

Charging scheme in city centre (AREA C) and other strategies in Milan

Hanoi Ho Chi Minh – June 10-18, 2017

2 Milan's background figures: general data

	INNER TOWN (MUNICIPALITY)	METROPOLITAN AREA
TOTAL AREA	182	1.575
POPULATION	1.324.169 ~ 7300 inh/km2	3.176.180 ~ 2000 inh/km2
JOBS	773.571	1.878.726
GDP PER CAPITA (Euro)		26.775
PRIVATE CAR FLEET	51cars / 100 inhabitants Trend: 2008-2014: -13%	

19/01/2017 170360003_00

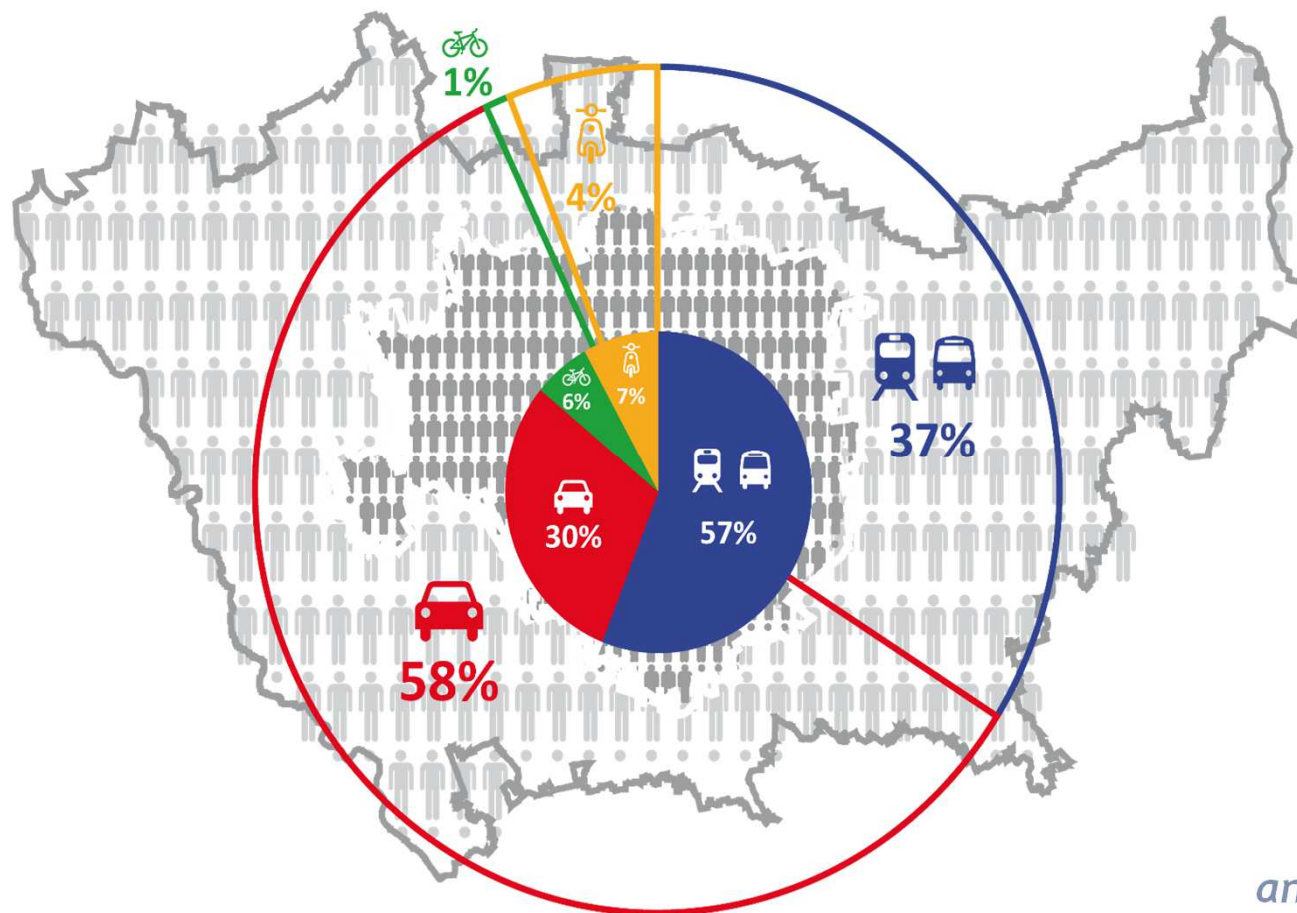
3 Milan's background figures: Economic Structure

	Milan Metropolitan area		Milan Metropolitan region (Lombardy)		Italy	
	11,8%		23,0%		100,0%	
Total Jobs	1.878.726	100,0%	3.673.387	100,0%	15.984.998	100,0%
Agriculture, forestry, fishing	6.581	0,4%	61.549	1,7%	846.807	5,3%
Industry	457.597	24,4%	1.291.830	35,2%	5.355.939	33,5%
Manufacturing industry	333.468	17,7%	956.662	26,0%	3.618.257	22,6%
Building	105.084	5,6%	291.783	7,9%	1.467.135	9,2%
Others industries	19.045	1,0%	43.385	1,2%	270.547	1,7%
Commerce	381.110	20,3%	685.980	18,7%	3.177.565	19,9%
Services	1.032.561	55,0%	1.632.226	44,4%	6.600.456	41,3%
Transport, storage, logistic	118.904	6,3%	195.375	5,3%	1.076.214	6,7%
Hoteling, catering	123.951	6,6%	251.839	6,9%	1.416.323	8,9%
Information, communication	143.886	7,7%	174.534	4,8%	476.375	3,0%
Finance, insurance	67.716	3,6%	110.959	3,0%	543.841	3,4%
Real Estate	25.461	1,4%	43.496	1,2%	177.208	1,1%
Professional, technical, scientific activities	121.223	6,5%	165.753	4,5%	475.775	3,0%
Business support, veicle rental, travel agencies	330.731	17,6%	422.302	11,5%	1.169.167	7,3%
Other service activities	100.689	5,4%	267.968	7,3%	1265553	7,9%
Non classified	877	0,0%	1.802	0,0%	4.231	0,0%

19/01/2017 170360003_00

4 Milan's Background Figures : MOBILITY

19/01/2017 170360003_00



Motorization Rate: 51 cars per 100 inhabitants

Daily city users:
~ 1 M

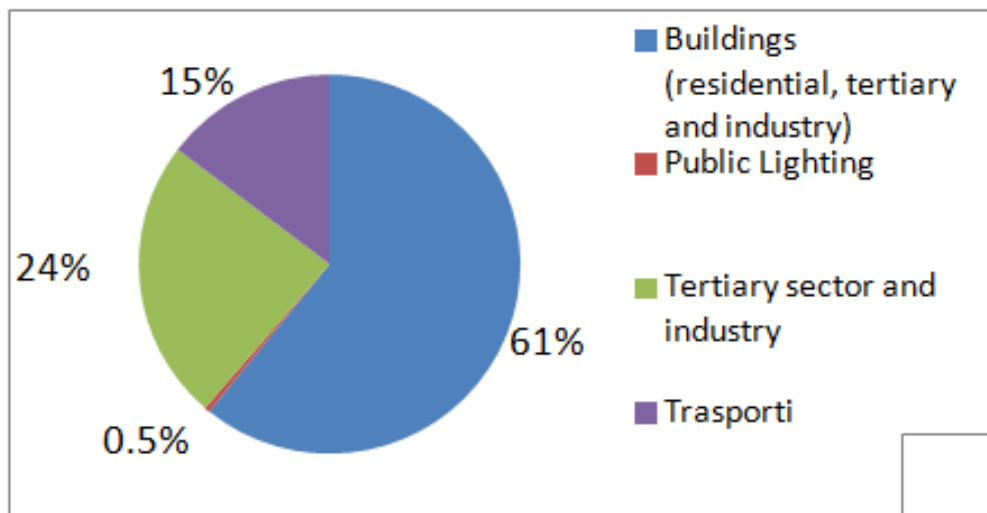
Overall Mobility
(trips/day, 2013):
5.255.000

Trips in Milan:
2.978.000 (56%)

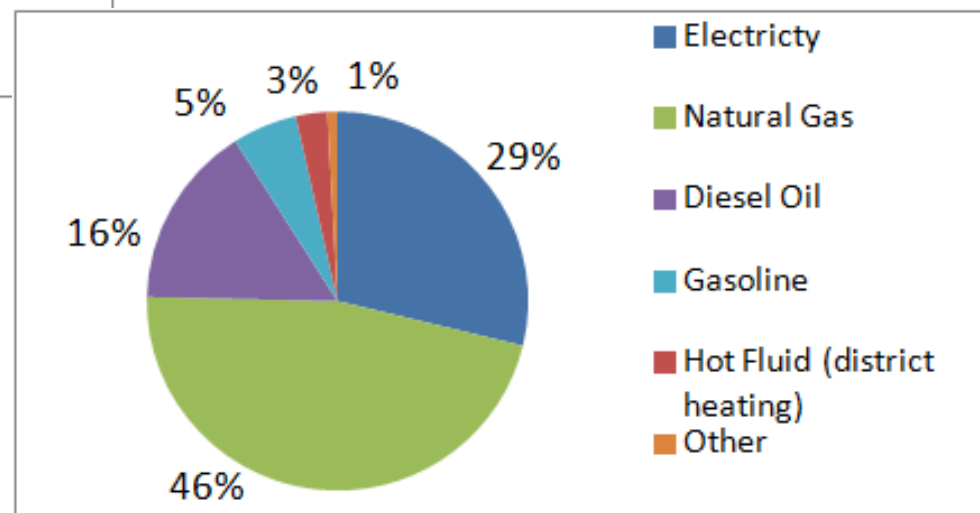
Trips between Milan
and the metropolitan area:
2.277.000 (44%)

5 Milan's Background figures: Energy

Energy demand broken down by final use



Final energy consumption by vector



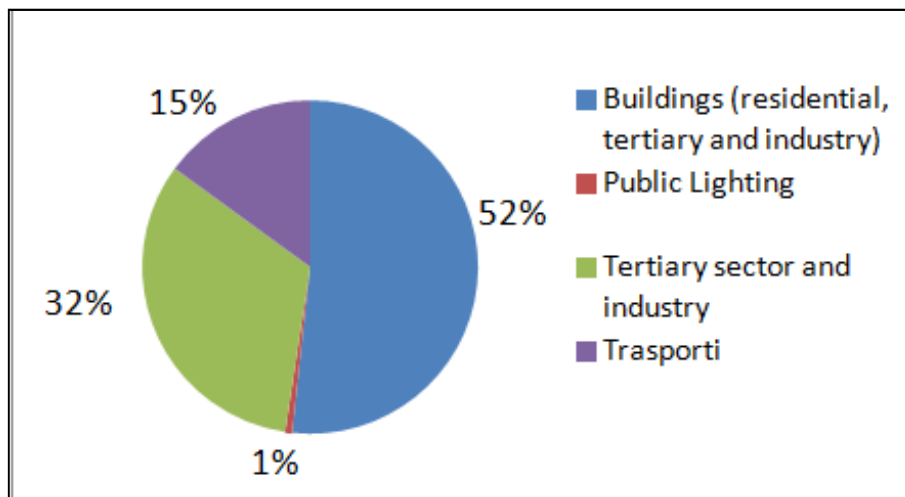
**Total final energy consumption
2013**

23,9 TWh

17,6 Mwh per capita/year

6 Milan's background figures: CO2 emissions

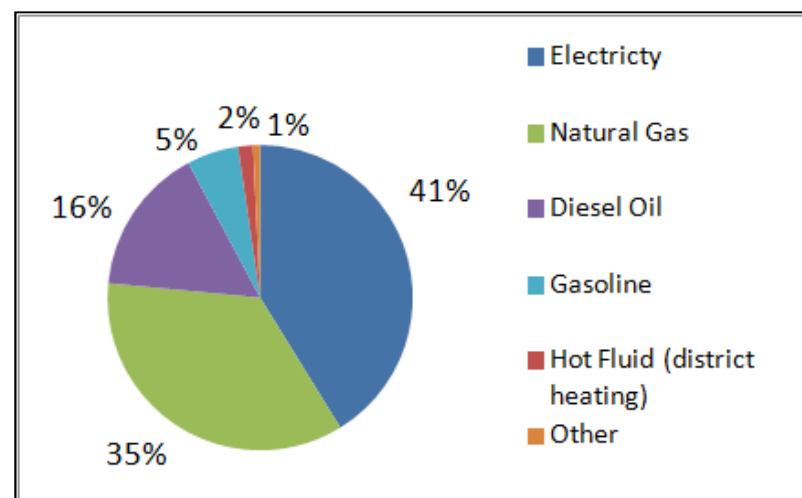
Total CO2 emissions bysector



Total CO2 emissions
2013

6340 Kton

4,68 ton per capita



7 Milan's commitment to reduce CO2 Emissions

As a member of the **EU policy Platform “Covenant of Mayors for Climate and Energy»)** (CoM)” Milan is committed **to reduce CO₂ emissions** on its territory by at least 20% before 2020 with reference to 2005, that is 1484 kton out of 7418 Kton

To achieve this target , Milano has already set in place several policies and is now updating its **Sustainable Energy Action Plan (SEAP/PAES)**

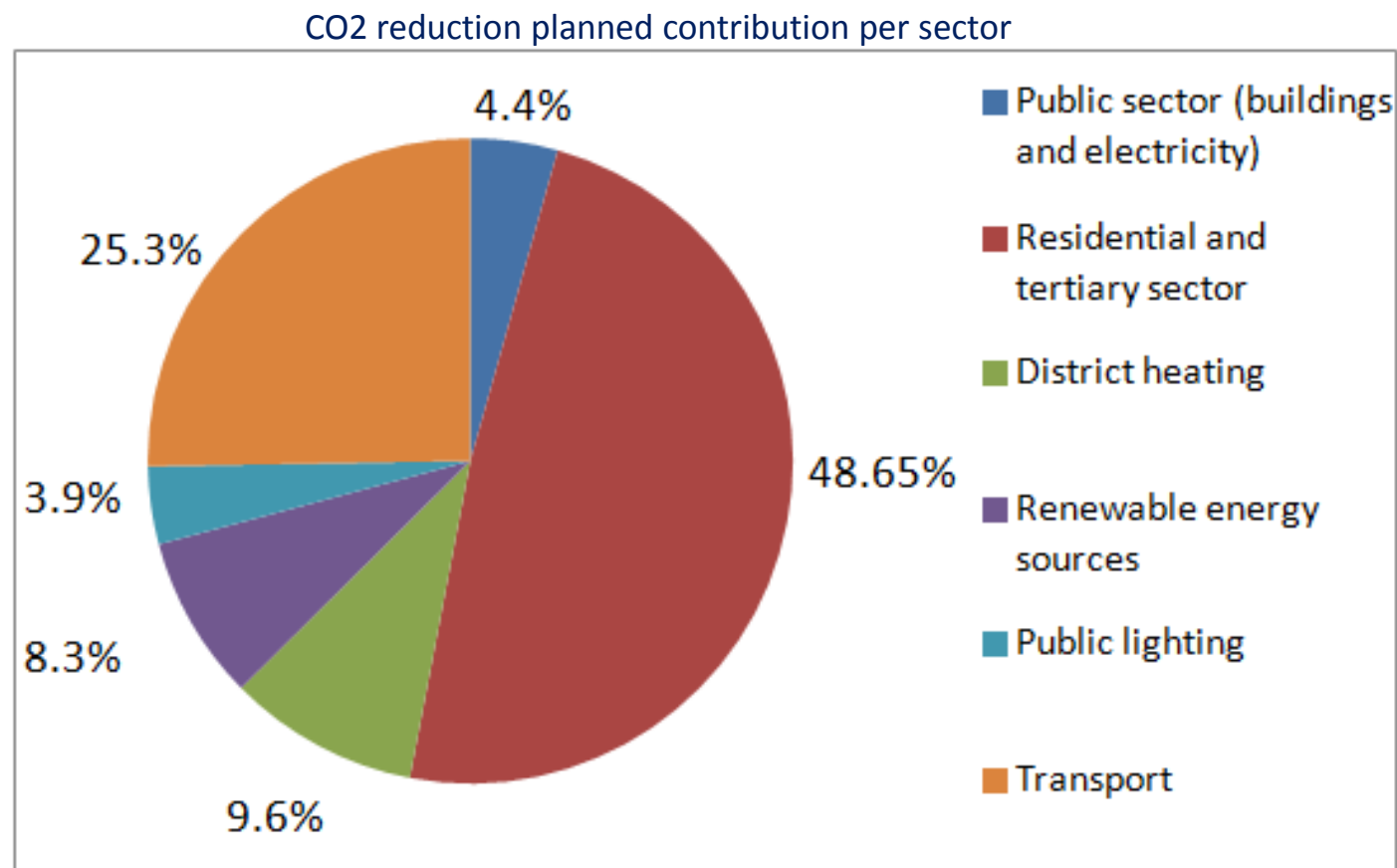
The measures in place and included in the SEAP cover the different sectors where the Municipality can act:

- Private buildings
- Public buildings
- Public lighting
- District Heating and Waste management
- Renewable energy sources
- Mobility and Transport

The local actions to reduce CO2 are important above all because of the great variety of collateral benefits (less energy consumption emissions of other local air pollutants less noise, less light pollution, less congestion costs, less structure and infrastructure maintenance costs)



8 How is Milan planning to achieve its target?



The **SEAP** sets, describes and accounts in details Milano's Actions **to reduce global emissions**, including measures that are already in place and additional measures essential to achieve the 2020 (and futures) target.

9 Private buildings- laws and awareness raising

The new Italian building code sets minimum compulsory energy performance requirements for new buildings .

Incentives are provided for new and retrofitted buildings respecting specific parameters concerning energy performance and sustainability.

Incentives are provided in terms of additional authorized building volume

Besides the building code, energy efficiency in buildings is fostered also by providing a reduction of taxes for buildings that respect specific criteria regarding energy performance and renewable energy use



Energy Help Desk (“sportello energia “) **experts** are available to citizens at fixed days in 9 institutional locations evenly distributed all around town.

They provide information concerning:

- available incentives and financing sources for building energy retrofit and renewable energy use
- building energy performance assessment and advices on feasible retrofit interventions
- maintenance and management of buildings heating systems

10 District Heating

Currently about the 5% of energy demand for building heating is supplied by **district heating**.

The heat is generated by: the waste to energy plant, three cogeneration plants, groundwater heat pumps (associated to two of the cogeneration plants), boilers (only for small local networks and as an integration to big cogeneration).

Currently there are separated networks serving different areas of the city, the extension of the district heating service and the creation of a unique network falls within the plans of the City Administration.

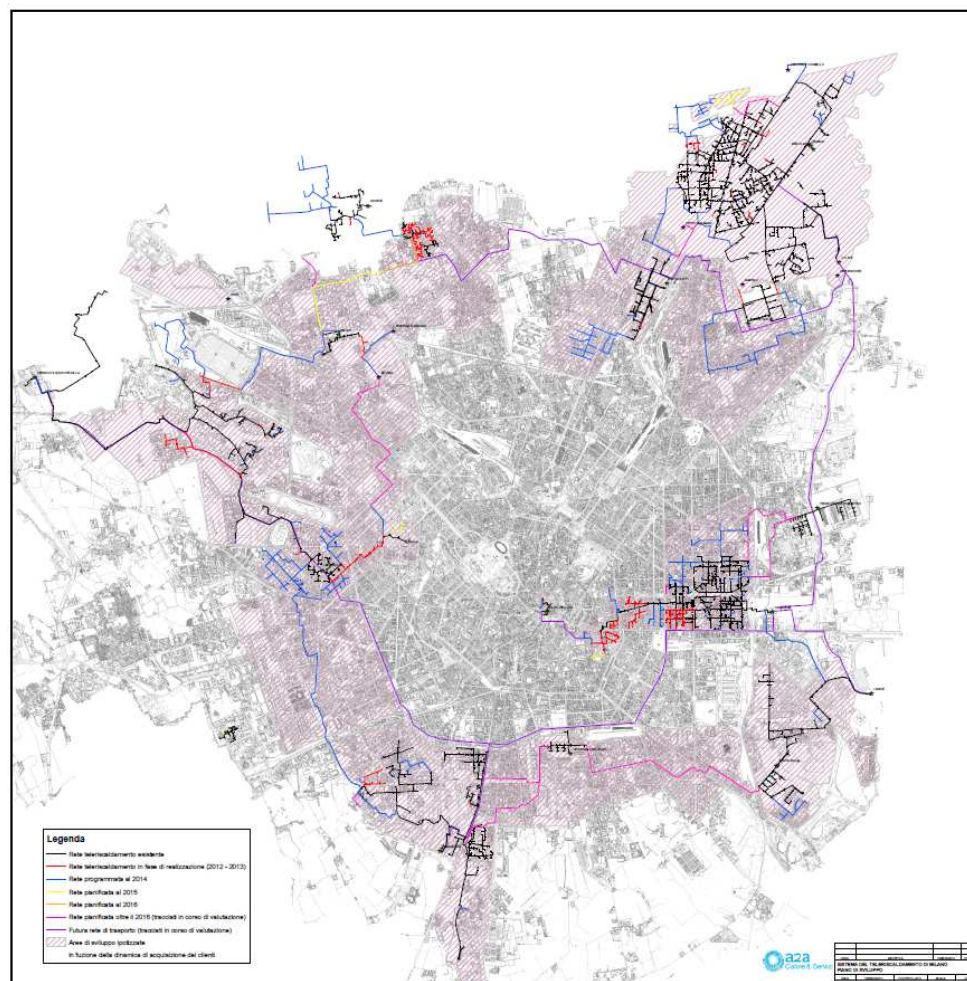


Waste to
energy plant
Silla 2



11 District Heating

Planned development of district heating service by the Milano Energy utility A2A



12 Public lighting LED retrofit

Milan, like Los Angeles, Copenhagen, Oslo and Stockholm, has chosen LED-technology for public lighting.

The municipal plan for public lighting retrofit, includes various actions. The most important is **the complete substitution of existing lights with LED lights by the end of August 2015.**

In Milan **there are approximately 140.000 lights** (84% street lighting, 13% in green areas and 1% architectural lighting).

The **80% of the substitutions** has taken place **by May 1, 2015**, the initial date of Expo 2015.

The plan of lamp substitution is going to be virtually completed by the end of this year.



13 Public lighting LED retrofit – expected results

Expected benefits of the Plan implementation:

- 52% reduction in electricity consumption (from 114 Million KWh to 55 Million KWh)
- reduction of CO2 emissions: 23.650 Tons /year
- 31% reduction in expenditure for electricity and management (maintenance included)



Co-benefits are not less important:

- a lower dispersion of the light beam, thus less light pollution
- a higher duration of lamps, which implies:
 - reduced costs for maintenance and service interruption
 - Waste production reduced by 9 tons/year : (moreover, LED lamps do not contain hazardous chemical, such as mercury.)

14 Milan Pollution Charge – ECOPASS

The **Ecopass** program was a **traffic pollution charge** implemented in Milan in 2008, as part of the overall sustainable mobility strategy of the Municipality of Milan and had been designed to **discourage the use of polluting private vehicles** inside the “Cerchia dei Bastioni” (the ring of city walls built between 1548 ad 1562), by applying an entrance charge related to the polluting emission levels (PM10).

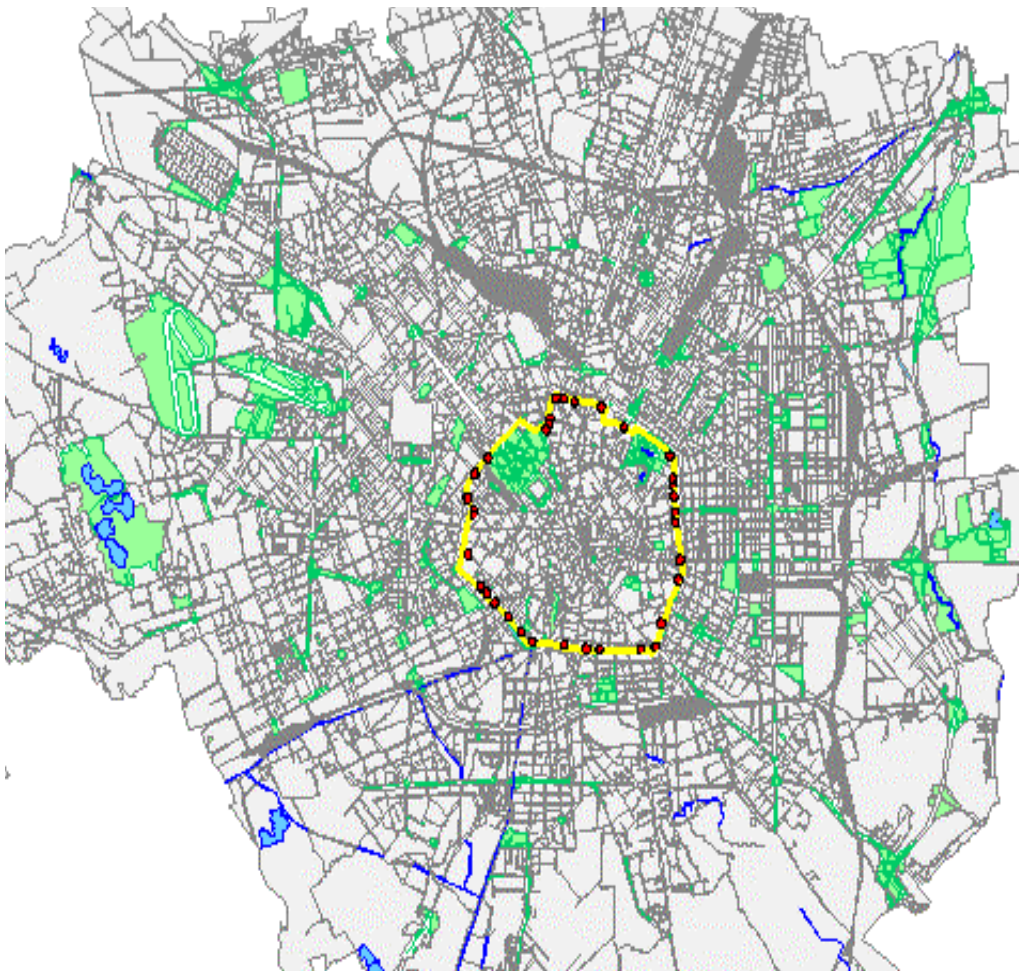
Some motorists had to **pay an urban toll** when entering the area encircled by the “Cerchia dei Bastioni”, which amounts around **8.2 km²**.

19/01/2017 170360003_00



15 Milan Pollution Charge – ECOPASS Area

19/01/2017 170360003_00



ECOPASS AREA

- 8.2 km² (4.5%)
- Residents: 77,000 (6%)
- Toll entrance gates: 43

16 Milan Pollution Charge – fares (2008)

POLLUTION CLASS	VEHICLE EURO CATEGORY	DAILY ECOPASS
CLASS I	gpl – lng,cng - electric – hybrid	FREE ACCESS
CLASS II	Petrol car E III- E IV Diesel car diesel E IV with APF Petrol light freight E II – E III- E IV Diesel light freight E IV with APF	FREE ACCESS
CLASS III	Euro I, II petrol cars and goods vehicles	€2
CLASS IV	Petrol car pre E Diesel car E III – E IV* no APF	€5
CLASS V	Diesel car pre E –E I- E II Diesel light freight pre E – E I – E II Diesel Freight 3.5 t pre E I – E II- E III	€10

19/01/2017 170360003_00

17 Milan Pollution Charge – ECOPASS Rules



Ecopass is in force from 7.30am to 7.30pm Monday to Friday.



If you are not able to pay the charge the day you enter the Ecopass area, you have time until midnight on the following day.

Exemptions

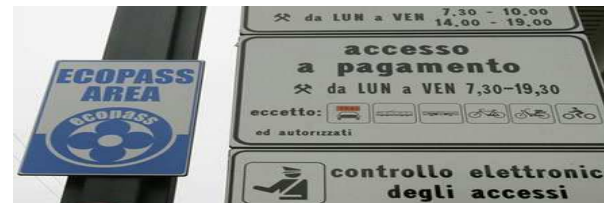
There is no Ecopass charge for:

- mopeds, scooters and motorbikes
- emergency vehicles
- vehicles carrying disabled passengers and/or bearing a disabled passenger badge;

Residents within the ECOPASS Area

Residents of the Cerchia dei Bastioni LTZ – Ecopass Area can apply for a yearly Ecopass at reduced rates.

Also the yearly Ecopass price is variable and given by the Pollution Class (50 €, 125 €, 250 €)



19/01/2017 170360003_00

18 Milan Pollution Charge – ECOPASS Results

- Traffic reduction, both private and commercial, within the ECOPASS Area during the ECOPASS enforcement time (**- 21%**)
- Public transport commercial speed increase (**+13% tram and + 20% bus and trolleybus**)
- Passengers increase on Underground line moving towards ECOPASS Area (**+23.000 pax daily average**)
- Reduction, within the ECOPASS Area, of the main pollutants emissions:
 - PM: **- 20%**
 - CO2: **- 15%**
 - Nox: **- 16%**
 - Ammonia: **- 45%**



19 Milan Pollution Charge – ECOPASS Revenues

Revenues at 31 July 2008

19/01/2017 170360003_00

REVENUES by WAY of Payment	
CARD (Ticket, Carnet, Residents)	
Total	5.765.533
Internet and ATMs	
Total	1.596.734
Bank Remittance	
Totale	792.654
TOTAL	8.154.921

The incomes from ECOPASS have been invested in projects aimed at improving urban mobility:

- Public transport
- Cycle mobility
- Car sharing
- Mobility Management
- Low impact vehicles

20 From Pollution Charge to Congestion Charge

Ecopass resulted a drastic traffic drop in 2008 **(-21%)**, however, over time, the **increase of exempted vehicles due to car fleet renewal** gradually **reduced the dissuasive power** of Ecopass.

(in 2007 50% of vehicles entering the area would have been exempted from Ecopass, in 2008 this percentage had already increased to 75% and in 2010, the share of exempted vehicles was as high as 90%!)



Moreover, following the results of a **referendum** in which a large majority of voters **(79%)** demanded an upgrade of the Ecopass measure, the scheme was upgraded to a congestion charge in 2012.

19/01/2017 170360003_00

21 Milan Congestion Charge – AREA C

“Area C” is a road pricing measure launched by the Municipality of Milan in 2012 in order to improve life conditions of those who live, work, study and visit the city. “Area C” is the restricted traffic zone in the center of Milan (C as Cerchia Bastioni).



The access points, monitored by cameras, are 43, including 7 for exclusive use of public transport. The charge is active on Monday, Tuesday, Wednesday and Friday from 7.30 to 19.30, and Thursday from 7.30 to 18.

22 AREA C – The context

- The area = **8.2 km²**, **4.5% of the whole territory** of the Municipality of Milan

- **Residents = 77,950** (42,300 families)

- The area has an **outstanding attractiveness** because of the activities and services settled in, that determine during the central daylight hours an average of 39.000 persons/km², with a **peak of almost 140.000 person/km²** within the **innermost area** between **Duomo and San Babila**

- **Area C offers 295.704 Jobs**, amounting to **almost 37% of the total jobs** within the boundaries of the Municipality of Milan.

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



19/01/2017 170360003_00

23 AREA C – GOALS

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.



24 AREA C – The electronic gates



Integrated IR illuminator

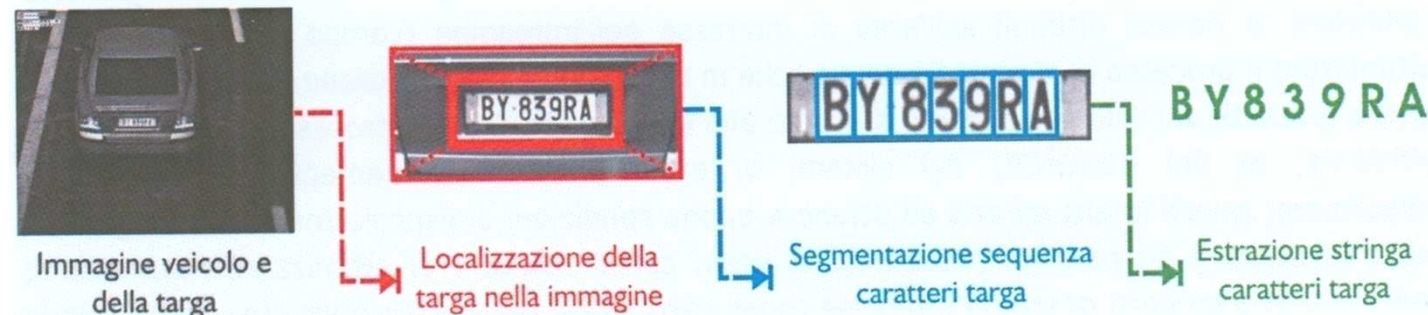


Context (CTX) camera



19/01/2017 170360003_00

25 AREA C – The system



19/01/2017 170360003_00

IR camera with OCR

Context (CTX) camera

List of transits

LAZMS WEB SYSTEM - Windows Internet Explorer

Http://172.25.1.14/LAZMS_WEB2/modules/CTLfrmTransitVisualizzaFrame.aspx

LAZMS WEB SYSTEM

S.R.I. WEB SYSTEM

Visualizza Transiti

È stato selezionato il Varco con nome: "Varco - PORTA VENEZIA" Periodo dal: 07/03/2008 ora: 09:00:00, al: 08/03/2008 ora: 00:00:00

Operatore: Marco Didoni (zz)

Varco	Data	Ora	CEU	Targa	Verificata	ADI	Categoria
PORTA VENEZIA	07/03/2008	09.00.00	N/A	DC367PT	<input checked="" type="checkbox"/>	0	-
PORTA VENEZIA	07/03/2008	09.00.03	N/A	C2237RC	<input type="checkbox"/>	0	-
PORTA VENEZIA	07/03/2008	09.00.06	N/A	DK619DE	<input type="checkbox"/>	0	-
PORTA VENEZIA	07/03/2008	09.00.08	N/A	CX407VD	<input type="checkbox"/>	0	-
PORTA VENEZIA	07/03/2008	09.00.09	N/A	DJ728JT	<input type="checkbox"/>	0	-
PORTA VENEZIA	07/03/2008	09.00.12	N/A	AE895GR	<input type="checkbox"/>	0	-
PORTA VENEZIA	07/03/2008	09.00.14	N/A	CV623LJ	<input type="checkbox"/>	0	-
PORTA VENEZIA	07/03/2008	09.00.17	N/A	DO124JB	<input type="checkbox"/>	0	-
PORTA VENEZIA	07/03/2008	09.00.17	N/A	BS858DC	<input type="checkbox"/>	0	-
PORTA VENEZIA	07/03/2008	09.00.18	N/A	CZ380DH	<input type="checkbox"/>	0	-

Chiudi Esporta

26 AREA C – The rules

The access is limited on Monday, Tuesday, Wednesday and Friday from 7.30 to 19.30, and Thursday from 7.30 to 18.

- Access is free for:
 - Public transport
 - Motorcycles and scooters,
 - Electric vehicles and hybrid vehicles, as well as natural gas, LPG and bi-fuel vehicles (until 31.12.2016)
 - Vehicles owned by public bodies, emergency vehicles
 - Taxi and NCC up to 9 seats
 - Vehicles carrying a disabled
 - Vehicles transporting people must go the first aid.



- Access is forbidden for:
 - “Euro 0” petrol vehicles
 - “Euro 0, 1, 2, 3” diesel vehicles
 - vehicles with a length of more than 7.5 meters.



- The access is to payment for all the other categories of vehicles
The entrance ticket cost 5 €.
Two facilitated rates exist reserved to:
 - residents - the first 40 accesses (every year) are free. From 41st access onward they pay 2 €
 - service vehicles - 3€



The ticket allows accesses, exits and transits with no limitations throughout the day.

27 AREA C – Payment processing system

Annual vehicles access 21.990.825, 57 % of vehicle must purchase and activate an entrance ticket

1. HOW TO BUY?

- By cash: ticket are available at tobacconist, newsagents, ATM Points (Milan transport company front offices)
- By credit card: on the website or calling the call center
- By debit and cash Cards: at the parking meters, at Intesa San Paolo counters

2. HOW TO ACTIVATE THE TICKETS?

To activate the ticket you must associate the pin identifier of admission ticket to a plate using one of **these** methods:

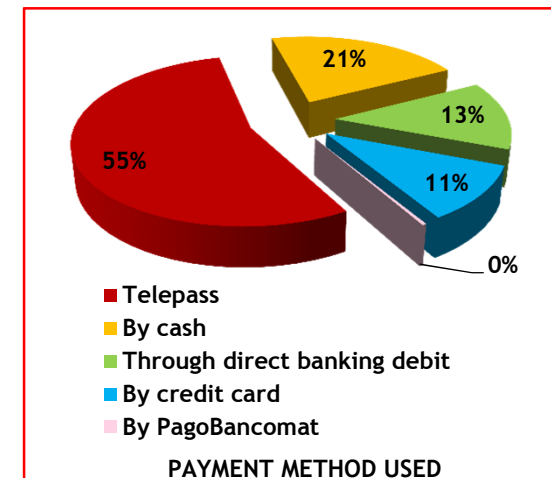
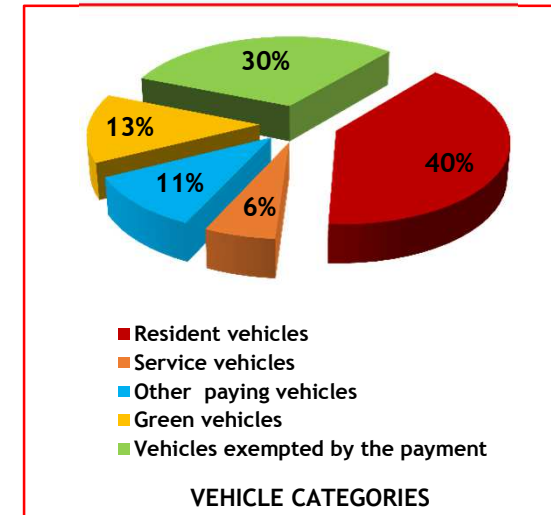
- SMS message to 339.994.0437 with the text "PIN.plate"
- Call center: + 39.02.48684001
- On this website under the "Servizi online" section

Alternatively there are 2 direct debit arrangements:

- By Tele pass: through debit account or debit credit card
- By RID: through direct banking debit

From September 2016:

- By Sisal and Lottomatica: at Sisal and Lottomatica points
- By SMS: using telephone credit
- By APP Mobile: using telephone credit



19/01/2017 170360003_00

28 AREA C – Fares

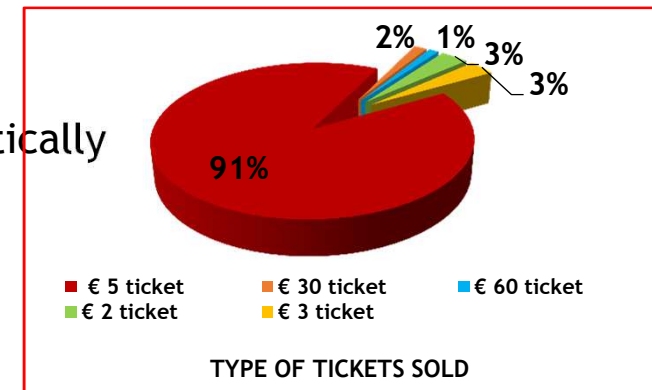
Each ticket to enter “Area C” must be activated the same day or no later than midnight of the next day access. The payment of an entrance covers all accesses made by the same vehicle during that day. Most vehicles does occasional transits, 42.9% of vehicles entered a single day and 90.4% of vehicles checked for less than 25 days in the year = 10% of days with active measure

There are 5 types of entrance tickets:

- Daily: 5 €
- Multiple daily: 30 € and 60 € credit decreasing automatically

After web registration

- Daily "resident vehicle": 2 € Daily
- Daily "service vehicle": 3 € Daily



All the incomes from Area C have been reinvested in projects for sustainable mobility

INCOMES in 2016 - more than € 28.000.000

19/01/2017 170360003_00

29 AREA C – Maintenance costs

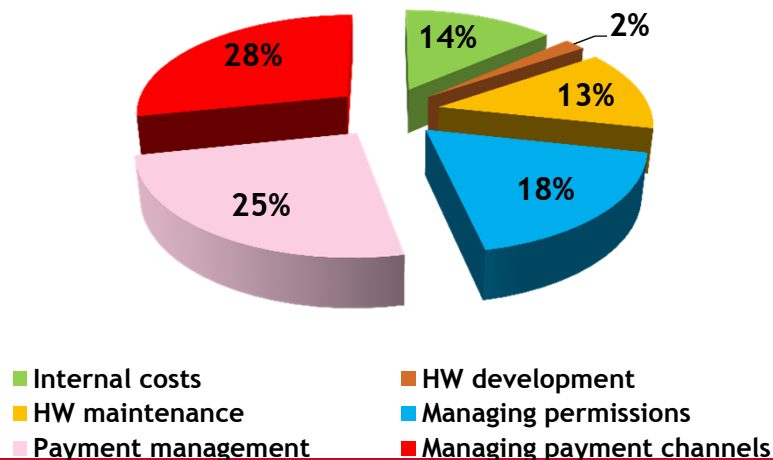
The management of Area C is played by 46 units, including the head.
In Staff there are 6 units: 4 technical units and 2 administrative units
In Line there are 39 units distributed as follows:

- Front office - 6 units
- Back office - 14 units
- Call Center - 19 units

The organization of the offices has been sized based on workload:

- Front office: 9.000 users/year
- Back office: 45.000 practices/year
- Call Center: 620,000 call minutes/year

Maintenance costs 2015 - € 3.801.958 (72% direct costs and 28 % coordinating staff costs)



DIRECT COSTS

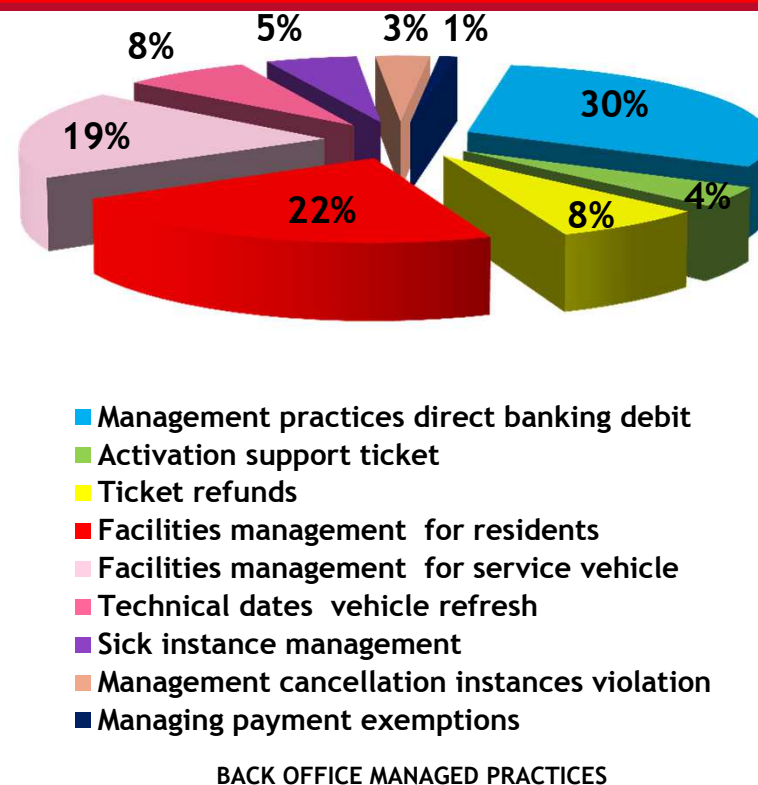
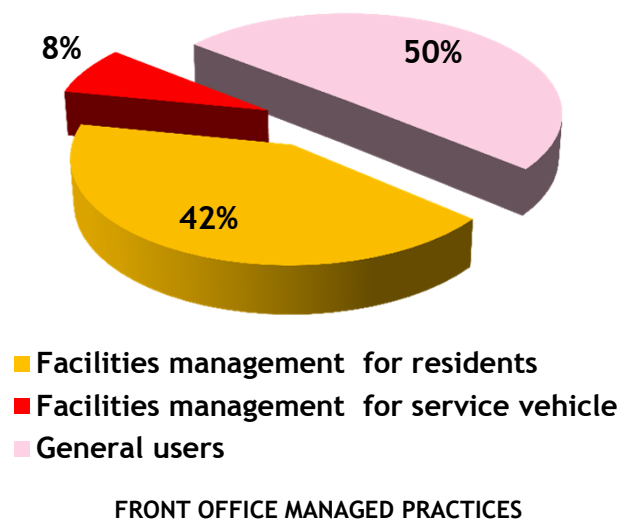
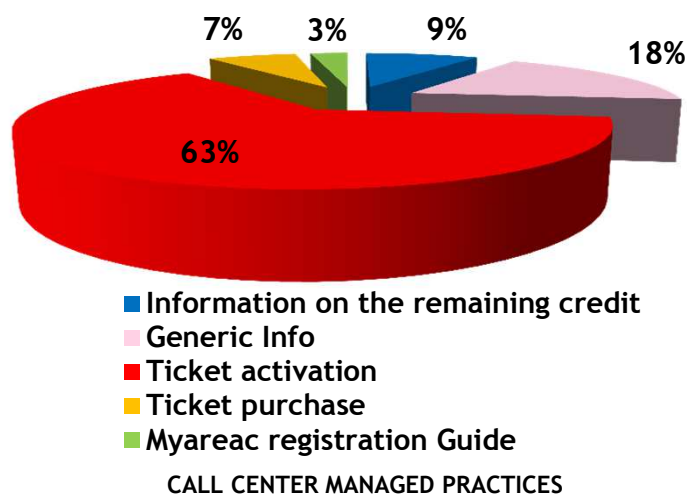
- Managing permissions
- Payment management
- Managing payment channels

COORDINATING STAFF COSTS

- HW development
- HW maintenance
- Internal costs

19/01/2017 170360003_00

30 AREA C – Type of managed practices



2015

- Front office: 9.000 users/year
 - Back office: 45.000 practices/year
 - Call Center: 620,000 call minutes/year
- The Workload trend has stabilized over the past 2 years

19/01/2017 170360003_00

31 AREA C – Mobility results

Improving the life conditions of those who live, work, study and visit the city is the goal of the Congestion Charge - Area C.

In 2015:

- **Decreasing road traffic** in “Cerchia dei Bastioni” = - **29.2 %** compared with 2012
- **Decreasing Road accidents** = - **26%** compared with 2012
- **Increase public transport speed** = **+2 %** for buses between 9:00-10:00 and **+ 5,9** between 18:00-19:00 and **+ 2,2%** for tram between 09:00-10:00 and **+ 4,4** between 18:00-19:00;
- **Increase Public Transport users** : **+12%** on surface PT; **+ 17%** on Underground
- **Raising funds for soft mobility infrastructures** = **+10%**

19/01/2017 170360003_00

32 AREA C – Environmental results

Pollutant vehicles: - 49% (-2.400 pollutant vehicles entering every day the Area C)

Cleaner vehicles + 6,1 % (from 9,6% to 16,6% of the total vehicles)

Less emissions of pollutants:

Total PM10 -18% ; Exhaust PM10 -10%;

Ammonia -42%; Nitrogen Oxides -18%;

Carbon Dioxide -35%

Less Black Carbon (BC):

28% to 52% reduction of BC concentration



19/01/2017 170360003_00

33 AREA C – Economic and social results

Area C achieved important results in terms of environmental, financial and social sustainability. As to the economical aspects, as a counterweight to the charge, several are the benefits enjoyable by users.

The reduction of the cars circulating in the city center enables the reuse of the public spaced once reserved to circulation and 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.



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



34 AREA C – Incomes reinvested

Incomes reinvested in Sustainable mobility

2012 incomes = **20.3 million €**

2013 incomes = **29.4 million €**

2014 incomes = **23 million €**

2015 incomes = **26.2 million €**

2016 incomes = **more than 28 million €**

All the incomes from Area C have been reinvested in projects for sustainable mobility:

- **62 %** for the strengthening of public transport in order to improve its frequency
- **22 %** for the development of sustainable mobility projects
- **16 %** is the cost of IT management access control the software management and authorizations of payment channels

19/01/2017 170360003_00

35 AREA C – New rules

Starting from February 2017

- access is forbidden to Euro 4 diesel vehicles;
- subjection to pay the entrance ticket of 5 euro for vehicles powered by LPG and Natural Gas;
- exemption for hybrid vehicles until 14 October 2019;
- access forbidden to freight vehicles from 8 am to 10 am;
- entrance payment for vehicles with more than 9 seats according to the length of the vehicles:
 - € 15 for vehicles (generally up to 30 seats) up to mt. 8,00;
 - € 25 for vehicles (generally up to 50 seats) between mt. 8,01 and mt. 10,50;
 - € 40 for vehicles (generally more than 50 seats) longer than mt. 10.50.



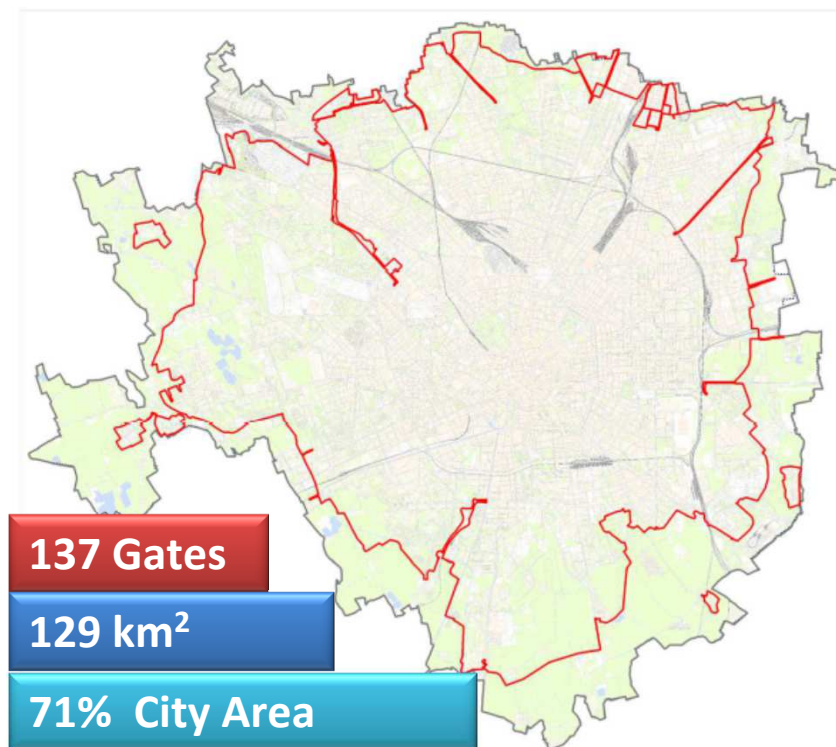
19/01/2017 170360003_00

36 Toward a 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, the City of Milan is developing an **infrastructure of electronic gates LEZ** next to the municipal boundary. The systems will be 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**, inspired by experiences such as Greater London LEZ.

19/01/2017 170360003_00



ZONA A TRAFFICO LIMITATO

— CONFINE ZTL

37 Toward a LEZ – Class of vehicles

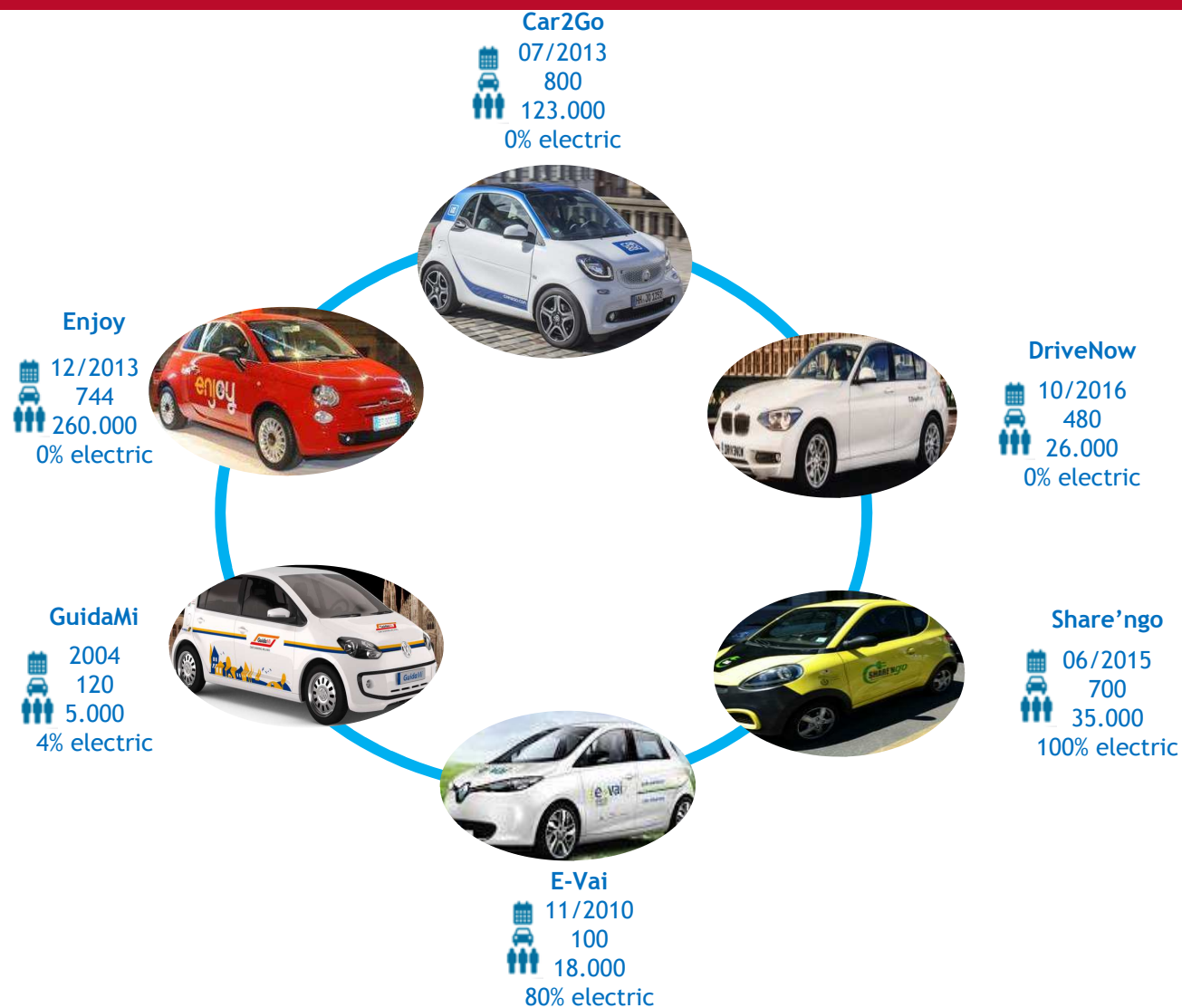
19/01/2017 170360003_00

Tipologia veicolo	Periodo di immatricolazione	Divieti di circolazione						
		2017	2018	2019	2020	2021	2022	2023
Motoveicoli a due tempi di classe Euro 0 Cidomotori a due tempi di classe Euro 0	ante 7/1999							
Motoveicoli a due tempi di classe Euro 1 Cidomotori a due tempi di classe Euro 1	07/1999 - 06/2004 07/1999 - 06/2003							
Motoveicoli a gasolio di classe Euro 0 Cidomotori a gasolio di classe Euro 0	ante 7/1999							
Motoveicoli a gasolio di classe Euro 1 Cidomotori a gasolio di classe Euro 1	07/1999 - 06/2004 07/1999 - 06/2003							
Motoveicoli a due tempi di classe Euro 2 Cidomotori a due tempi di classe Euro 2	07/2004 - 12/2006 07/2003 - 06/2015							
Motoveicoli a gasolio di classe Euro 2 Cidomotori a gasolio di classe Euro 2	07/2004 - 12/2006 07/2003 - 06/2015							
Autoveicoli Euro 0 benzina (trasporto persone e trasporto cose)	ante 10/1995							
Autoveicoli Euro 0 diesel (trasporto persone e trasporto cose)	ante 10/1995							
Autoveicoli Euro 1 diesel (trasporto persone e trasporto cose)	01/1993 - 09/1998							
Autoveicoli Euro 2 diesel (trasporto persone e trasporto cose)	01/1997 - 12/2001							
Autoveicoli Euro 3 diesel trasporto persone M1	01/2001 - 12/2006							
Autoveicoli Euro 3 diesel trasporto cose	01/2001 - 12/2006							
Autoveicoli Euro 4 diesel trasporto persone M1	01/2006 - 12/2012							
Autoveicoli Euro 4 diesel leggeri e Euro IV/V pesanti trasporto cose	01/2006 - 12/2014							

Tipologia veicolo	Periodo di immatricolazione	Divieti di circolazione						
		2017	2018	2019	2020	2021	2022	2023
Autobus M3 diesel di classe Euro 0	ante 10/1993							
Autobus M3 diesel di classe Euro 1	10/1993 - 09/1996							
Autobus M3 diesel di classe Euro 2	10/1996 - 09/2001							
Autobus M2, M3 diesel di classe Euro 3	10/2001 - 09/2006							
Autobus M2, M3 diesel di classe Euro 4	10/2006 - 09/2009							
Autobus M2, M3 diesel di classe Euro 5	10/2009 - 12/2014							

- Nessun divieto
- Divieto di accesso e circolazione dal 15 ottobre al 14 aprile da lunedì a venerdì feriali, dalle 7.30 alle 19.30
- Divieto di accesso e circolazione dal 15 ottobre al 14 aprile da lunedì a domenica, dalle 7.30 alle 19.30
- Divieto di accesso e circolazione dal 15 ottobre al 14 aprile da lunedì a domenica, dalle 0.00 alle 24.00
- Divieto di accesso e circolazione permanente da lunedì a domenica, dalle 0.00 alle 24.00
- Veicoli soggetti a limitazioni alla circolazione già previste dalla normativa Regionale

38 Car sharing in Milan

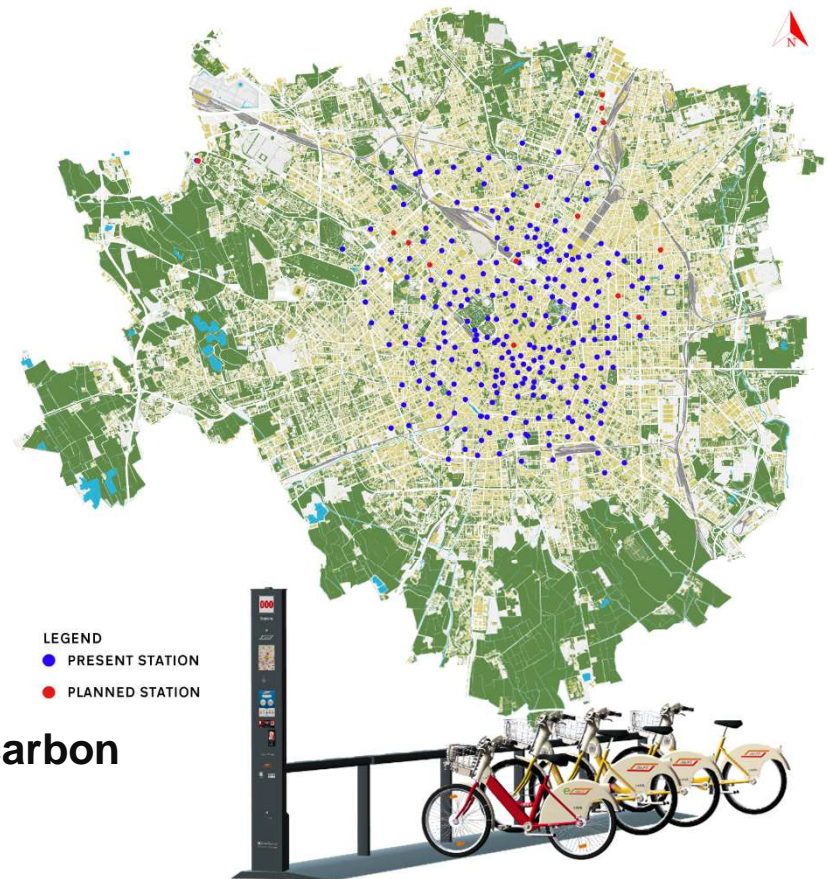


19/01/2017 170360003_00

39 Bike sharing

BikeMi is the service of Bike-Sharing, developed by ATM and operated by Clear Channel. Born in December 2008, it provides a user-friendly, practical and ecological service.

- **280 stations (October 2016);**
- **3.650 traditional bikes;**
- **1000 electric bikes;**
- **54.000 yearly subscriptions;**
- **More than 20.000 rents per day on average**
- **3.600.000 million rents in 2016**
- **2.700.000 Kg of CO2 saved in 2016 (Defra's carbon convertor factor)**



19/01/2017 170360003_00

THANK YOU FOR THE ATTENTION

claudia.ceccarelli@comune.milano.it
marcello.oneta@comune.milano.it