

Best Practice: Pollution Charge Program

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CITY: MILAN

POLICY AREAS: TRANSPORTATION; CLIMATE CHANGE

BEST PRACTICE

ECOPASS is a pollution charge program administered by the City of Milan wherein motorists travelling within a designated traffic restricted zone or ZTL are charged a fee. The amount of the charge is based on the vehicle's engine emissions standard and varies from €2 to €10. The program is part of Milan's broader Strategy for Sustainable Mobility, Health and Environment, 2006-2011, which includes the expansion of railway services, development of a system of lanes for cyclists, and the extension of the centralized traffic light system into more areas to make traffic flow more fluid and reduce congestion throughout Milan.

ISSUE

On April 6, 2006, Milan courts ruled that the Milan Council Administration is responsible for guaranteeing citizens' right to health, covered by Article 32 of the Constitution. Monitoring activities had concluded that Milan's atmospheric pollution was one of the worst in Europe. The Milan Council Administration developed the Strategy for Sustainable Mobility, Health and Environment to protect the health of its residents and the environment. Efforts are concentrated on particulate (PM_{10}) reductions. Particulates, or fine particles, are tiny subdivisions of solid or liquid matter suspended in a gas or liquid.

The impact on human health of the quality of air due to high concentrations of PM_{10} is quantified by the World Health Organization (WHO), which has determined that life expectancy in Europe is reduced by an average of nine months due to pollution. Atmospheric pollution also increases respiratory and cardiovascular diseases, especially affecting children and senior citizens. Emissions from vehicles represent the main source of fine particulate emissions in Milan. Each day, half of the cars travelling in Milan come from the suburbs.

GOALS AND OBJECTIVES

The main goal of ECOPASS and Milan's overall environmental policy agenda is to fight air pollution and more specifically fine particulate concentration (PM).

The Municipal Council Administration has set the following targets:

- To reduce polluting emissions;
- To reduce the use of cars and increase the use of public transport.

The City of Milan has begun to implement several goals to accomplish by 2015 such as:

- Increasing the frequency of surface public transport;
- Doubling the number and extension of the metro lines;
- Doubling the number of interchange parking areas;
- Doubling the areas subject to price (metered) parking;
- Doubling the extension of bike lanes and starting a bike sharing system in 2010;
- Doubling the area of pedestrian areas;
- Doubling the amount of green spaces.

IMPLEMENTATION

ECOPASS has been in effect since January 2, 2008 and applies to vehicles entering the city center (an area of 8.2 square kilometers) between 7:30 a.m. and 7:30 p.m. Monday to Friday. Vehicles have been classified into five categories according to

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their propensity to pollute. Cars that are considered to pollute minimally are free, while others have to pay the charge, ranging from €2 to €10.

There is no charge for motorbikes. Exemptions are also provided for public transport, emergency vehicles, and people with disabilities. Annual discounted passes are granted to citizens living inside the area. There are 43 toll entrance gates equipped with cameras that read car plates. Residents can pay via the internet, phone, ATM, bank remittance, or cash. Residents can also pay the charge the same day you enter the area or the following day.

COST

In 2008, the total cost of administering the ECOPASS program was €6.5 million (\$8.6 million USD).

RESULTS AND EVALUATION

Since 2008, there has been a 15.7% reduction in traffic within the traffic restricted zone. Traffic has also been reduced by 8% outside of the traffic restricted zone. The speed of the public transport system has increased by 6.8% and the number of passengers using the metro system has increased by 11%.

Most importantly, PM₁₀ emissions caused by traffic have dropped by 15% within the traffic restricted zone and CO₂ emissions have dropped by 6%.

Summary of ECOPASS Infrastructure Developments

Improvements to the local transportation system include:

- 13% more tramway lines for use in both peak and off-peak time
- 20% more bus and trolleybus lines for use in both peak and off-peak time
- 15 kilometers of dedicated ECOPASS lanes has been established
- 7 entrance gates has been dedicated for public transport only

Improvements to the greater metropolitan transportation system include:

- 27% more lines for use during peak hours
- 51% more lines for use during off-peak hours

The city of Milan constantly evaluates the ECOPASS program in order to ensure that congestion rates are decreasing. Several different scenarios are underway or under consideration, including:

- Enlarging the traffic restricted zone
- Reviewing the vehicle emissions classes
- Including motorbikes that heavily pollute
- Reconfiguring ECOPASS rates

TIMELINE

September 2007	Started the study and the project of the system
January 2008	ECOPASS program launched

LEGISLATION

Italian Law allows municipalities to limit circulation to given areas (LTZ) and to apply fees to access these areas.

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LESSONS LEARNED

According to the City of Milan, the main challenge in enacting the ECOPASS program was in changing the commuting habits of residents from primarily the use of cars to public transportation. It was critical that the City improve the public transportation system before launching the ECOPASS program in order to offer an attractive and viable option.

As a result of the ECOPASS developments, the City now has an integrated system of access to the city, clear data regarding the City's fleet of buses, and new technologies to manage the system. Milan discovered that a pollution charge can in fact be implemented and managed effectively.

TRANSFERABILITY

In order to develop a viable system similar to ECOPASS, a city must have complete data regarding mobility in the greater metropolitan area including the causes of daily movements throughout the city. It also must have an integrated public transportation system which offers a valid option for the continued use of private vehicles. Finally, the city must focus on the accompanying technologies to support a dynamic system.

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Facts and figures in this report were provided by the highlighted city agency to New York City Global Partners.