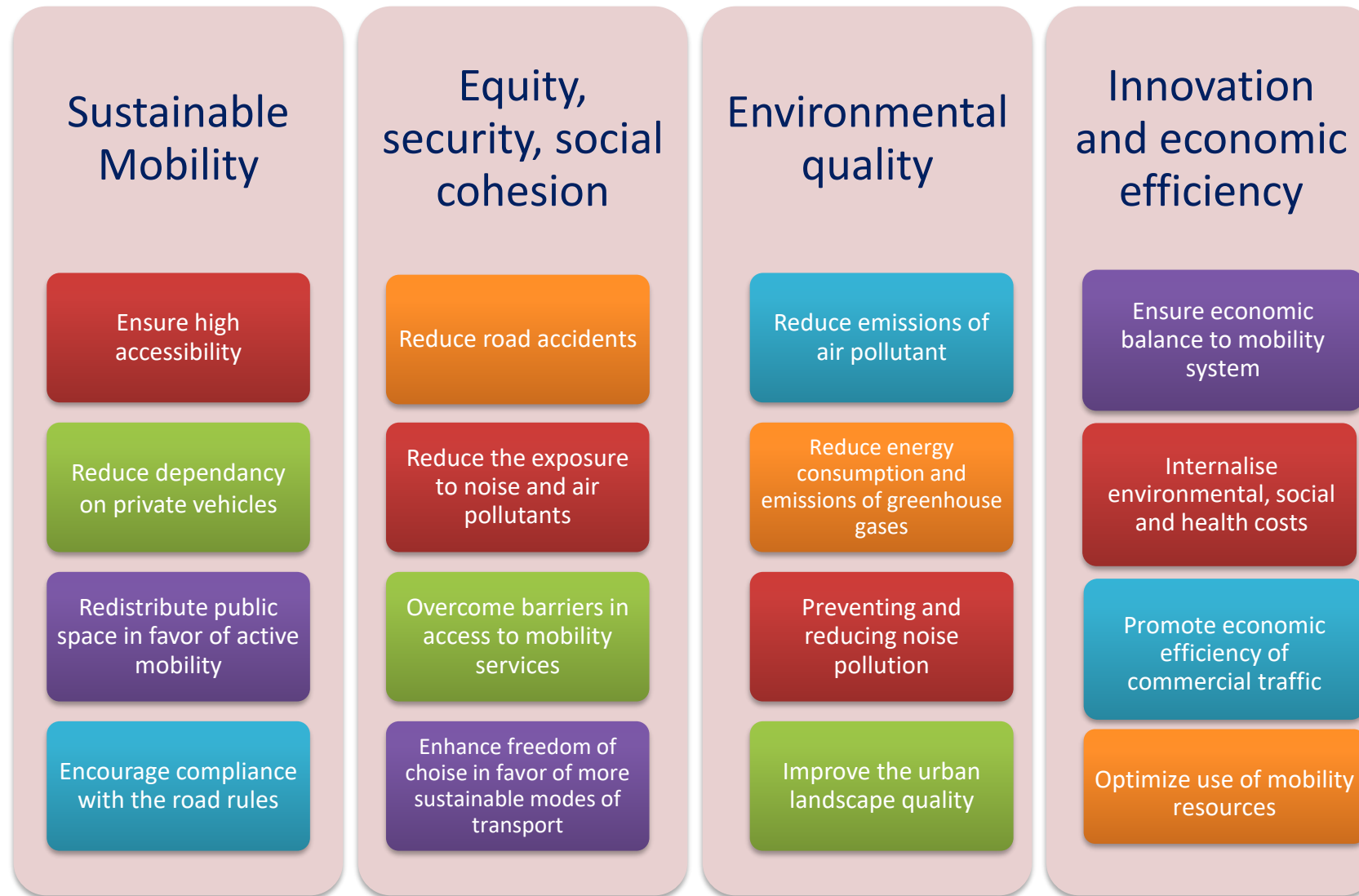
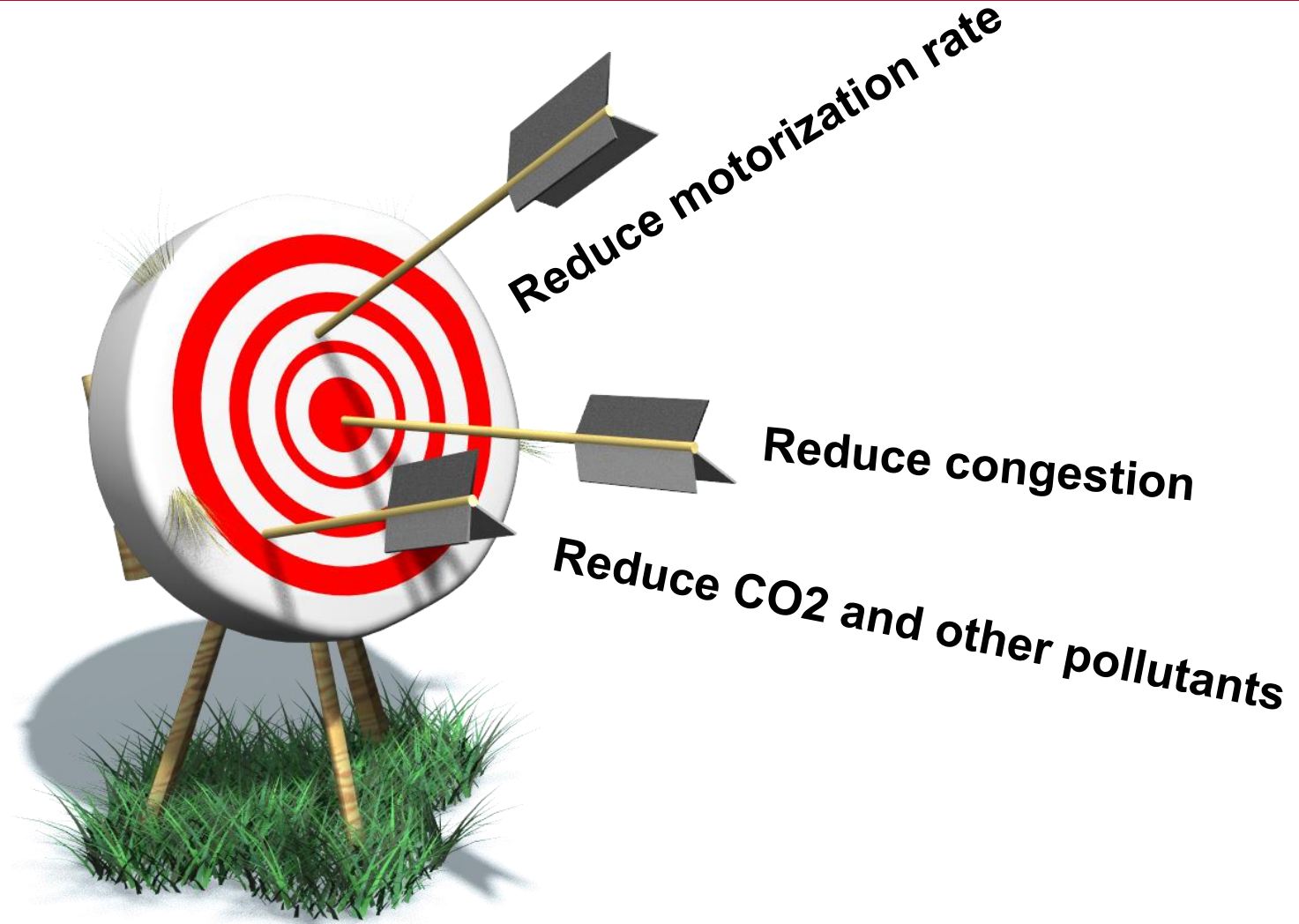


# AREA C, AREA B and urban improvement in Milan

*VALENTINO SEVINO - PAOLO CAMPUS*  
**AGENZIA MOBILITÀ AMBIENTE E TERRITORIO (AMAT)**

# Sustainable Urban Mobility Plan – 4 pillars





## AREA C – Peculiarity

Milan is the **only city in the world** that has experienced **2 type of road pricing measures**

**2008 - Ecopass scheme (pollution charge)**



**2012 - Area C (congestion charge)**



The scheme was upgraded following the results of a **referendum asking a plan of action to enhance public transport and alternative mobility, the extension the road charge to all vehicles (except those with zero emission) and the progressive widening of the area subjected to the pricing.**

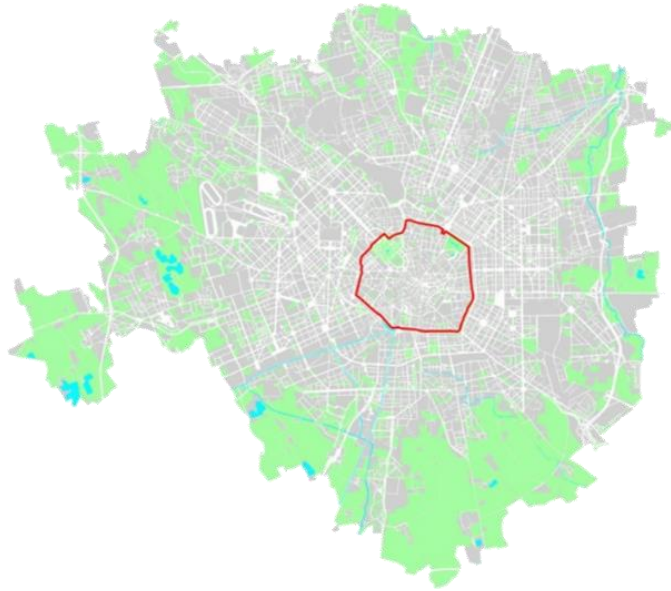
The referendum was approved **by 79% of voters, in stark contrast with the experience of other cities**, where voters have turned down charging schemes (e.g. **Edinburgh, Manchester**) or been barely decisive (in **Stockholm**, only 51% of voters were in favour of introducing a congestion charge scheme). **London's** congestion charge was introduced in 2003 without referendum.





# 4 Milan Congestion Charge – Area C

- The area = 8.2 km<sup>2</sup>, 4.5% of the whole territory of the Municipality of Milan
- Outstanding attractiveness



Every day about **500.000 people** coming from outside get there



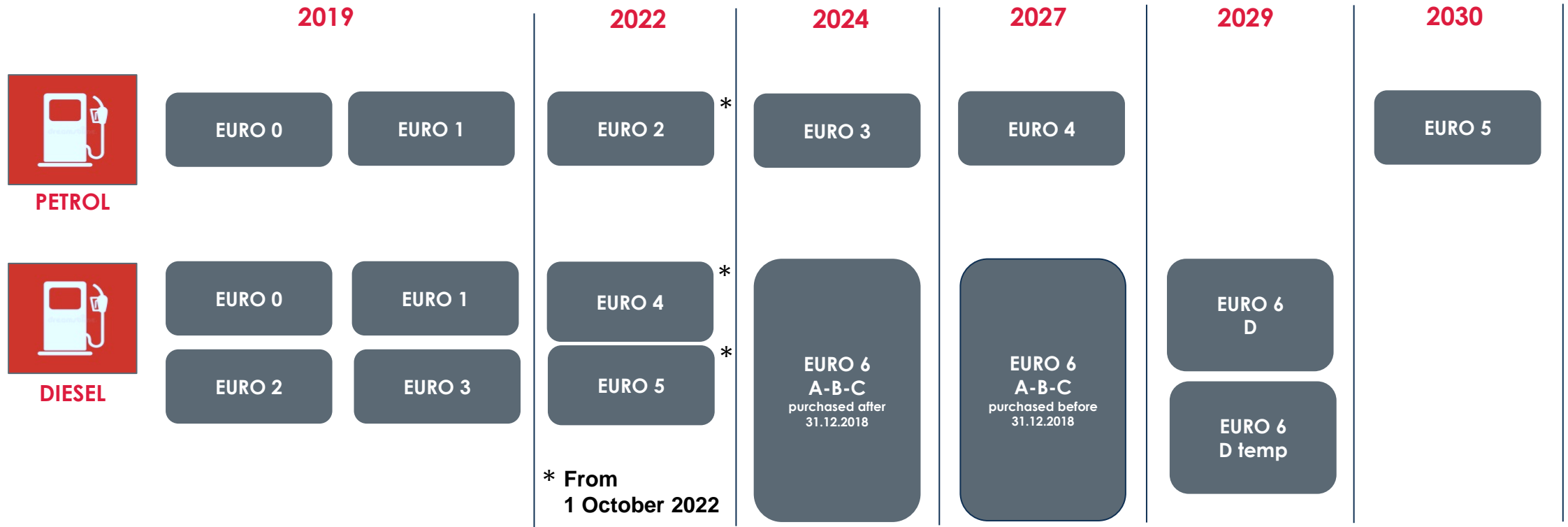
The access points, **monitored by cameras**, are **43**, including 7 for exclusive use of public transport. The charge is active **Monday-Friday from 7.30am to 7.30pm**. Each ticket to enter “Area C” must be activated the **same day or no later than midnight of the next day access**. **Payment (5€)** enables vehicles to drive around, leave and re-enter the charging zone **as many times as required in one day**.

## Area C – Rules and bans

**Residents in the Area C:** the first **40 accesses** (every year) are **free**. From 41st access onward they **pay 2 €**  
**Service vehicles pay 3 €** (after registration).

Access is **free** of charge for **electric vehicles, mopeds and motorbikes** and **M1 hybrid vehicles** (electric-thermal propulsion) with an **emission contribution  $\leq 100$  g/km**. Access is **always permitted for Euro 6 petrol vehicles**.

**Access is progressively prohibited to personal transport vehicles cat. M1** (Vehicles designed and constructed for the carriage of passengers, with no more than eight seats in addition to the driver's seat):



**FORBIDDEN ACCESS 8am – 10am  
To freight transport vehicles**

**Only freight electric vehicles admitted  
(with some exemption)**



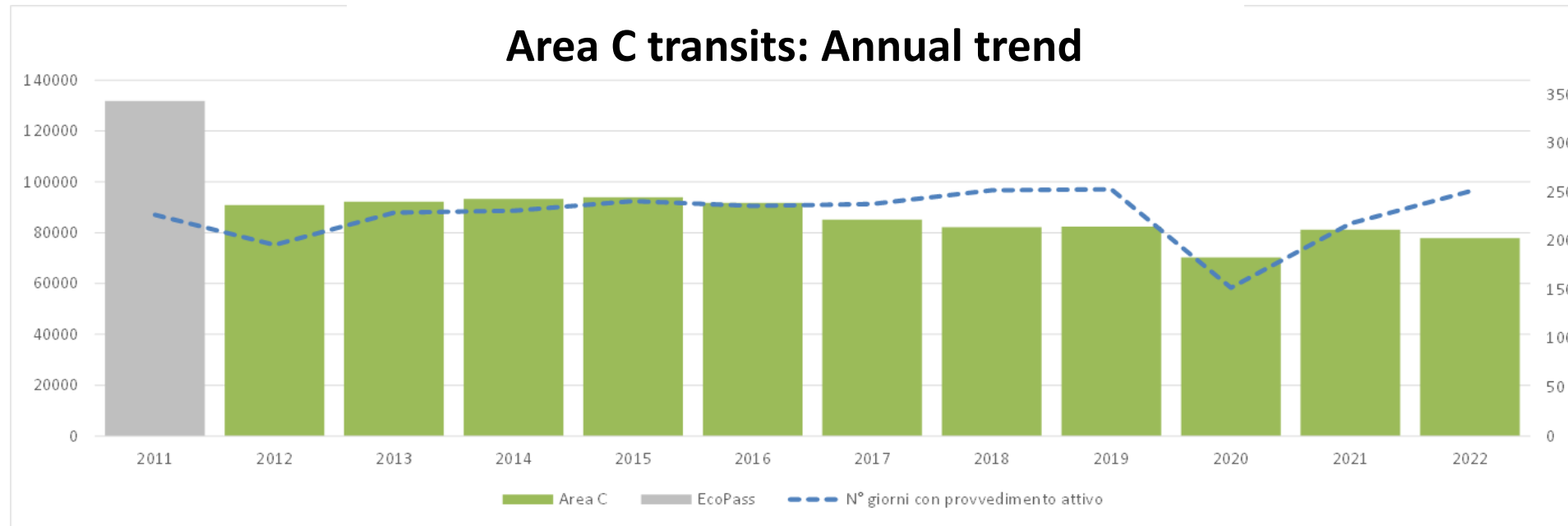
### Decreasing vehicular access to the Area C, therefore:

- ✓ Decreasing traffic congestion;
- ✓ Improving public transport speed;
- ✓ Decreasing the occupation of on-street parking;
- ✓ Reducing road accidents;
- ✓ Reducing pollutant emissions caused by traffic;
- ✓ Reducing health risks related to air pollution;
- ✓ Increasing the share of sustainable modes of travel;
- ✓ Improving urban center quality and attractiveness;
- ✓ Raising funds for sustainable mobility services and infrastructures.





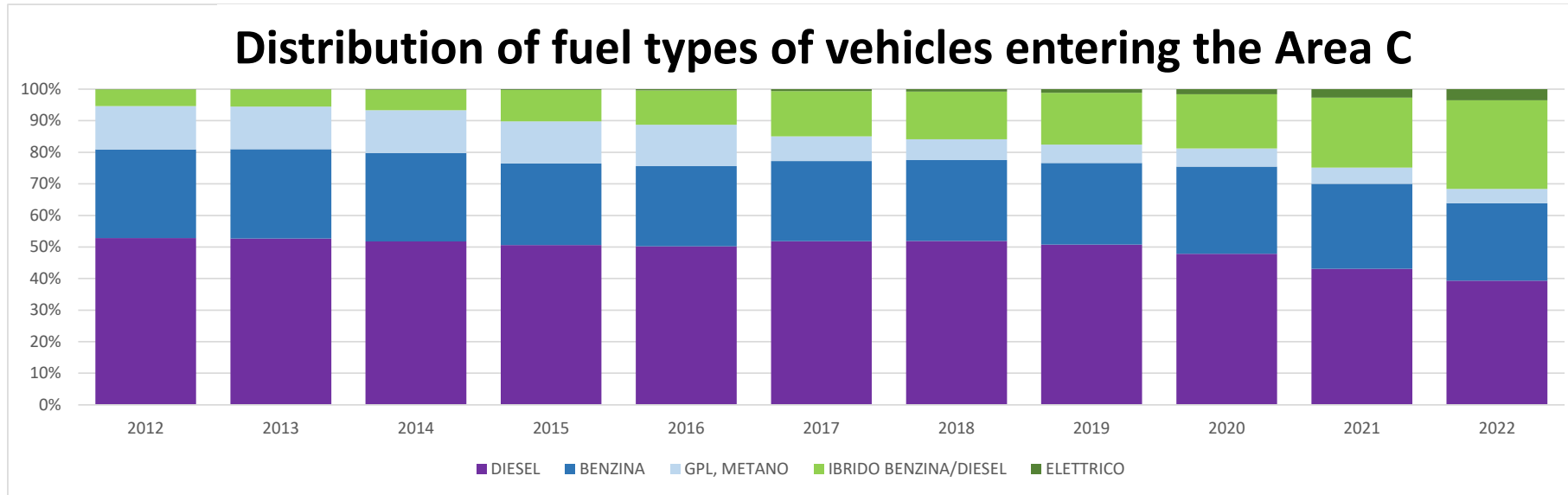
## Area C – Annual trend of average daily transits from 7.30 am to 7.30 pm



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Daily transits (average)	131.898	90.849	92.175	93.342	94.033	91.687	85.049	82.140	82.306	70.195	81.181	77.940
Variation compared to 2011	0,0%	-31,1%	-30,1%	-29,2%	-28,7%	-30,5%	-35,5%	-37,7%	-37,6%	-46,8%	-38,5%	<b>-40,9%</b>
Days with Area B measure in force	227	196	229	231	241	236	238	252	253	152	218	251

*In order to allow comparison between years with different operating hours, the accesses from 7.30 am to 7.30 pm on weekdays with an active measure have been taken into account.*

## Area C – Fuel types vehicles distribution



POWER VEHICLES	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
PETROL	28,1%	28,3%	28,0%	25,9%	25,4%	25,4%	25,6%	25,9%	27,6%	26,9%	24,6
DIESEL	52,8%	52,7%	51,7%	50,5%	50,3%	51,8%	51,9%	50,8%	47,9%	43,1%	39,3
<b>ELECTRIC</b>	<b>0,1%</b>	0,1%	0,1%	0,3%	0,4%	0,6%	0,8%	1,1%	1,6%	<b>2,7%</b>	<b>3,5</b>
LPG, METHANE	13,7%	13,5%	13,7%	13,3%	13,0%	7,8%	6,6%	5,8%	5,7%	5,1%	4,5
HYBRID PETROL/DIESEL	5,3%	5,4%	6,5%	10,0%	10,9%	14,4%	15,1%	16,4%	17,2%	22,2%	28,1

## Area C – Economic and social results

Area C achieved important results not only in terms of **environment**, but also with regard to **economic** and **social sustainability**. As to the economic aspects, as a counterweight to the charge, several are the benefits enjoyable by users.

For instance, thanks to Area C, the **traffic reduction generated benefits to the whole transport systems**. In fact, according to a statement of AICAI (Courier Aircraft Association), the Area C has resulted in an **increase in productivity of 10% on freight deliveries in the city**.

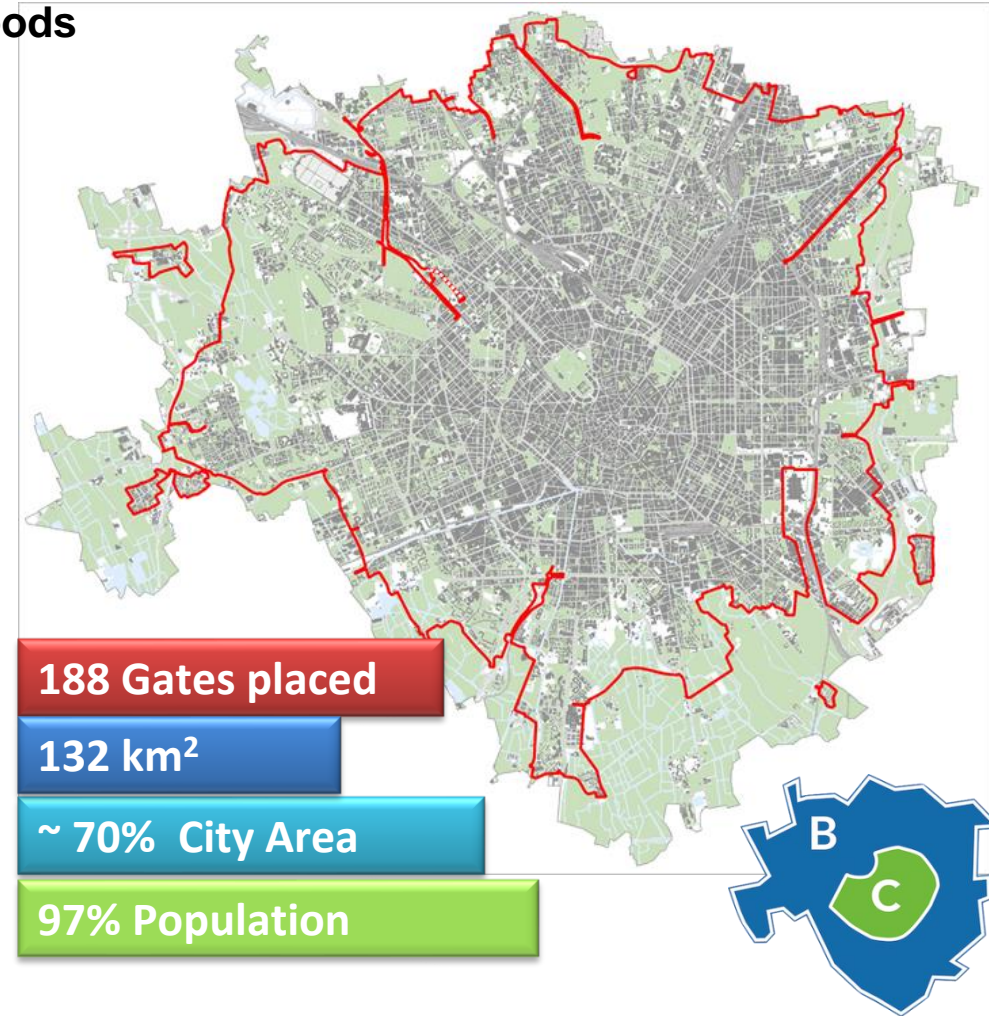
The reduction of the cars circulating in the city center enables the **reuse of the public spaced** once reserved to the parking. For instance, **an area of approximately 15.000 sqm near Castello Sforzesco was turned into a pedestrian area**, and new bike sharing stations and car sharing services were set up in the city.



## Area B – Low Emission Zone

Control of the most pollutant vehicle and control and tracking of access for heavy vehicles and for the transport of dangerous goods

As stated in the Sustainable Urban Mobility Plan, in February 2019 the City of Milan launched the Italy's largest Limited Traffic Zone and **one of the largest Low Emission Zone of Europe**, called **Area B**, an **infrastructure of electronic gates** around and next to the municipal boundary. The systems is set up for the **control of the most pollutant vehicles** and for the **control and management** of the most **heavy vehicles** and the ones used for the **transport of dangerous goods**.

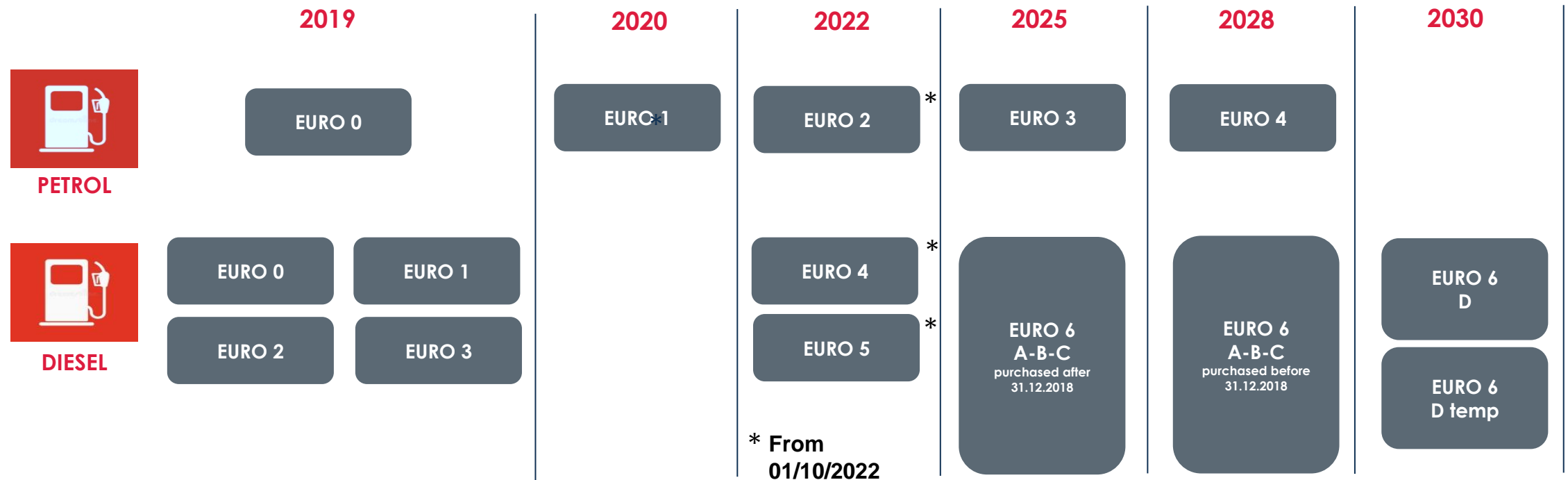




**Access is always allowed for Euro 6 petrol, electric and hybrid vehicles.** Some **exceptions**: From 1 October 2022, **Euro 4 and 5 diesel** and **Euro 2 petrol** vehicles are entitled to **50 days of access** and circulation within the area and such exemption lasts until 30 September 2023.

**From the second year** that the ban comes into force for your vehicle, additional exemption days are possible for all types of vehicles, regardless of their environmental class: **residents: 25 days; non-residents: 5 days** (after registration).

**Access is progressively prohibited to personal transport vehicles cat. M1** (Vehicles designed and constructed for the carriage of passengers, with no more than eight seats in addition to the driver's seat):

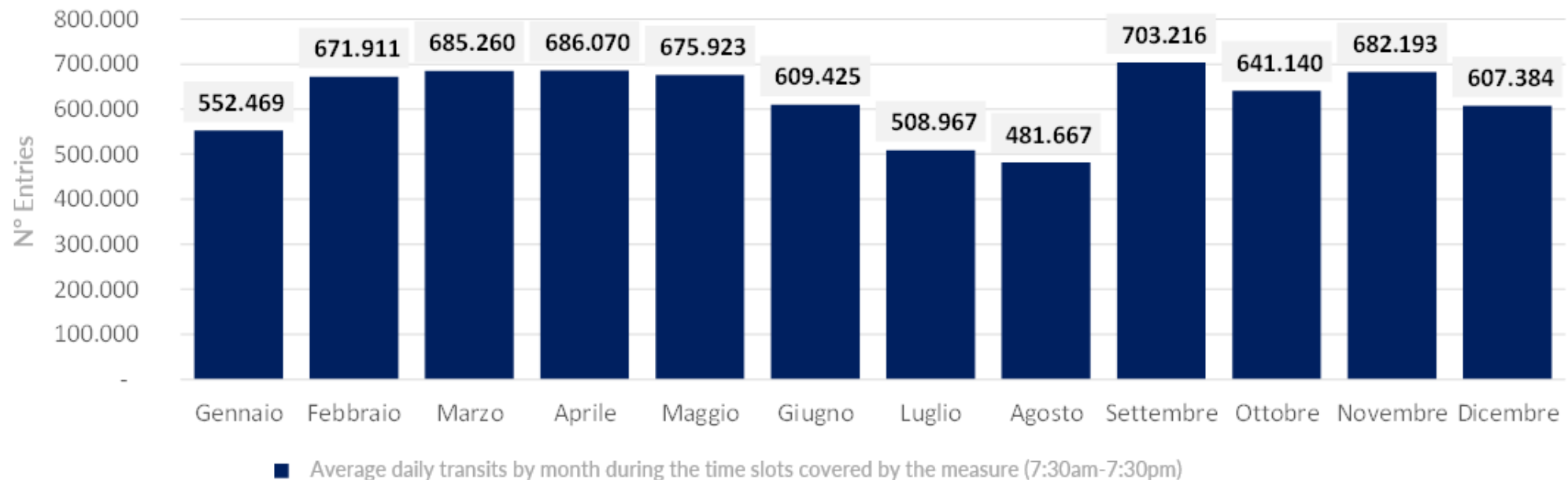


## Area B – Traffic indicators: Monthly daily entries (average)

During 2022, access to the limited traffic zone (LTZ), during the time slots between 7:30am and 7:30pm, averaged approximately 630,104 transits per day, corresponding to about 407,068 different vehicles.

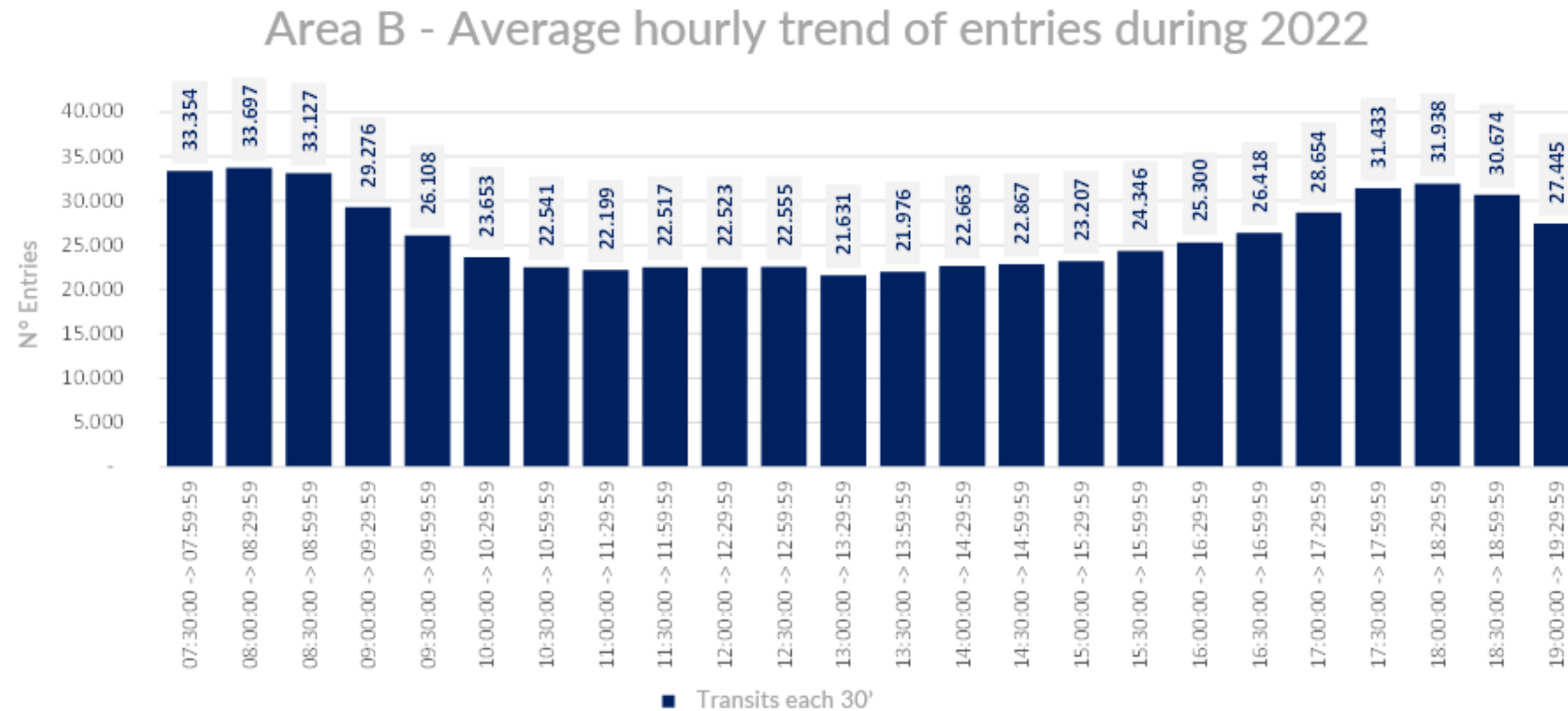
Compared to 2021, there was a variation of approximately -0.8% when comparing the subset of active access points in the analogous operating period of the LTZ (in 2021, Area B was launched on June 9th due to the extraordinary measures for containing the covid-19 pandemic).

Area B - Monthly trend of average daily entries during 2022



## Area B – Traffic indicators: Hourly entries (average)

The hourly curve of access to the Area B access points shows the typical pattern with the morning peak more pronounced than the evening peak. In particular, the **average daily peak is 33,697 transits** in the time slot between 8:00am and 8:30am in the morning.



## What forms of incentives have been activated?

The introduction of Area B is accompanied by the provision of public contributions for the replacement of environmentally harmful vehicles, with the purchase of new vehicles with lower environmental impact.

	BUSINESSES AMOUNT ALLOCATED	RESIDENTS AMOUNT ALLOCATED	TOTAL
2018 APPLICATION	€ 2.229.200,00	€ -	€ 2.229.200,00
2019 APPLICATION	€ 3.000.000,00	€ 1.000.000,00	€ 4.000.000,00
2020 APPLICATION	€ 5.056.200,00	€ 8.500.000,00	€ 13.556.200,00
2021 APPLICATION	€ -	€ 3.000.000,00	€ 3.000.000,00
2022 APPLICATION	€ 2.000.000,00	€ 3.000.000,00	€ 5.000.000,00
	<b>€ 12.285.400,00</b>	<b>€ 15.500.000,00</b>	<b>€ 27.785.400,00</b>

The amounts of the contributions are differentiated and increasing with respect to lower CO2 emissions.

Starting from 2022, in order to facilitate the most vulnerable groups, with an EESI income of less than or equal to €20,000.00, additional contributions are provided, differentiated by income brackets.



On 25 February 2019, the day the Area B started, Milan launched a pilot project on **street vendors** who had a **very polluting vehicle** subject to area B restrictions. They **were allowed to drive in Area B**, as long as they **did not exceed a certain distance**, provided they installed a **device (OBU)** capable of calculating the mileage within Area B. The measure responded to a **principle of equity** as it was designed to **give the possibility**, even to those who could not afford the change of the vehicle, **to continue to carry out their work**.

The street vendors project has now merged into **Move-In project**, an experimental project of the Lombardy Region for Area B of Milan and some areas of the Lombardy territory. It is an **alternative to the exemptions** ordered for vehicles fuelled by:

**Euro 0, 1 and 2 petrol**

**Diesel fuel Euro 0, 1, 2, 3, 4 and 5**

which are affected by the blocks in Area B and in the Lombardy Region.

A **black box**, installed on the vehicle, allows real distances to be detected through the satellite connection to a dedicated technological infrastructure, **until the vehicles reach an annual mileage limit**.



Vehicles Categories (km/year)			
Engine type and Class	Private vehicles (max. 8 seats) Commercial vehicles (> 8 seats; ≤5t)	Commercial vehicles (mass ≤ 3.5 t) Commercial vehicles (≤ 12 t)	Private vehicles (> 8 seats; >5t) Commercial vehicles (> 12 t)
Petrol Euro 0	200	200	200
Diesel Euro 0	200	200	200
Petrol Euro 1	300	300	300
Diesel Euro 1	300	300	300
Petrol Euro 2	600	600	600
Diesel Euro 2	600	600	600
Diesel Euro 3	1.500	1.500	1.500
Diesel Euro 4	1.800	2.000	2.000
Diesel Euro 5	2.000	-	-

As of 3 October, **33,612** applications had been received. The number of **black box** installed has gradually increased to around **1,300/day**

## Area B – Summary

Active  
measure

**251**  
DAYS

Monitoring  
ring

**188**  
GATES

Daily  
transits

**630.104**  
07:30 – 19:30

Unique  
vehicles  
per day

**407.068**  
07:30 – 19:30

No<sub>x</sub>  
Emission

**-9**  
TONS

*Corresponding to a reduction of about  
2.5% of the total NO<sub>x</sub> emissions from  
road traffic*

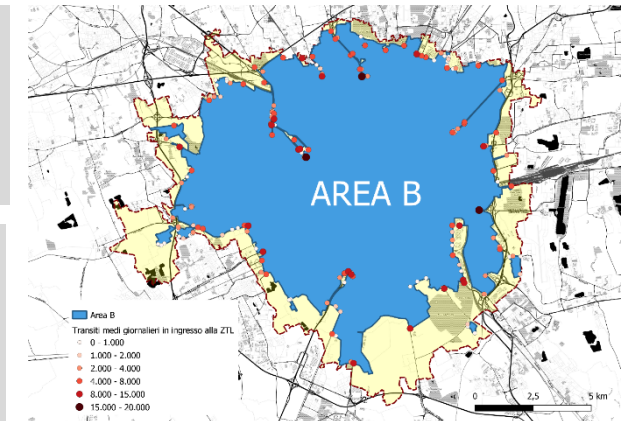
MoveIN

**58.873**  
INSTALLATIONS

**5%**  
Petrol

**95%**  
Diesel

*6.4% of the different vehicles  
that pass through the LTZ gates  
daily*



Incentives for the  
replacement of private  
vehicle fleets

**3 MIL**  
EURO

Incentives for the  
replacement of commercial  
vehicle fleets

**2 MIL**  
EURO

Daily  
exemptions in  
effect

*Vehicles exempt from environmental regulations* **3.089**

*Vehicles longer than 12 [m]* **2.383**

*Vehicles for the transport of dangerous goods* **12**

*Vehicles for the transport of disabled people* **55.600**



# Open Plazas project (2018)





# Open Plazas project (2018)





# Open Plazas project (2018) – Key achievements

22.000 m<sup>2</sup>



of new pedestrian spaces

38



tactical urbanism interventions

250



benches

310



potted plants

380



bike racks

35



tables

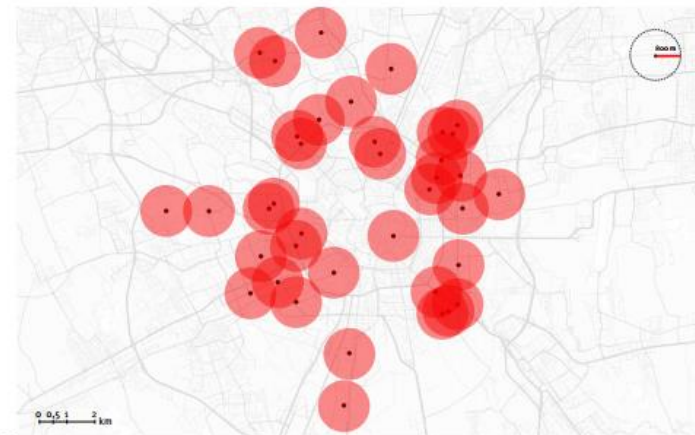
32



ping-pong tables



**One in two Milanese residents has now a square within 15 minutes (800 meters) from home**



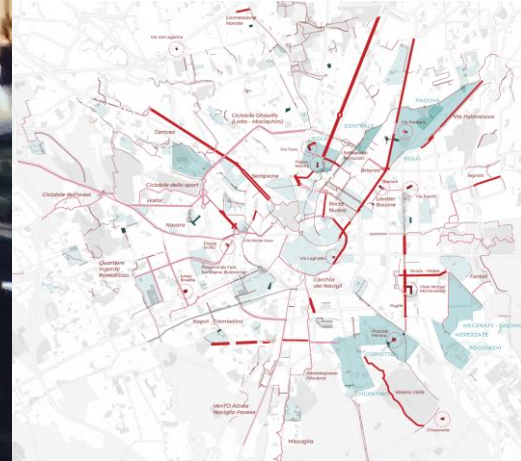


# Streeteries and parklets – Regulation on temporary occupation of public space (2020)





# Open Streets project (2020)





- **STRONG POLITICAL COMMITMENT:** Strong leadership of the Mayor was fundamental to communicate, raise awareness and support the traffic regulation measures by public meetings held with citizens, stakeholders and associations.
- **AGREEMENTS:** Agreements with stakeholders
- **CITIZEN ENGAGEMENT:** Public Debates



# THANK YOU FOR YOUR ATTENTION

[valentino.sevino@amat-mi.it](mailto:valentino.sevino@amat-mi.it)

[paolo.campus@amat-mi.it](mailto:paolo.campus@amat-mi.it)