



Cofinanced by
The European Commission
within LIFE Programme

New Supporter Partners for the LIFE-DIADEME project and new Demonstration Sites

LIFE-DIADEME project is enriched by new Supporters and expands the installation sites of its smart street lighting control systems.

After the Agreement with **Rome Capitale** and the implementation carried out in the **EUR area** and in the **Pietralata district** with, respectively, 722 and 74 Diademe devices, of which 721 Diademe Standard Device, 45 Diademe Air Quality and 30 Diademe LTM, two new Agreements involved the **Municipalities of Piacenza and Rimini** with the effective collaboration of two international companies such as **Citelum SA (EDF Group)** and **Enel X (Enel Group)**. Thanks to the positive feedback of the European Commission, they can be counted among the project **Supporting Partners**.

The **Municipality of Piacenza** had already adopted, in 2018, a point-to-point remote management and control system, with conveyed waves technology, for the city public lighting systems. Piacenza was an excellent reference for the application of the Adaptive System developed by Diademe project, thus being able to represent a third demonstration site of the project itself.



With the subscription of the necessary documents to ensure the collaboration of the Municipality and the technical partner **Citelum SA**, manager of the public lighting network, a demonstration site was realized in the semi-central area, suitable for existing traffic conditions, providing the installation of **73 Diademe Standard Device**, **2 Diademe Air Quality** and **1 Diademe LTM** for traffic detection.



The Excellent institutional relations built in the years by **Reverberi Enetec**, **Diademe lead partner**, allowed to involve in the project the **Municipality of Rimini** too.

The agreement signed with the Municipal Administration and **Enel Sole**, manager of the public lighting network, foresees the installation of **87 Diademe Standard Device**, **2 Diademe Air quality Sensors**

Life DIADEME - 2020

Completed the DIADEME installation in Rome EUR and Pietralata District

DIADEME Installations in the Municipalities of Piacenza and Rimini

AIDI Congress in Naples



and 1 Diademe LTM for adaptive lighting in a semi-central area of the city deemed appropriate to be considered a demonstration site. This action could also involve further developments.

With a technical collaboration agreement with **Reverberi Enetec, Enel X**, company of Enel Group dealing with the development of digital and innovative solutions for energy efficiency, put at disposal its expertise providing the installation of all the devices on selected lighting points in Rimini.

By doing so, both the cities involved have been equipped by additional tools towards the realization of Smart City systems: sensors located in strategic areas will provide real time data on traffic, noise and air pollution, while the analysis of the detected and monitored information, will be used to promote the **reduction of the environmental impact in urban areas and the improvement of road safety**.

Not to mention that, on the basis of the data analyses primarily conducted on the data from the Rome EUR City Capital site, the energy savings obtained from the installed Diademe devices are much greater than those foreseen at the beginning of the project and therefore of considerable interest during the replication phase in **Piacenza** and **Rimini** Municipalities.

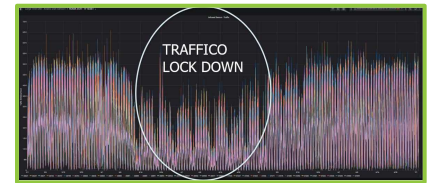
These actions, not initially planned, if on one hand will have a great value in bringing further confirmations on the quality of the applications conceived and tested by the project, on the other hand demonstrate that **LIFE-DIADEME** can be already considered a Best Practice for the reduction of energy consumptions, greenhouse gas emissions and costs.

Moreover, the new Supporting Partners, Institutional and Technical ones, will ensure a greater visibility to the project activities developed accordingly and in line with the indication provided by the European Institutions.

New deadline for the LIFE-DIADEME project

With a Letter of Amendment, the European Commission confirmed the new **LIFE-DIADEME** project deadline at **31 December 2020**.

The well-known sanitary emergency events, but also the chance of adding **2 new Demonstration Sites in the Municipality of Piacenza and in the Municipality of Rimini** that firmly wished to **adopt the LIFE-DIADEME Smart Applications**, led the Consortium Partners to request The adjournment of the project deadline. LIFE-DIADEME will be enriched with two additional Demonstration Sites where to install and apply the Diademe Devices. Moreover, there will be the possibility to have 6 additional months of data collecting and data analysis in the two Rome Capitale sites in EUR and Pietralata Districts.



LIFE-DIADEME Installations completed in Rome

The innovative idea proposed by the **LIFE-DIADEME** project can be summarized in a **new Smart system dedicated to Public street lighting in urban environment for real time adaptive regulation of light flow, based on the surrounding brightness, traffic flows and weather conditions**. A system providing, in the same time, a correct lighting level in terms of safety, as prescribed by UNI 11248, but also **economically efficient and with a significant reduction of energy consumptions**.

The **decrease in consumption and gas emissions**, together with the **cutting down of maintenance costs** and the **lengthen of the average working life of the lighting points**, go towards the **realization of a Smart City**. Even more when the Public Administration is able to supply **information on traffic flows, quantity and quality of pollutants and noise level** in different parts of the town.

Thanks to an Agreement with **Rome Capitale**, at the end of March 2018, 112 Light Points in the Rome EUR area (**Small Test Site**) were equipped with Diademe technology for Smart Lighting.



These devices collected data on luminance, traffic flows, air quality, noise level, temperature and pressure, providing adaptive lighting to the roads involved in the project.

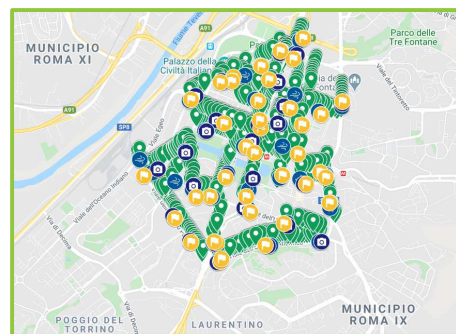
The data collected and the improvement of electronics in the Diademe systems allowed an

effective and definitive development leading to the complete installation of **two Demonstration Sites in the Rome EUR Area and in the Pietralata District in 2019**.

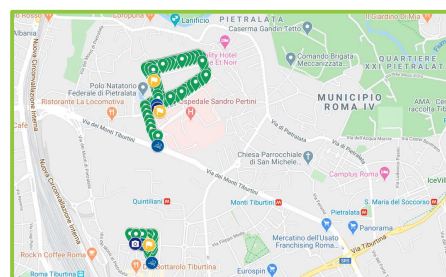
722 new installations of which **653 Diademe standard Device** (adaptive lighting and noise level), **41 Diademe Air Quality** (pollutants level), **28 Diademe LTM** (traffic flows monitoring and lighting level control) and **47 informative Notice Boards** in each street involved in the test in **Rome EUR area**.

74 new installations of which **68 Diademe standard Device**, **4 Diademe Air Quality**, **2 Diademe LTM** and **3 informative Notice Boards** in **Rome Pietralata District**.

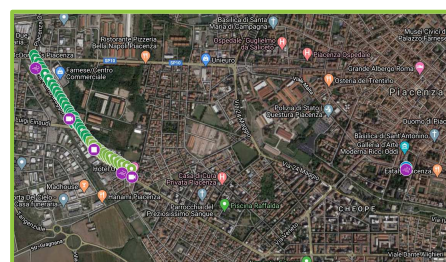
Since the final installation, the **performance of the two real-time adaptive lighting systems in Rome Capital City** shown a **reduction in energy consumption and pollutants of absolute significance**, compared to the pre-programmed systems, currently in use in the most state-of-the-art public lighting plants, and even greater than systems without such regulation.



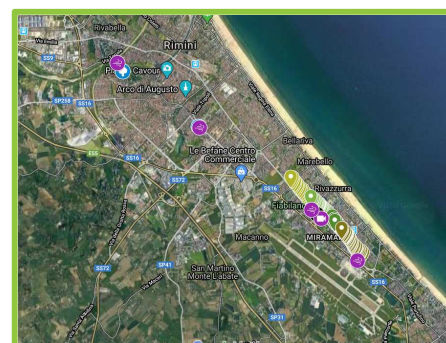
LIFE-DIADEME in Rome EUR



LIFE-DIADEME in Rome Pietralata



LIFE-DIADEME in Piacenza



LIFE-DIADEME in Rimini

Today, together with the **Department of Digital Transformation of the City of Rome**, the data collected by Diademe equipment is being made usable for environmental, planning and informative purposes. The intelligent utilization of energy resources becomes a cornerstone of the Smart City concept.

National AIDI Congress - Naples 19/20 October 2020

The **AIDI National Congress**, the Italian lighting Association, will be held in Naples in October 2020, with a subtitle "**The light between Culture and Innovation in the Digital Age**".

The Congress is an important event to discuss and deepen issues on lighting and on new technologies used to design a more effective, flexible, dynamic, energy efficient and high-quality lighting. In particular, the main aim is to encourage, through sessions, roundtables and debates, a discussion on the relevant transformations and evolutions of the lighting sector.

There will be the opportunity to tackle the relationship between light and architecture and the increasing interactions between lighting and other sectors, such as electronics, home automation and telecommunications, especially in the field of public lighting and smart cities.

The Congress will focus four thematic sections:

- ✓ Urban lighting in the smart city age.
- ✓ Innovation and new tools for lighting design.
- ✓ Light, architecture and public welfare.
- ✓ Lighting appliances design with Led technology.

LIFE-Diademe project will participate in the event with a presentation given by **Eng. Paolo di Lecce**, **Reverberi Enetec** CEO, project **lead Partner**, and by the **Director of the Digital Transformation Department** of the **Municipality of Rome**, **Eng. Raffaele Gareri**.



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Comune di Rimini

Technical Supporters:

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