



Università  
Ca'Foscari  
Venezia

**PROJECT ACRONYM AND TITLE:** ECOMOBILITY - ECOlogical supporting for traffic Management in cOastal areas By using an InteLLigenT sYstem

**FUNDING PROGRAMME:** INTERREG ITALIA – CROAZIA 2014-2020

**CALL:** First call 2017 Standard+

**SCIENTIFIC FIELD:** Maritime transport management

**HOST DEPARTMENT/CENTRE:** DAIS - Department of Environmental Studies, Informatics and Statistics

**SCIENTIFIC RESPONSIBLE:** Andrea Gambaro

**FINANCIAL DATA:**

| Project total costs | Overall funding assigned to UNIVE |
|---------------------|-----------------------------------|
| € 830.000,00        | € 300.000,00                      |

**ABSTRACT:**

ECOMOBILITY addresses a serious challenge of the Adriatic area, which is how to manage road and ship traffic in coastal areas, in order to preserve environment, still maintaining economic, commercial and tourist development. At the same time ECOMOBILITY will foster a more sustainable approach of tourism. The overall objective of ECOMOBILITY is to promote an innovation in the management of the main means of transport in coastal areas, towards an eco-friendly approach, with the scope to increase the environmental sustainability of road and ship transport in these critical regions. It is also expected an increase of participation of the towns#-# citizens and visitors towards environmental issues. An additional objective of ECOMOBILITY, as capitalization project of POSEIDON, is to provide an enhancement of knowledge about the impact of shipping on air quality of Venice and Rijeka, which could be useful for the elaboration of future actions to curb pollutant emission from the maritime sector in the delicate coastal environment. After an experimental phase related to the refinement of the assessment regarding the impact of shipping to particulate matter, ECOMOBILITY will go beyond the theoretical activities that have been carried out in the last years in the area, producing tools to be concretely used in the two regions. ECOMOBILITY will develop a supporting tool for traffic management system, which will allow traffic management bodies to organize vehicles#-# flow based on pollutant concentration, reducing peaks of pollution. The system will collect environmental data from monitoring stations located around the city and will stream the information to traffic management bodies in real time, thus permitting to intervene preventively with the most appropriate action. In Venice and Rijeka a direct link between monitoring activity and traffic controllers is still missing. The innovative character of ECOMOBILITY is also evident in the quantification of the shipping contribution to six different sizes of particulate matter at the same time, to size-segregated particle number concentrations and specific chemical species (like metals and carbon). To our knowledge this is the first time that such a careful comparing study is carried out. The real-time environmental information will be used also to feed an application for planning ecological trips. It will be an additional utility supplied to people that already uses coastal transport services. The broadcast to public of the service will encourage tourists to actively

participate in the pollution reduction process. Both tools are easily transferrable to other cities, since they use real-time data and they are not linked to a specific place or period of time.

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| <b>Planned Start date</b>          | <b>Planned End date</b>          |
|------------------------------------|----------------------------------|
| <b>1<sup>st</sup> January 2018</b> | <b>30<sup>th</sup> June 2019</b> |

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**PARTNERSHIP:**

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|--|--------------------|--------------------|
| <b>1</b> Università Ca' Foscari Venezia                            | <b>Venice (IT)</b> | <b>Coordinator</b> |
| <b>2</b> Regione Veneto  | <b>Venice (IT)</b> | <b>Partner</b>     |
| <b>3</b> Istituto di Scienze dell'Atmosfera e del Clima (CNR-ISAC) | <b>Lecce (IT)</b>  | <b>Partner</b>     |
| <b>4</b> University of Rijeka                                      | <b>Rijeka (HR)</b> | <b>Partner</b>     |
| <b>5</b> City of Rijeka  | <b>Rijeka (HR)</b> | <b>Partner</b>     |

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**WEBSITE:** available after the beginning of the project