

Intensive local monitoring campaign in the port area of Genoa

The local monitoring campaign started in Genoa in February 2011, following the general schedule of the project. On the basis of the information collected during the previous phase of the project (i.e. historical series of meteorological and pollution data, previous apportionment studies) and also running some very preliminary simulation of the dispersion of pollution produced in the harbour area, the two Partners collaborating in the study area (i.e. Province of Genoa and Physics Department of the University) have designed an articulated sampling program. All the data provided by the urban network for air quality monitoring (managed by Province of Genoa) will be collected and organized in a unique database. Furthermore, PM_{2.5} (Particulate Matter with dimension smaller than 2.5 micron) will be collected on daily basis and analyzed in several sites in town. During the winter and early spring the PM_{2.5} sampling will be carried on in one of the reference sites in town for quality (selected according the national rules) while from May to the Autumn, the sampling will be conducted contemporary on three sites located downtown and in the northern and western suburbs. Finally, in the last months, the PM_{2.5} will be collected in two sites very near the harbour docks devoted to goods handling. All the PM_{2.5} samples will be analyzed with several up-to-dated techniques: Gravimetric analysis, Energy Dispersive – X Ray Fluorescence, Thermo-Optical evolution and Ion Chromatography. This approach will give the possibility to follow the concentration temporal trends of pollutants characteristic of specific sources and to single out those related to the harbour activities.