

Description of the measure and main outcomes expected

The Measure ROM_02 concerns the “Green Area”, which is an area of 156 square meters, with a perimeter of 72 km. It basically corresponds to the ZONE 3, to make this a proper Low Emission Zone. This measure must be placed among the initiatives to push people outside their (polluting) cars, and change their mobility habits in favour of PT. The measure combines policies and ITS to implement restrictions according to a Roadmap indicated by the City Administration, based on the provisions of the Lazio Region PRQA (Regional Air Quality masterplan) to cope with the condemnation for the infraction for non-compliance with the Ambient Air Quality Directive 2008/50 for exceeding the NO₂ emissions limit. The measure includes the implementation of a total of 154 electronic access gates over the “Green Area” perimeter.

The measure expects to deliver:

- 154 electronic access gates
- Revised “Specifications Document” that defines the roadmap, the new regulations for access (permits for residents and freight delivery), the incentives, etc.
- New signalling
- Large-scale implementation of the measure

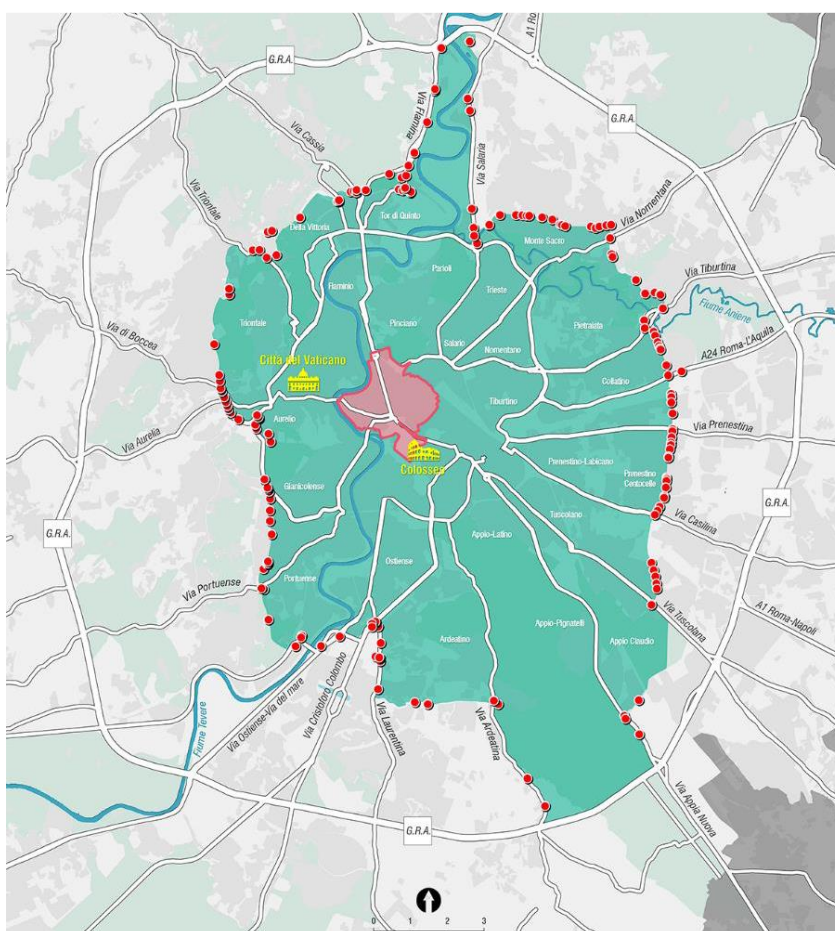


Figure 1 The Green Area and its 154 access points

Preparation of the measure

In May 2022, the European Court of Justice condemned Italy for non-compliance with the Ambient Air Quality Directive 2008/50, placing a mitigation responsibility for the harmful effects of traffic on the Lazio regional authority that has issued a strategic regional air quality plan (PRQA revised in 2022), which sets targets, objectives and deadlines also for the mobility sector.

Normally, since its establishment in 2015, the Green Area is a zone where traffic restrictions are activated in exceptional cases of pollution emergency. Since November 2022, it has been formally regulated with the Deliberation n° 371/2022, which sets boundaries and outlines a roadmap for traffic restrictions. According to the roadmap, pre-Euro 5 Diesel cars are provisionally expected to be banned from 2025 onwards. The “Green Area” is a Low Emission Zone with the purpose of reducing ambient pollution resulting from urban traffic according to the PRQA, in particular focusing on NO₂ and PM emissions harmful for health.

The activities include three different levels:

- The **policy** one – which outlines and issues the restrictions to private traffic. The initial roadmap is subject to revision following a proposal by the city of Rome to the Lazio region, expected for the 1st November 2024.
- The **technical** one – analysis of traffic data, the vehicle fleet composition, modal propensity analyses, hypothesis on incentives, traffic simulations, in the pre and post scenario to assess the different scenarios to achieve the expected polluting reductions. Drafting of a document to demonstrate the effects of different scenarios “Assessment of the interventions to lower ambient emissions and to restore air quality in the territory of Rome”. The activity has involved RSM, the City Mobility Department, the City Environmental Department.
- The **infrastructural** one (Hardware and Software) – completion of the electronic access control system including 154 electronic poles, and the Central control system. These infrastructural investments are covered by different sources (PON Metro ReactEU and Jubilee 2025). The system must be capable of sorting the type of motorization of the vehicles passing through the electronic access poles, the connection with the database of the national motorisation must be ensured; in addition, the system will be flexible enough to adapt to different “rules” and policies.

In mid-2024, a specific call for tender was launched by RSM with the specifications designed in cooperation with the Mobility department, and the following has been completed:

- 80 electronic poles have been installed, with the relevant signalling
- the centre control platform was defined
- evaluation of the capacity plan, for the on premise installation in RSM centre of the hardware and software licences required for the correct computational and repository capacity necessary for the central system

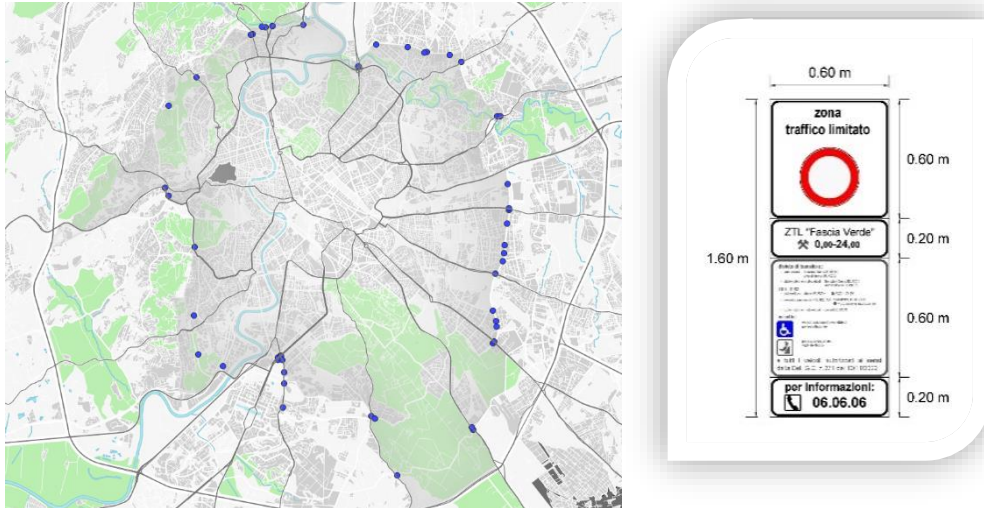


Figure 2 Installations finalized 2024 and signalling placed around the Green Area

Challenges & Mitigations

Social impact and acceptance: the measure ROME_02 is supposed to have a major social impact, therefore forms of incentives and compensation are being studied and the roadmap is being fine-tuned, to have a final decision to be implemented by November 1st 2024. The initial enforcement expected with the Deliberation n° 371/2022 caused a strong reaction from the citizens.

Mitigation strategies and flexibility rules were studied and presented in the measure ROM_09, including the possibility to have a bonus in terms of flexibility for the first period for the banned categories of vehicles, depending on the Euro emission category.

Next steps towards implementation

Following the analyses performed by RSM and the document *"Assessment of the interventions to lower ambient emissions and to restore air quality in the territory of Rome"* submitted by the city of Rome (Mobility Department) to the Lazio Region, the enforcement rules will be confirmed and formally issued to enter into force on November 1st 2024.

After that, monitoring the effect of the measure on the air quality and on the mobility habits will be possible. Thanks to the implemented electronic poles, a first monitoring campaign had already been carried out in winter 2023/24 and had provided the data modelling of the phenomena, a better scenario analysis as well as the forecasting for next winter period.