



## APICE: Common Mediterranean strategy and local practical Actions for the mitigation of Port, Industries and Cities Emissions

APICE News is a newsletter published by the APICE's partners, for reporting the progress of the project. The project is part of the EU MED Programme ([www.programmemed.eu](http://www.programmemed.eu)). Details on the project: [www.apice-project.eu](http://www.apice-project.eu), [Brochure](#).

### Intensive air pollution monitoring campaigns carried on in five Mediterranean port cities

Within APICE project, five intensive air pollution monitoring campaigns have been carried on in each study area: Venice, Barcelona, Marseille, Genoa and Thessaloniki. The main goal was the characterization of pollution sources and their possible link with the harbors activities. A common strategy has been discussed among the partners and it has been finally approved at the First Technical Meeting held in Barcelona in January 2011. The focus is on Particulate Matter, one of the most elusive atmospheric pollutants. PM<sub>2.5</sub> and PM<sub>10</sub> (Concentration of Particulate Matter with dimension smaller than 10 and 2.5 micron, respectively) levels was monitored in all the study areas both by sampling on proper collecting media and by automatic monitors. Sampling was organized on 24 hours and/or longer basis according to the specific speciation techniques foreseen in each study area. Sampling/monitoring period was one-year long in each study area: during the local campaigns contemporary sampling/monitoring in different sites of the same study area was carried out. Sampling frequency (i.e. number of collected sample per day, week, etc) was decided in each study area according to the specific needs and to the constrains posed by the adopted statistical tools to produce firm results. Gaseous pollutants were monitored in the same sites or nearby the positions of the PM sampling/monitoring stations In each study area the sampling strategy and the speciation techniques will be addressed to single out and characterize the following anthropogenic/natural sources of PM and gaseous compounds:

- Marine Aerosol
- Saharan Dust
- Soil Dust
- Heavy Oil Combustion
- Secondary Sulphates
- Secondary Nitrates
- Traffic
- Biomass Burning
- Main Industries (if present)
- Loading/Unloading of dusty goods (if present)



At the conclusion of the monitoring period hundreds of samples have been collected and analyzed in each study area, thus producing an extremely large and complete data base which will constitute a firm reference for any future study and/or development.

Number, emission profile (i.e. the chemical composition of the pollutants emitted by a specific source) and impact of the major pollution sources in each study area will be identified on the basis of the outputs of the monitoring campaigns using the worldwide most advanced statistical tools as Chemical Mass Balance (CMB) and/or the Positive Matrix Factorization (PMF).

More details concerning the intensive monitoring campaign in each pilot area are available here:

[Air monitoring campaign in Venice.pdf](#)

[Air monitoring campaign in Genoa.pdf](#)

[Air monitoring campaign in Thessaloniki.pdf](#)

[Air monitoring campaign Marseille.pdf](#)

[Air monitoring campaign in Barcelona.pdf](#)

## **APICE inter-comparison campaign: a first report is available**

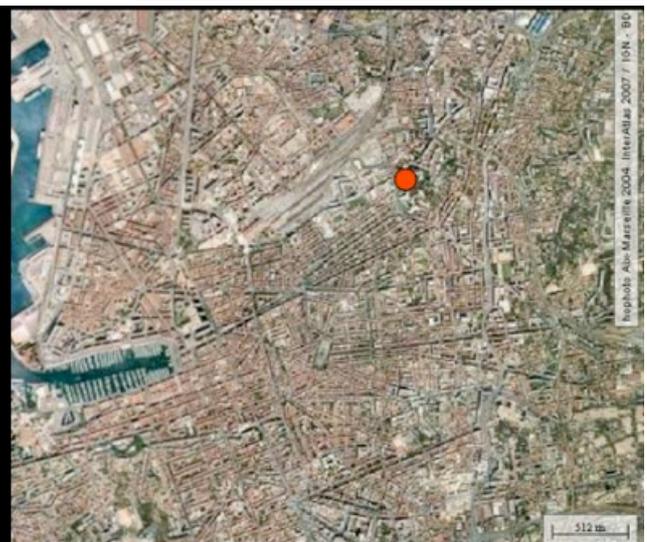
Before performing the local intensive campaign in five port cities, the APICE partners carried on an "inter-comparison campaign" in Marseille in the period 24th January 2011 - 7th March 2011.

The campaign was carried on in Marseille, in the "5 avenues" , which is located downtown in the Plateau Longchamp, a vast landscaped park situated near the upper end of La Canebière.

The main objective of this campaign is to inter compare the different source apportionment approaches used within APICE in each harbors.

Further details concerning the campaign are available here: <https://sites.google.com/a/univ-provence.fr/apice/> .

A first report on the intercomparison campaign is now available: [Intercomparison Campaign .pdf](#)



## [Air quality comparative analysis in five port cities](#)

Experimental analysis and modellistic evaluation carried on within APICE project were preceded by a comparative evaluation of the air quality pollution in the port cities involved in APICE (Barcelona, Marseille, Genoa, Venice and Thessaloniki).

In this framework, the air quality status of the five port cities has been analyzed, with a focus on PM10, in a comparative analysis

A summary report is available here: [Comparative analysis in five port cities - Report.pdf](#)



### [Third technical meeting in Venice](#)

The third technical and scientific meeting of the APICE project will be held in Venice on 24<sup>th</sup> - 26<sup>th</sup> January 2012.

During the meeting a full day will be devoted to the discussion of the results of the intercomparison campaign held in Marseille in February 2011.

In addition, the recent developments of the common approach to the model application and scenarios definition for sustainable development strategies in harbour areas will be presented.

The agenda of the meeting is available [here](#)

### [The 8th International Conference on Air Quality - Science and Application will be held in Athens, 19-23 March 2012](#)

The conference is one of most prominent forums for discussing the latest scientific developments, applications and implications for policy and other users. An important feature of the conference is that it brings together scientists and other stakeholders from the air pollution, climate change, policy and health communities

More details are available here: <http://www.airqualityconference.org/>

### [Electric vehicles at Harwich Port](#)

On 17th January, the Mayor of Harwich officially ‘plugged-in’ a new electric vehicle charging point at the UK’s Harwich International Port - the first port to be included in the Source East Electric Vehicle Recharging Network.

For more details: <http://www.greenport.com/news101/europe/electric-vehicles-at-harwich-international-port>

### [New clean technology for dust containment](#)

A US company is seeking to clean up dusty ports with a new suppression device designed specifically for use at conveyor discharge points.

More info available [here](#)