OPENCOESIONE

DataCard

"Cohesion policies' role in climate action"

April 2022

On 22nd April is celebrated the **International Mother Earth Day** established by the United Nations in 2009. Since 1970, on the same day, in the United States of America has been promoted the Earth Day, an event that has become global over the years with the aim to attract the attention of policy makers and public opinion and address civic mobilization on the need to take care of the planet.
2022 also marks the fiftieth anniversary of the United Nations Environment Programme (UNEP): in 1972, in Stockholm, the UN Conference on the Human Environment marked the beginning of a global awareness of the interdependence between people, other living species and our Planet. This year the theme of Earth Day is "Invest in our Planet": “This is the moment to change it all — the business climate, the political climate, and how we take action on climate.

Now is the time for the unstoppable courage to preserve and protect our health, our families, our livelihoods... together, we must Invest In Our Planet” explains the manifesto of the appointment.
On this occasion, OpenCoesione publishes for the first time the focus dedicated to EU cohesion policy interventions relating to the 2014-2020 period to mitigate the effects of climate change and a Data Card that describes some of the projects included in this "policy perimeter". The focus was set up on the basis of **Implementing Regulation no. 215/2014 of the European Commission**, which defined coefficients for the calculation of the support for the climate change objectives of the European Union for each area of intervention of the European Structural and Investment Funds.

This is a simple method to have a first estimate that approximates the contribution to the climate, in terms of reducing CO2 emissions, of the investments made with European funds. To give some examples, a coefficient of 100% is linked to projects that involve the production of energy from renewable sources or the renewal of public infrastructures in terms of energy efficiency, and the same applies to cycle paths; railway infrastructures are instead associated with a coefficient of 40%, which recognizes the ability of the latter to "change" people's modal habits, moving from road or air transport to more efficient modes, such as the train.

The projects the focus are 6,575, for a total value of 13.24 billion euros (data updated as at 31 December 2021) and refer in particular to the ERDF - European Regional Development Fund 2014-2020. This is obviously a partial representation of the contribution of cohesion policy to the mitigation of the effects of global warming due to the simplified methodology and the exclusion of interventions from previous programming periods and those with coverage of national cohesion funds, but - at the same time - it is useful to understand the priority areas of the interventions carried out in Italy with the support of the european cohesion policy in recent years.

Out of the total of the interventions indicated above, 4,922 are classified as contributing 100% to the mitigation of the effects of global warming. The interventions are equally distributed between the regions of the Center-North (3,183) and the South (3,029). Over half of the interventions (3635, equal to 55.3%) foresee the carrying out of public works. Over 81.5% of the projects envisage funding of less than one million euros.

5 Projects financed by the cohesion policies in Italy

Programming period
2014-2020

EARTH
PLANET - #08

EXTENSION OF THE RAILWAY NETWORK IN THE METRO SECTION OF CATANIA FROM THE CENTRAL STATION TO THE AIRPORT

Data & Figures

Total cost

€ 77.3 Millions + 402 Millions

Duration

17 months

Climate class 40%

Financial source

ROP ERDF Sicily 14-20

Beneficiary

Circumetnea Railway

The airport of the city of Catania is the third airport in the country for traffic volumes in 2021 and in the last year before the Covid-19 emergency more than 10 million passengers had traveled from Fontanarossa. The project financed by the cohesion policy is the first part of the one that foresees the extension of the city subway from Stesicoro to the Fontanarossa airport, which will connect the center of the Etna city with the airport, with the construction of overall of eight new stations along almost 7 km. The service will be guaranteed by Ferrovia Circumetnea.

The Airport station will be the last stop of the subway and will guarantee a direct connection between the airport, the city, the railway network and the towns of the western foothills of Etna. Access to the station will take place through three entrances located all within the airport area. The first entrance is foreseen at the junction point between terminal A and terminal B. The second entrance is foreseen near the P6 parking lot while the third entrance is inside the P4 parking lot.

Meanwhile, RFI is also building a railway stop in Fontanarossa, which will also allow those coming from Messina, Syracuse, Enna, Caltagirone, Caltanissetta to go and take the plane more easily, without the use of a personal car.

ENERGY EFFICIENCY FOR THE ELDERLY HOUSE "ADA AND ALFREDO ARCICASA"

The project was financed with the funds referred to in the tender “Reduction of primary energy consumption in social and health structures for non-self-sufficient elderly persons” (ROP ERDF 2014-2020 - Action Line 3.1.b.2). The works consist in the execution of external thermal isolation on the perimeter walls of the entire structure and in the replacement of the lighting bodies with the installation of an automation system and control of the same.
The intervention should ensure a decrease in the annual consumption of primary energy by 139,666.23 KWH / A. The project described is only one of those that act on the reduction of energy consumption in public buildings, a fundamental effort for the science that studies the climate as also evidenced by the third volume (WG3) of the Sixth Assessment Report of the IPCC, the most up-to-date and a complete scientific review on climate change, dedicated to “CLIMATE CHANGE 2022. Mitigation of climate change”. In relation to buildings, among the key messages of the report, it is written that: “Action in this decade (up to 2030) is essential to fully capitalize on the mitigation potential of buildings. There are examples of buildings that do not consume energy or that guarantee zero carbon emissions in almost all climates”.

Data & Figures

Total cost

€ 372.645,90

Duration

6 months

Climate class 100%

Financial source

ROP ERDF Friuli-Venezia Giulia 14-20

Beneficiary

Municipality of San Quirino

REALIZATION OF THE ENERGY COMMUNITY PIAZZA MEDAGLIA MIRACOLOSA

The project promoted by the Department of Technological Innovation of the Municipality of Cagliari envisages the construction of the first Energy Community of Cagliari among the ERP accommodations in Piazza Medaglia Miracolosa. An Energy Community is made up of families, individuals and owners of economic activities who produce, share or simply use energy generated from renewable sources, obtaining economic advantages on an individual level and environmental benefits on a collective level, in a spirit of participation and solidarity among citizens.

The investment financed with cohesion policy resources for 410,000 euros will see the construction of photovoltaic systems on the roof of the nursery school and the buildings surrounding the square. The electricity produced will be partly used by the school complex and partly made available to the residents of the area who will join the community.

"It is - explained the Councilor for Technological Innovation of the Municipality, Alessandro Guarracino, presenting the initiative - a pilot project among the first in Italy and the idea is to replicate it in other areas of the city. The roofs of the municipal school buildings will house photovoltaic systems and will be the nucleus of the future Energy Communities".

Data & Figures

Total cost

€ 410.000,00

Duration

18 mesi

Climate class 100%

Financial source

NOP ERDF ESF Metropolitan Cities 14-20

Beneficiary

Municipality of Cagliari

PROTECTED PEDESTRIAN PATH AND WATERFRONT CYCLE PATH - PINETA ZERBI

As part of projects aimed at slow mobility, the ongoing intervention focuses on the creation of a Panoramic Walk to re-stitch between the existing waterfront and the port. This path was conceived as an “integrated linear garden” through a walk divided into two levels and structured with pedestrian, semi-vehicular and cycle paths.

The route constitutes a stretch for the construction of a Main Cycle Network of the City to defend and spread the use of bicycles as a primary means of transport, capable of satisfying even home-school and home-work trips and access to services, and not only recreational or sporting or very short range ones but also and above all to the conjunction with the Strait mobility system and therefore to the precious enhancement of the interaction between the two cities of Reggio and Messina.

The complex of cycle paths will have to connect various urban areas and services (railway stations, offices in the center, bus terminals, school facilities, etc.), but also the main places of scenic and cultural interest (such as the waterfront, municipal beach, Arena dello Stretto, the National Museum of Magna Graecia, the Greek Walls and the Roman Baths, etc.). In this way, in addition to home-school and home-work trips, those linked to leisure, sports and recreational activities in the open air will be favored.

Data & Figures

Total cost

€ 4,6 Million

Duration

43 months

Climate class 100%

Financial source

NOP ERDF ESF Metropolitan Cities 14-20

Beneficiary

Municipality of Reggio Calabria

GUTTA - savinG fUel and emissions from mariTime Transport in the Adriatic region

The International Maritime Organization (IMO) has recently approved mandatory norms for reducing carbon intensity of shipping, starting from 2023 prescribing the expected reductions in the carbon intensity indicators (CII) of ships. Supporting measures include the installation of energy saving devices, limiting engine power and the use of travel optimization mechanisms. The latter is the theme of **GUTTA-VISIR**, an operational tool devised for computing least-CO2 ferry routes in the Adriatic Sea, depending on forecast meteo-oceanographic conditions. The VISIR model can compute optimal routes by suggesting a spatial diversion which leads to avoidance of rough sea and related ship speed loss, and exploitation of sea currents; it is based on a graph-search method and makes use of dynamic meteo-oceanographic fields for computing optimal maritime tracks. The CO2 and CII savings obtained through VISIR are computed for routes between various sea ports, departure times, and ship's engine loads. This provides a picture of the order of magnitude and variability of the potential savings in relation to the changing meteo-oceanographic conditions. Moreover, the GUTTA-VISIR web tool offers some routes, such as the Zadar-Barletta route, that are not currently available, and therefore it may also contribute to assess how to improve the cross-border maritime links between Italy and Croatia.

Data & Figures

Total cost

€ 1,2 million

Duration

42 months

Climate class 40%

Financial source

Interreg Italy-Croatia 14-20

Beneficiary

CMCC Foundation and other 4 transnational partners