ENVIRONMENTAL IMPACT ASSESSMENT ON NATURAL COMPONENTS ON THE WIDE AREA OF THE CENTRAL TURBOGAS POWER STATION MODUGNO (BARI)

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In the framework of the assessment of environmental impact on the Wide Area (W.A.) as a consequence of the construction of the turbogas power plant, located in Modugno (BA), a balance of CO_2 has been defined. This balance was calculated using a simplified scheme which takes into account the sources of emissions from Municipalities falling in W.A., the construction of the plant, the sources of CO_2 absorption by vegetation, soil and marine environment. In order to achieve this goal a specific study was carried out, resulting in the "Carta della Natura" of the Wide Area (scale 1:50.000). A further study based on bibliographic sources aimed at assessing the specific absorption capacity by factors that contribute to that balance.

As the Map of Habitats shows, "Olive groves" and "Towns" on the whole cover 85 - 87% of the total area that results considerably anthropized and with a strong agricultural aptitude, in particular for olives.

Further maps have been developed for the W.A., such as that of Ecological Value, Ecological Sensitivity of Anthropogenic Pressure and Territorial Fragility.

As a result, it emerges that the olive tree has a high specific capacity to fix atmospheric CO_2 and, therefore, it contributes significantly to the containment of greenhouse gases in that specific area. Hence it would be possible to compensate the impacts resulting from the construction of fossil fuels power plants dedicating new suitable surfaces to this type of crop and/or increasing the existing ones in areas with similar climatic characteristics.