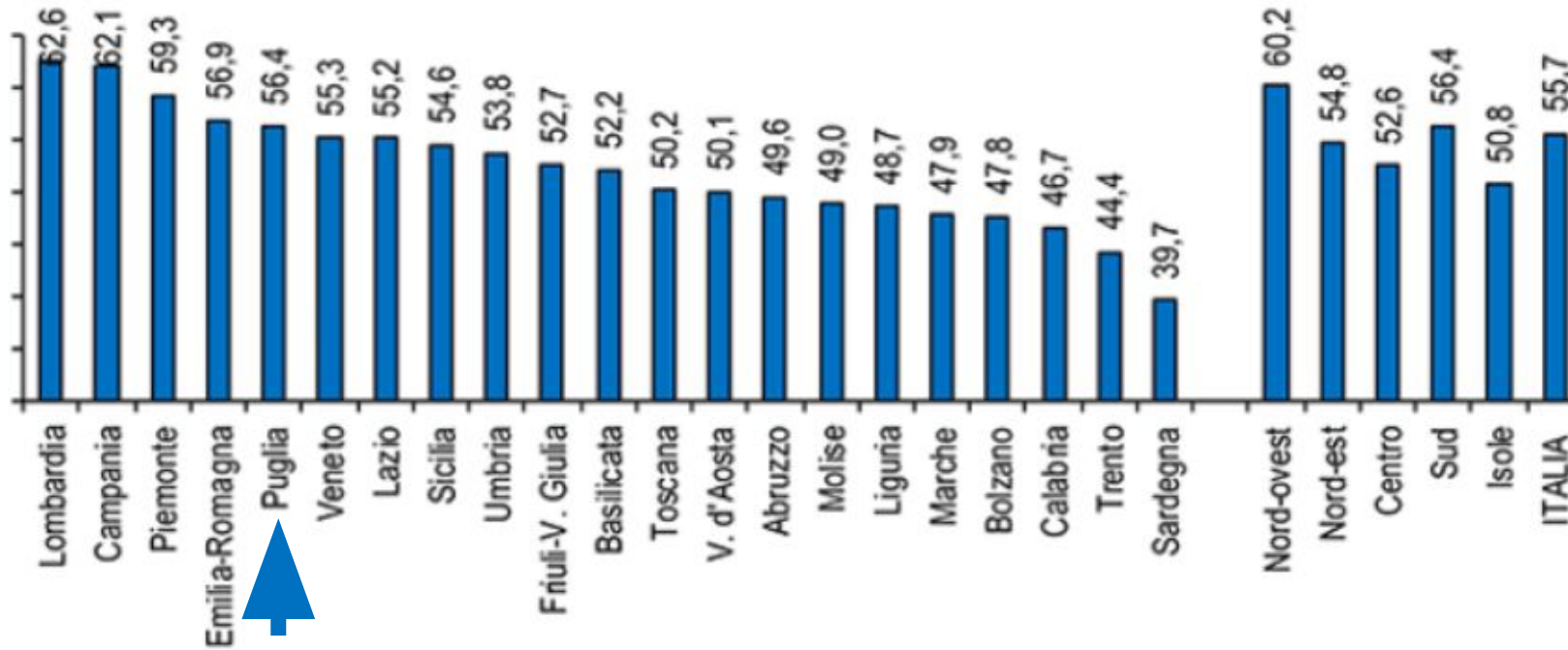
Other pollutants are nitrogen oxides (in particular NO₂), ground-level ozone (O₃), sulfur dioxide (SO₂) and carbon monoxide (CO)

Traffic is the main source of emission of pollutants into the air, followed by domestic sources of heating and industry.



CONCERN FOR AIR POLLUTION BY REGION

2012-2018, % population over 14 years of age (ISTAT data, processed by Ufficio Studi Confartigianato)



AIR POLLUTION FROM POWER PLANTS

ILVA is a steel mill located near the city of Taranto, Apulia. It is responsible for producing 6 to 10 million tons per year which apparently has a strong environmental impact. One of the sources of pollution is due to the transport of huge quantities of raw materials like limestone, coal and iron (with a negative impact on people's health). Several studies on the city of Taranto resulted in:

- 400% more cases of cancer among workers employed in ILVA foundries.
- 50% more cancers even among the employees of the plant, who were exposed only indirectly.
- 500% more cancers than the average population of Taranto



CERANO POWER PLANT

Another problem affecting air pollution is Cerano, a coal-fired thermoelectric power station, south of Brindisi.

This plant would cause up to 44 deaths a year in the area of Brindisi, Taranto and Lecce.

Particulate matter and other substances dispersed in the atmosphere (NO_x , SO_2) could cause lung tumors, cardiovascular and respiratory diseases.





CLIMATE CHANGES

CLIMATE CHANGES

Climate changes lead to an increase in atmospheric temperatures, the surface of the seas, the sea level and causes the acidification of sea waters and coastal erosion.

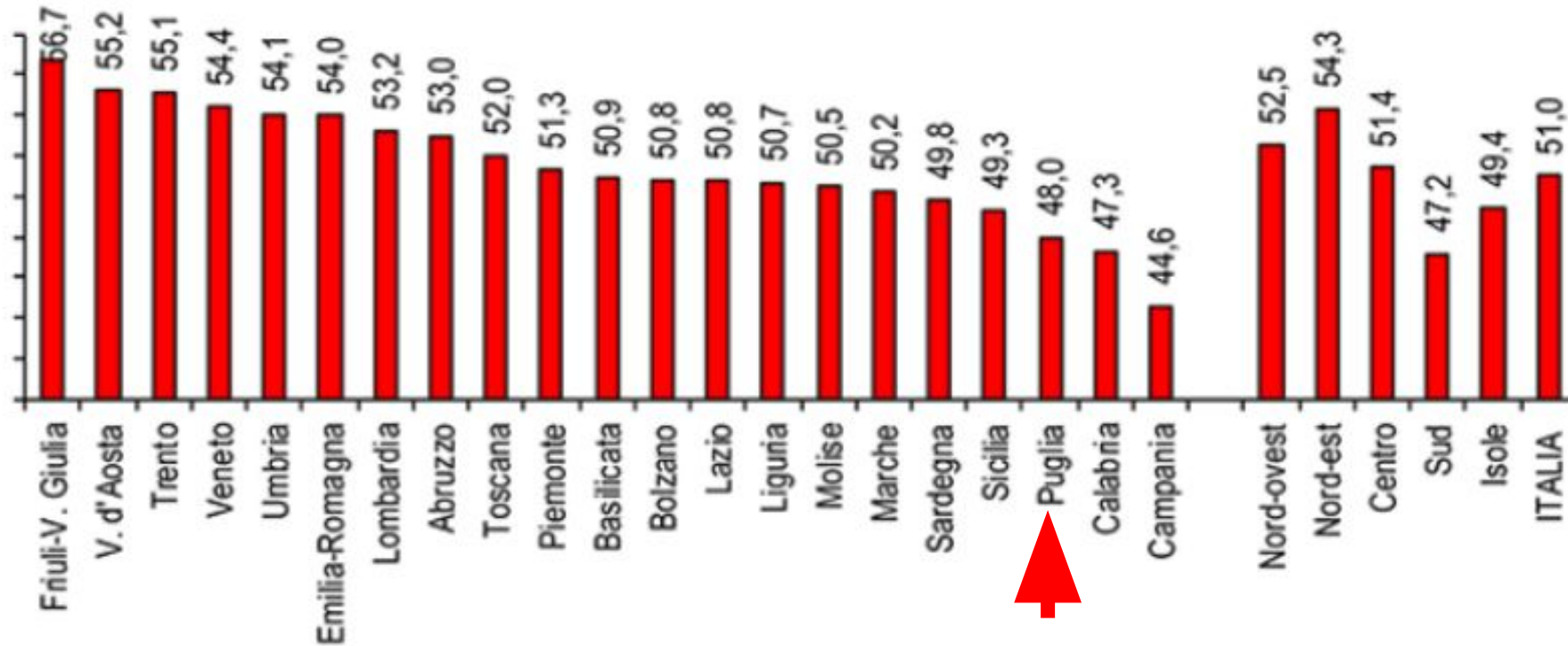
The number of extreme events that occur in Italy is growing by the year, with records of heat, intense rains, violent hailstorm, tornadoes and floods.

The different climate models agree in evaluating an increase in temperature of up to 2° C in the time lapse 2021-2050 (compared to 1981-2010).



CONCERN FOR CLIMATE CHANGES BY REGION

2012-2018, % population over 14 years of age (ISTAT data, processed by Ufficio Studi Confartigianato)



THE ALIEN SPECIES DETERMINED BY TEMPERATURE RISES:

On average, new alien species are reported every 9 days due to the altering of the habitat along our coasts and the warming of the waters. As a matter of fact, our seashores proliferate with algae and animals from distant oceans, released into our seas:

- from the ballast waters of ships,
- from private aquariums,
- from aquaculture facilities,
- from the Suez Canal which has been enlarged, favouring the spontaneous entry of non-native species.

Exotic marine species (also called alien) are another environmental problem in Italy because they affect the marine ecosystems of the Mediterranean with consequences for local biodiversity.



DEGRADATION OF THE SOIL

The increasing frequency of extreme climatic events, and in particular of intense and localized rainfall, accentuate soil degradation. Soil degradation causes problems in the main economy activity of our geographical region (Apulia) which is agriculture.



ILLEGAL BUILDING ON THE SEASHORES

Illegal buildings are houses built without the necessary authorization.

The phenomenon is still very common in Italy, where many consider it normal to build a house, dig a pool or expand an industrial shed without requiring permission on their land.

Wild construction is a danger.





WASTE PRODUCTION AND DISPOSAL



WASTE PRODUCTION AND DISPOSAL

Negative impacts on environmental components and public health are

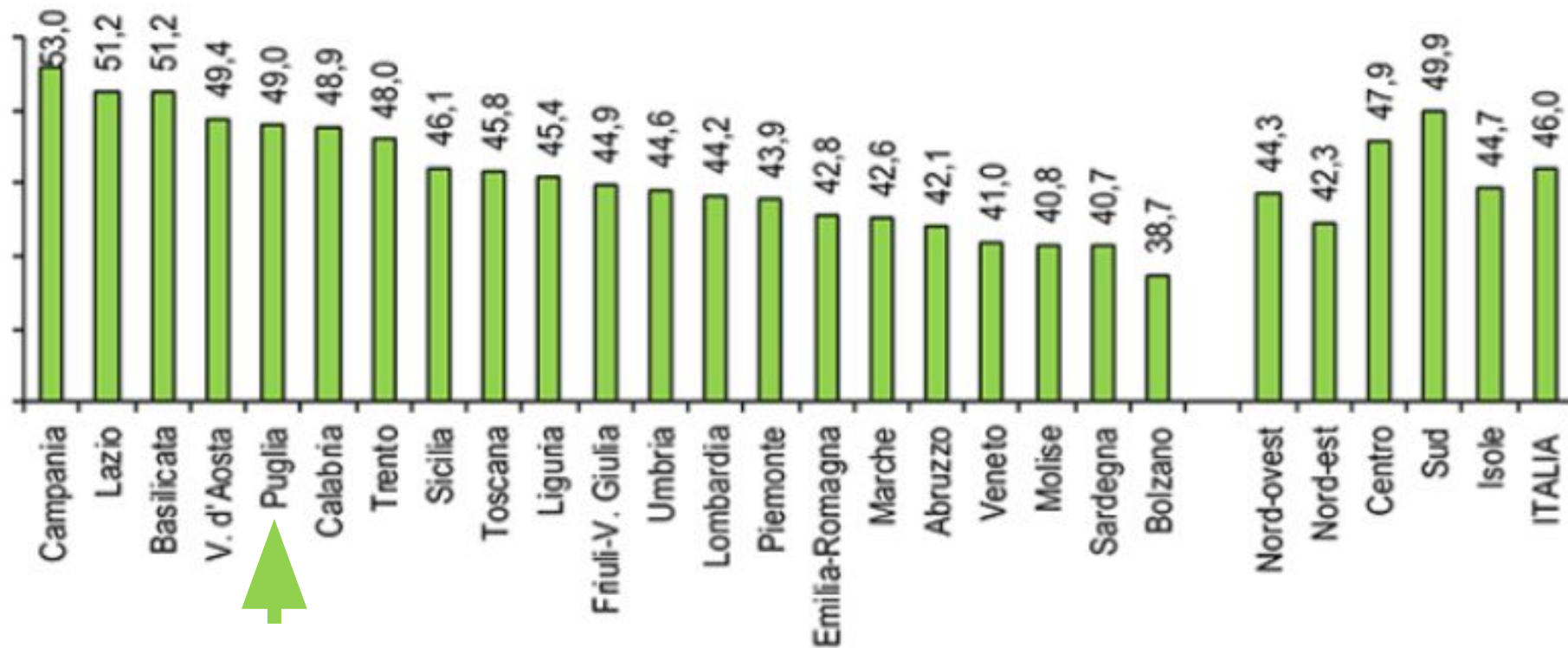
- aesthetic-landscape pollution;
- pollution of the subsoil due to contaminants contained in the waste that can infiltrate the subsoil, causing pollution of the groundwater
- surface water pollution
- air pollution caused by the release of smelly or toxic compounds such as the volatile compounds formed as a result of biodegradative waste processes or various solvents

The incineration of waste which causes the emission of pollutants is also a cause of air pollution.



CONCERN FOR WASTE PRODUCTION AND DISPOSAL BY REGION

2012-2018, % population over 14 years of age (ISTAT data, processed by Ufficio Studi Confartigianato)



LA 'TERRA DEI FUOCHI' THE LAND OF FIRES

The expression 'Terra dei Fuochi' refers to an extensive area of Campania between the provinces of Naples and Caserta, particularly affected by the illegal activity of ecomafias and in particular by the illegal landfills of toxic waste and its burning that emits harmful substances in the air such as dioxin, dangerous to the health of living beings nearby.

Scientific research has shown a correlation between the phenomena taking place there and the increase in the number of cases of thyroid cancer.



GROUNDWATER POLLUTION

The present condition of Apulian groundwater is a great concern.

The data published by the Italian Environmental Yearbook, edited by Ispra, the Higher Institute for Environmental Protection and Research, leave no doubt: 78.3% has a poor chemical state due to the concentration of contaminants and their tendency to increase over time.

Apulia is second only to Lombardy.





WATER POLLUTION



WATER POLLUTION

Plastic is one of the main dangers for the Italian territory, the continuous flow of tourists is a problem for the Mediterranean. Actually it is one of the reasons why our sea is so full of them.

However, this form of pollution is also due to other activities such as fishing, the transport of goods by sea, etc.

The 16% of plastic remains floating in water and can travel kilometers around the sea per year.

In highly urbanized areas, microplastics have reached concentrations of 1.25 million fragments per km², four times as much as the notorious "plastic island" in the Pacific.



BUT NOT ONLY NEGATIVE THINGS...

... IT'S TIME FOR SOME ...



CREATION OF NATURAL RESERVES

- Many people have begun to oppose those who ruined the natural beauty of our territory, an example is Renata Fonte who was committed to the protection of Porto Selvaggio, a natural park located in the marina of Nardò, in Salento. Renata opposed the construction of a resort on the coast because it would forever ruin the fragile beauty of the place.
- She created a great deal of attention on the issue which then led to the issuance by the Apulia Region of a law that still protects this area today. As a matter of fact, it is still a nature reserve today.



DEFENSE OF THE ENVIRONMENT THANKS TO CIVIL FIGHTS AND CONSTITUTIONAL PROTECTION

Over the years, the love for one's own territory has led citizens to develop a civic sense towards environmental protection which has been added to the Italian Constitution, among the fundamental principles, since February 2022. Article 9 states that the Italian Republic:
"Protects the environment, biodiversity and ecosystems, also in the interest of future generations. The law of the State governs the methods and forms of animal protection"

ART. 9

THANKS FOR YOUR ATTENTION

I.T. "G. Deledda" Lecce

STUDENTS:

Luca Anglano
Sara De Filippo
Benedetta Janise Franco
Maria Valeria Patera
Andrea Pino D'Astore
Giacomo Romano

TEACHERS:

Anna Vera Cuppone
Antonio Romano
Alessandro Lezzi
Romina Calabrese

