

International EPSA Knowledge-Transfer Conference

**Urban Development for Healthier Cities:
A Cross-cutting Approach to Innovative
Local Governance**

Barcelona (ES), 13-14 June 2016

**City Panel: Innovation, leadership and
participatory governance for health and
wellbeing – Three cities, three models**



Ing. SANDRO PETRUZZI

Metropolitan City of Torino



SUMMARY

- What is a Metropolitan City (or Area)
- Why Metropolitan Cities play a key role for the sustainable development:
 - In the world, In Europe, in Italy
- The Metropolitan City of Turin
 - Presentation
 - Strategic plan
 - Some good practices (I hope!!!)



WHAT IS A METROPOLITAN AREA?

A **Metropolitan Area** (or City) is a region consisting of a densely populated urban core and its less-populated surrounding territories, sharing industries, infrastructures, and public services.

Metropolitan areas include one or more urban areas, as well as satellite cities, towns and rural areas that are socio-economically tied to the urban core



METROPOLITAN CITIES IN THE WORLD



Host the 54% of the world population
Take up the 3% of the earth surface
Consume 80% of the resources

Produce 80% of GDP



Produce 85% of innovation

METROPOLITAN CITIES IN EUROPE

Europe is one of the **most urbanised continents** in the world.

The policies of European Metropolitan areas will determine the **future economic, social and territorial development of the European Union** because Metropolitan Cities play a key role:

- as engines of the economy
- as places of connectivity, creativity and innovation
- and as centres of services for their surrounding areas.



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METROPOLITAN CITIES IN EUROPE

Metropolitan cities are, however, also places where problems such as **unemployment, segregation and poverty** are concentrated.

Thriving and dynamic metropolitan cities can play an important role in the well-being not only of their own inhabitants but also for the surrounding rural populations

In other words.... Metropolitan Cities are both the problem and the solution



The most innovative school building of Europe in Amsterdam made by shipping container



A luxury house made by shipping container



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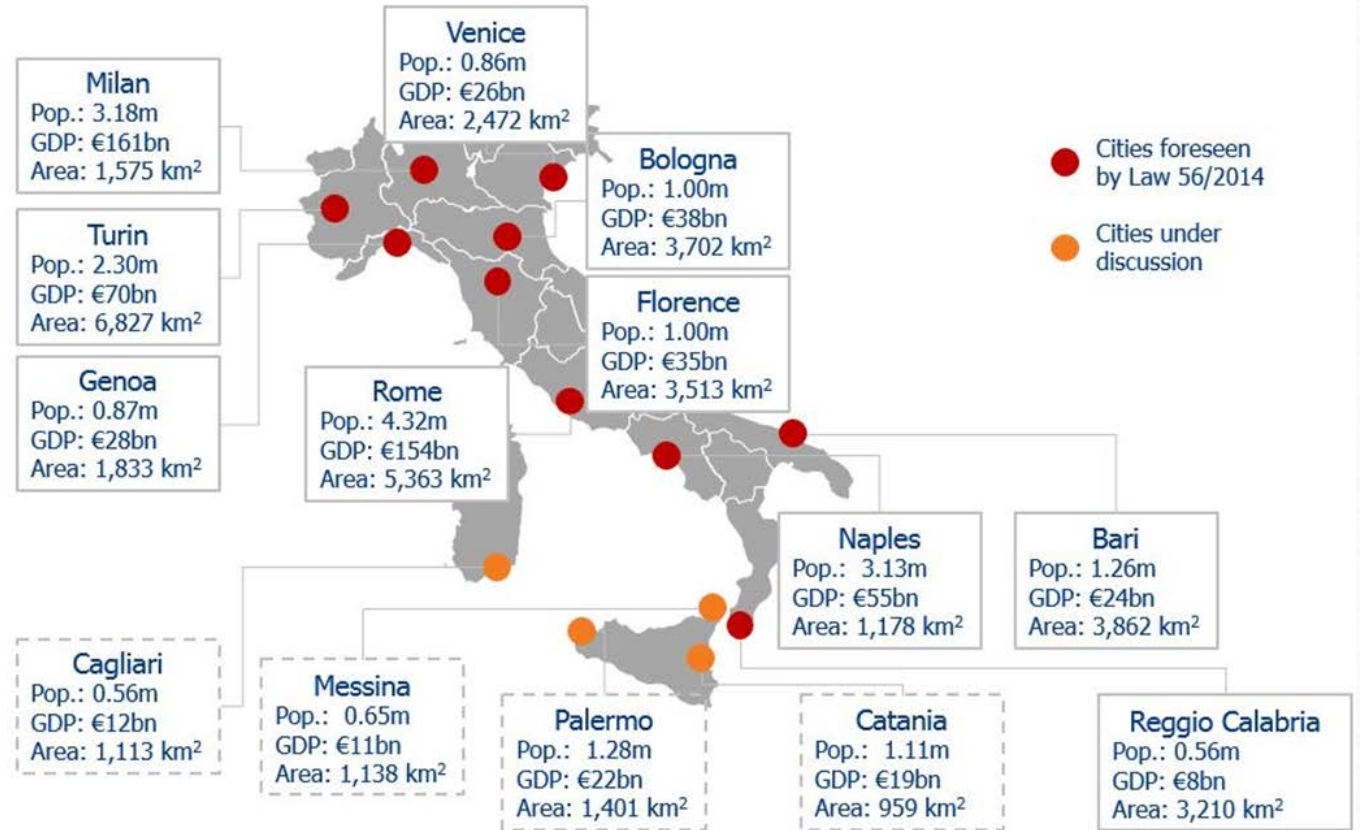


METROPOLITAN CITIES IN ITALY

The Metropolitan Cities in Italy are a system composed of **over a thousand municipalities**, that together constitute the “backbone” of the national economy.

Since the January 2015 In Italy there are 10 Metropolitan Cities which account for **11% of the surface area** of the territory but have over **30% of the population**.

They produce **more than a third of national value added** and contain **20.3%** of the railway stations and a third of the airports.



METROPOLITAN CITIES IN ITALY

In Italy, the Metropolitan Cities are fully aware of the role that they are assuming in the **promotion of a sustainable local development**.

The most important instrument is the **Metropolitan Strategic Plan** which will be adopted by each Metropolitan City in this 2016.

The Metropolitan Strategic Plan will outline the policies for the “**promotion and coordination of economic and social development**, also insuring support for economic activities and innovative research, consistently with the vocation of the city”.



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METROPOLITAN CITY OF TORINO

It replaced the Province of Turin and it is composed by Torino City and other **314 Municipalities**. It is officially operative starting from the 1 first of January 2015.



Metropolitan City of Turin

MAIN DATA

- **Municipalities: 315**
- **Km²: 6,830**
- **Inhabitants: 2,248,955**
- **Mountainous areas: 52.4%**
- **Hilly areas: 20.9%**
- **Valley areas: 26.7%**
- **Main economic sectors: industry, ICT, business services, tourism, agriculture.**



GOVERNANCE

Metropolitan Major

- Is the major of the City of Turin elected by its Citizens;

Metropolitan Council

- Is composed by 18 members elected by Majors and councilors of the 315 municipalities
- Their members are councilors or majors (2° level election)

Metropolitan Conference

- Is composed by 315 majors of the municipalities

Social and economic context

When you think of Turin, for most people the thought goes immediately to **FIAT** and its working class, the **industrial identity** that for over a century marked the city skyline.

And it is certainly an image that comes from the history of a city that for over one hundred years **has been the most important Italian factory town**, symbol of work, that became strong and great thanks to the industry.

The industrial area of Mirafiori where more than **55.000 workers were employed in 1970**



Metropolitan City of Turin

After the end of the second world war, the city of Turin actively participated in the **"Italian economic miracle"**, and its population sharply increased, **reaching 1.2 million inhabitants in 1974**.

The main protagonists of this development were **Fiat and other automotive companies**, which attracted workers from every part of the country in particular from the South.

For decades the "City of the Fiat" was seen in Italy as nothing more than a **"grey industrial city"**.



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Metropolitan City of Turin

But in the last 20 years Turin had known the crisis of the automotive and, slowly, had lost many industrial activities and reduced significantly the number of workers.

Starting from its industrial roots Torino has been able to invest in new vocations.

Turin is becoming the **city of the opportunities** with a large number of institutions of excellence in research and technological innovation as well as incubators enterprise that enabled it to be one of the three Italian cities with the highest number of start-ups.

Polytechnic of Turin's Mobility Campus (Cittadella della Mobilità). Hosts the degree courses of Industrial Design and Visual Communication and Automotive Engineering.



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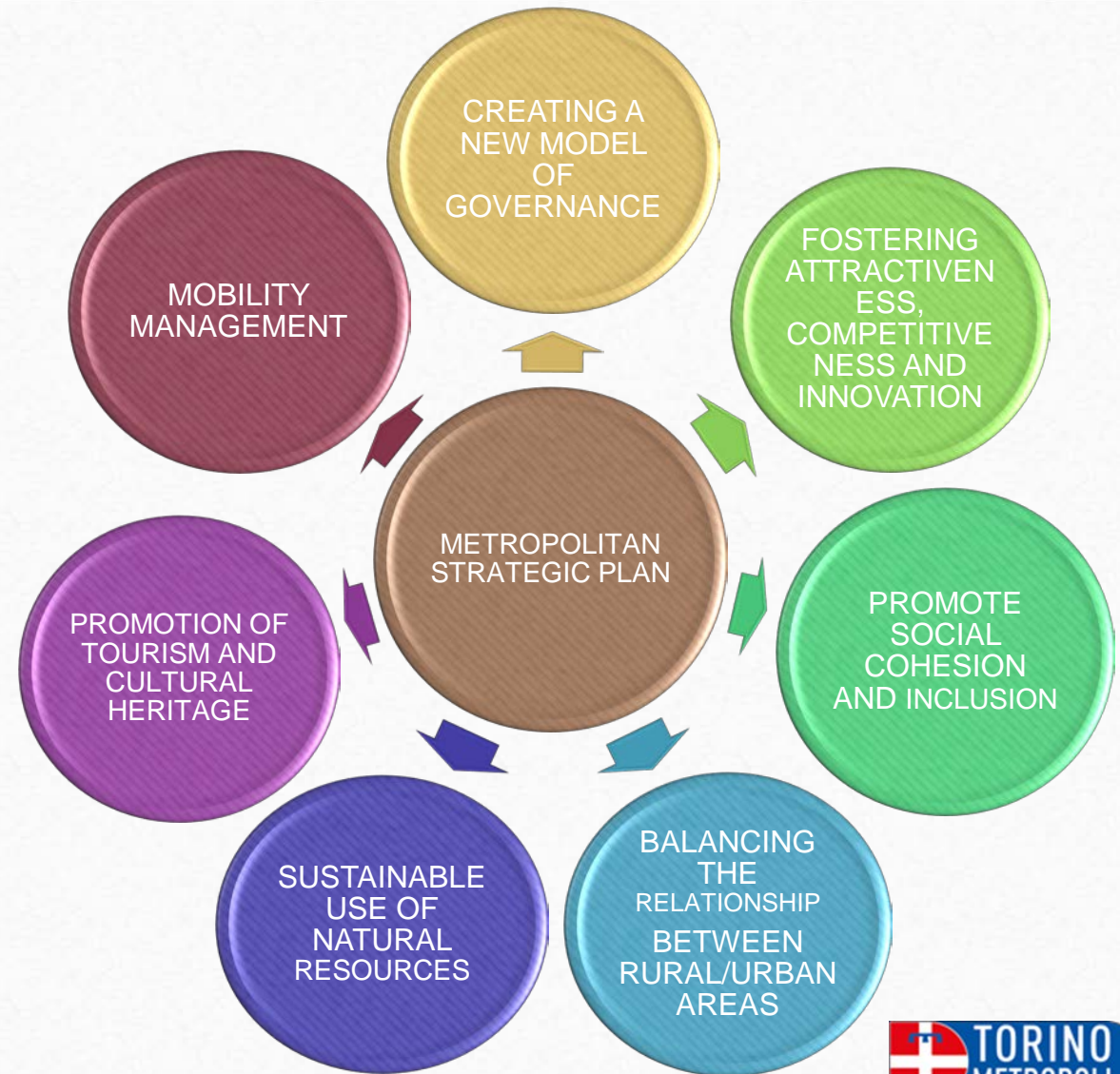


THE STRATEGIC PLAN

The Strategic Plan of the Metropolitan city of Turin (PSMTo) contains an agenda of multisectorial actions, within which is possible to identify the priorities and strategic projects, selected according to the criteria of relevance, feasibility and sustainability.

One of the first challenges that will face PSMTo regards the dichotomy between urban metropolitan area and rural and mountain areas, taking advantage of the specificity of each and recognizing the differences between territories.

The construction of a metropolitan governance must be based on the overcoming of the administrative borders to build a strong network of cooperation, capable of giving birth to a truly cohesive territory, attractor of investment, economic, social opportunities, cultural, scientific, tourist, and competitive with the rest of the country and the world.



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THE HOMOGENEOUS ZONE

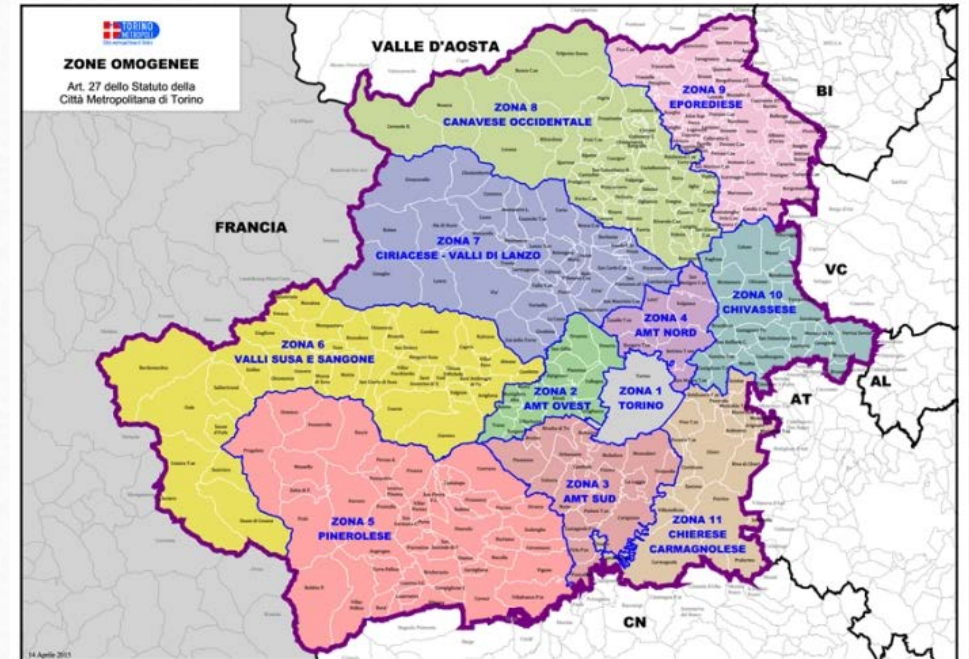
In a fragmented context such as that of Turin one of the most challenging issue was to convince all the 315 municipalities of the advantages of being inside the CMT0 compared to the disadvantages to stay outside.

Everyone must feel included; each reality, big or small it is, closer or further away from the Capital City, is a fundamental part of the Metropolitan City of Turin.

The involvement of a territory as vast and diverse as ours needs to establish a new participatory model of local administrators.

The CMT0 has articulated its territory into **11 homogeneous areas** in order to modulate its own vision of development, taking into account the different identities and priorities sharing this fundamental principles:

- **Access to resources and services must be guaranteed equally to all citizens and areas.**
- **Specificity and diversity are values to defend;**
- **Each Area will have to recognize their own identity and assume a definite role to collaborate with other parts of the territory;**





Sestriere – the highest municipality in Italy 2050 m

The orange battle during the historical carnival of Ivrea



Gran Paradiso national park



Ph: L'Angolo della Foto-Pont C. Se

A small rural village



The historic center of Turin with the surrounding landscape and the Po river



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PROJECT AND ACTIVITIES

TORINO2015
CAPITALE EUROPEA DELLO SPORT



TORINO SMART CITY



*THEmatic Transnational
church Route development
with the Involvement of
local Society*

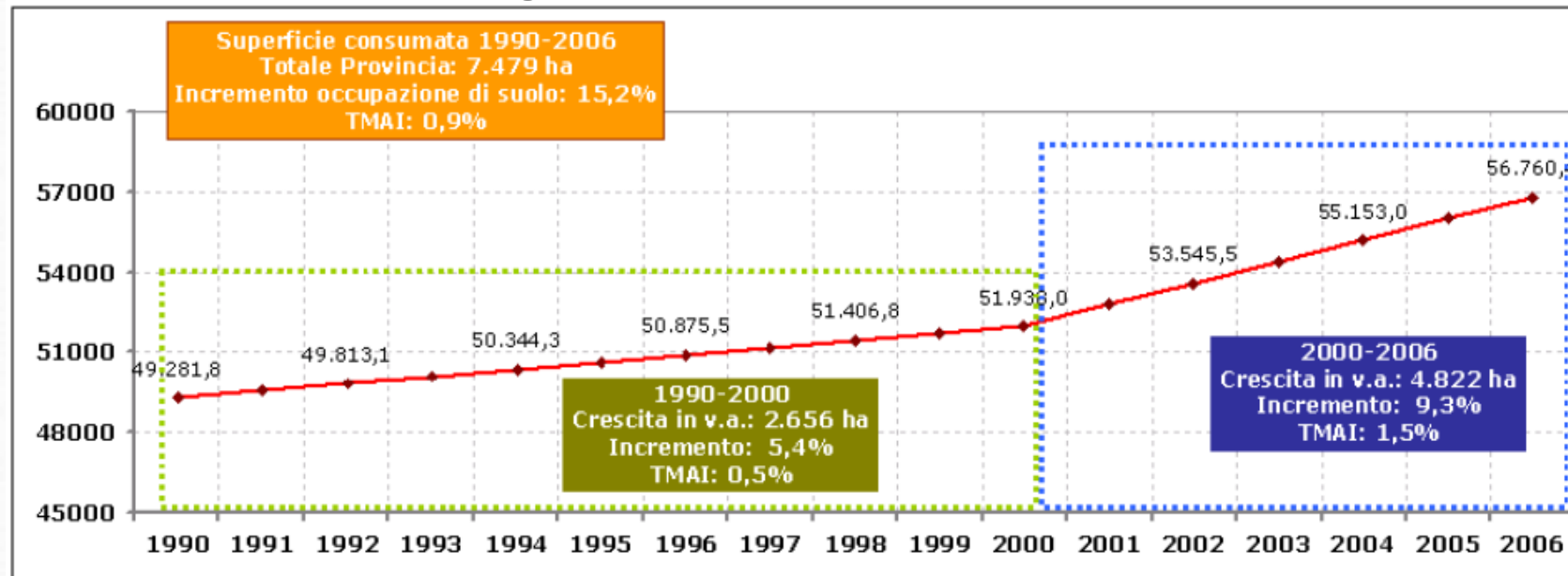


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THE EXPERIENCE OF THE PTC2 (Territorial Coordination Plan)

Between 1990 - 2006 has been used more than 75 million of square meters of ground (approximately 7500 soccer field), meanwhile has been realized buildings that together represent a City of the same extension of Turin. Moreover the **speed of construction was in this period three time higher than the previous**



- **1990 - 2000** used on average **265 ha per year**
- **2000 - 2006** used on average **803 ha per year**



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CLASSIFICATION OF THE AREAS IN THE TERRITORIAL COORDINATION PLAN

Dense Areas

transformation and increasing processes are allowed in respect of applicable standards

Transition Areas

through higher-ranking tools, is possible to reach the completion urban, following rules oriented to the respect of quality

Free Areas

these areas are absolutely to protect in order to limit the dispersion urban process and consequently the soil consumption



A territorial plan covers regulations on land usage, the development of large urban areas, and the planning of infrastructure such as road network and railways

SUSTAINABLE USE OF NATURAL RESOURCES

Consolidated Urban Areas:

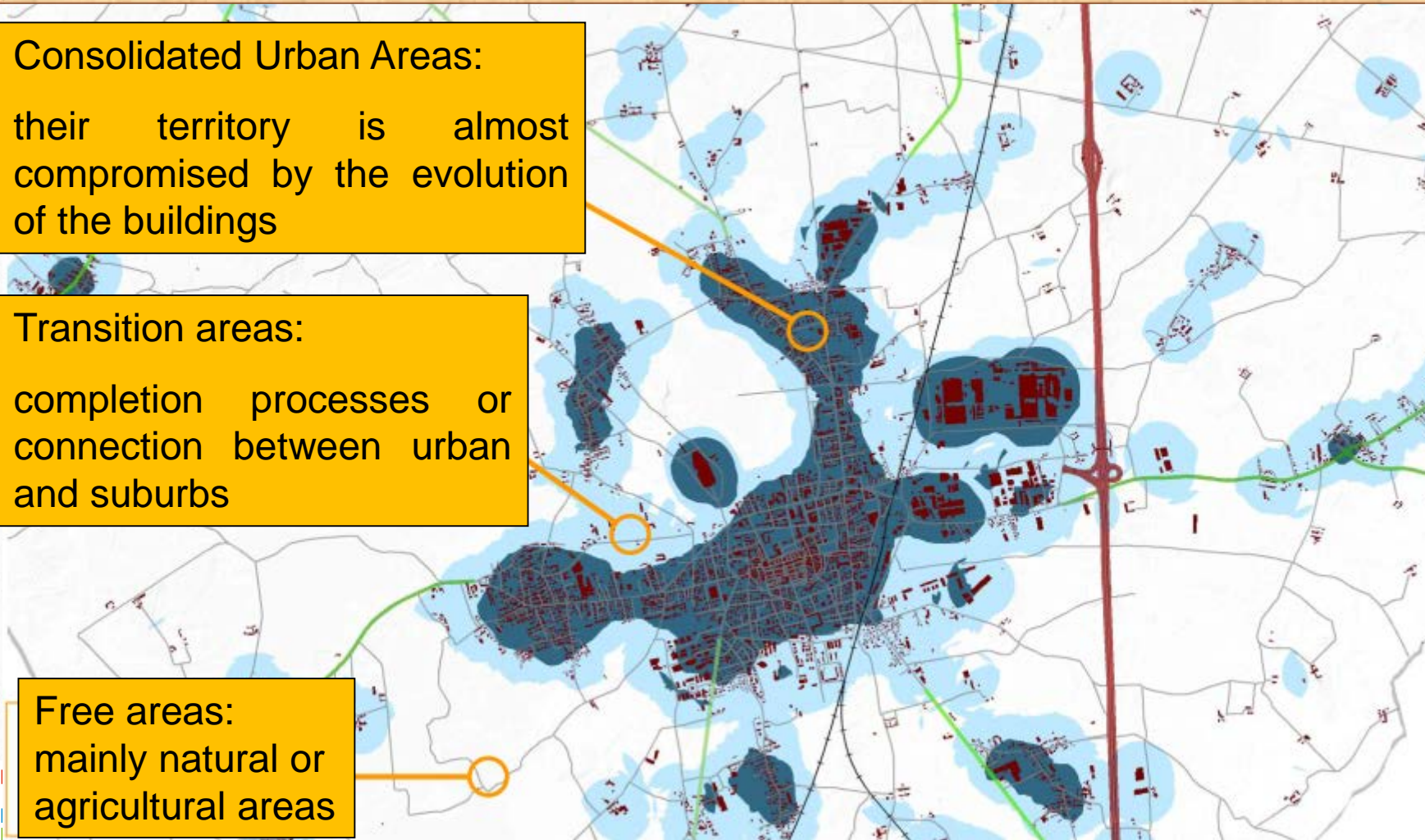
their territory is almost compromised by the evolution of the buildings

Transition areas:

completion processes or connection between urban and suburbs

Free areas:

mainly natural or agricultural areas



SUSTAINABLE USE OF NATURAL RESOURCES

	HOMES	PRODUCTIVE ACTIVITIES	COMMERCIAL ACTIVITIES	PUBLIC INTEREST ACTIVITIES
	LOCALIZATION PROCESS			
DENSE AREAS	growth opportunities, through densification, replacement buildings, urban restructuring	recovery of unused or underused areas, growth opportunities, through densification, replacement buildings, urban restructuring	growth opportunities, through densification, replacement buildings, urban restructuring	For the localization of public interest activities are preferable the dense areas, environmentally compatible
TRANSITION AREAS	limited growth opportunities through urban planning and restoration, to be develop in sectors fixing sprawl damages	limited growth opportunities through urban planning and restoration, to be develop in sectors fixing sprawl damages	limited growth opportunities through urban planning and restoration, to be develop in sectors fixing sprawl damages	For the localization of public interest activities are preferable the dense areas, environmentally compatible
FREE AREAS	not available for new buildings	not available for new buildings	not available for new buildings	Usable for public interest buildings only in lack of other possibilities, in this case approximately the 5% of the investment will be addressed to compensation environmental measures



TORINO SMART CITY

Torino aims to become a smart city, in which **the quality of life improves** with the ability to promote a clean and **sustainable mobility**, reducing the **energy consumption**, producing **high technology**, offering **culture, be accessible**.

These are the objectives that the city is given within the Torino Smart City Project.



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CAPITAL OF INNOVATION



*Turin was selected as runners-up, winning the second prize, for its **open innovation models supporting social innovation start-ups and creating new market opportunities for urban innovations.***

European Capital of Innovation Award Capital 2016

INNOVATION UNION



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ENVIRONMENTAL SUSTAINABILITY and RENEWABLE ENERGIES, in collaboration with other Italian and European cities.

PRIORITY AREAS FOR IMPLEMENTATION:



public and private
building



energy
efficiency



renewable
energies



mobility and
transport



good
practices



TAPE

Turin Action Plan for Energy



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TAPE – ACTION PLAN

ACTION PLAN COMPOSED OF 51 ACTIONS

THE MOST SIGNIFICANT ACTIONS:

DISTRICT HEATING

CO2 REDUCTION ESTIMATES AT 2020: 567.679 t/year

URBAN SUSTAINABLE MOBILITY PLAN (PUMS)

CO2 REDUCTION ESTIMATES AT 2020: 261.679 t/year

ENERGY RENOVATION OF BUILDINGS

REDUCTION ESTIMATES AT 2020: 259.476 t/year



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THE 2° STEP TAPE ► SMILE



SMART

MOBILITY

INCLUSION

LIFE & HEALTH

ENERGY



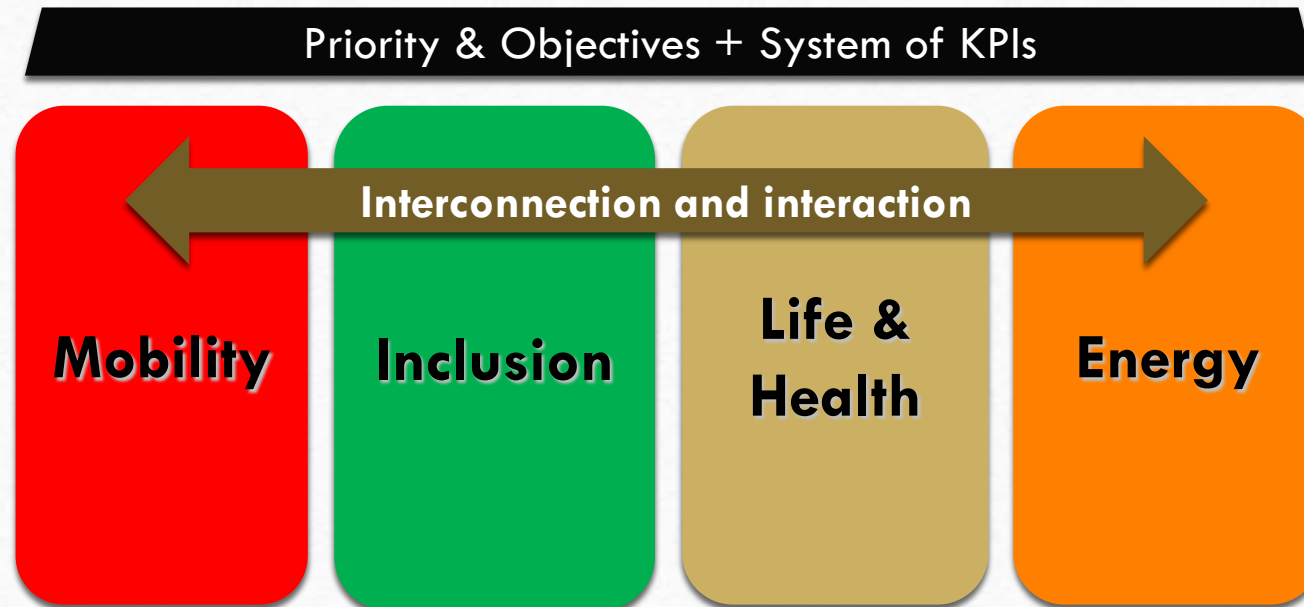
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SMILE Smart Mobility Inclusion Life&Health and Energy

THE KEY COMPONENTS

4 VERTICAL DOMAINS where the city expresses a clear value

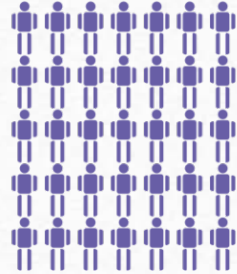


1 CONNECTIVE TISSUE of transparent and minimally invasive technologies
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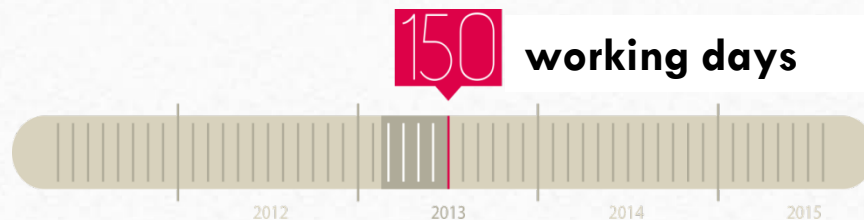


SMILE - PARTICIPATION IN NUMBERS

350
PEOPLE
INVOLVED



- 28** Companies
- 23** Entities
- 5** Research Centers
- 10** Associations



10 THOUSAND MAN
HOURS SPENT

THE CITY OF TURIN REPRESENTED IN SMILE

77 people involved

- 55 participated in the work groups
- 22 attended the committees (guidance & operating)

All Departments participated



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SMILE

#15 TORINO SOCIAL INNOVATION



Almost 100.000 university students
of around 900.000 inhabitants



Cities have an enormous potential as innovation collectors because of the strong concentration of competences, high-educated people, resources, networks

HOW TO FACE NEW SOCIAL CHALLENGES ?



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SMILE

#15 TORINO SOCIAL INNOVATION

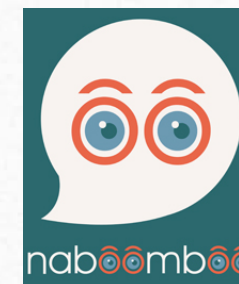
FIRST RESULTS

From January 2014:

170 projects submitted

35 projects in incubation phase

22 projects funded



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SMILE

#29 BUILDINGS/OFFICES WITH LOW EMISSIONS

ENERGY SAVINGS AT SCHOOL

Description: retrofitting of school buildings to achieve a reduction in the energy consumption.

- **41.000 sqm AREA**
- **70-80% ENERGY SAVING**
- **1000 t/year of CO2 EMISSION REDUCTION**



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**“There are three teachers
of children: adults, other
children, and their physical
environment.”**

– Loris Malaguzzi

**The environment is
The Third Teacher.**

The school building structure, the environment where students study, The space, the classrooms, the laboratories, the lobbies, the building shape, the wall colors, the illumination quality, the furniture, the context where the school building is, all above create the environment where the student learns, live, get experiences, be in relationship.



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The ongoing research project Green School



Metropolitan City of Turin



Politecnico di Torino

Research team TEBe | www.polito/tebe/



green school

Developing an innovative approach to the sustainable management of the portfolio of buildings of the metropolitan city of Turin, which facilitates the transformation of existing school buildings in sustainable school facilities.

The ongoing research project Green School



Metropolitan City of Turin



Politecnico di Torino

Research team TEBE | www.polito/tebe/

green school

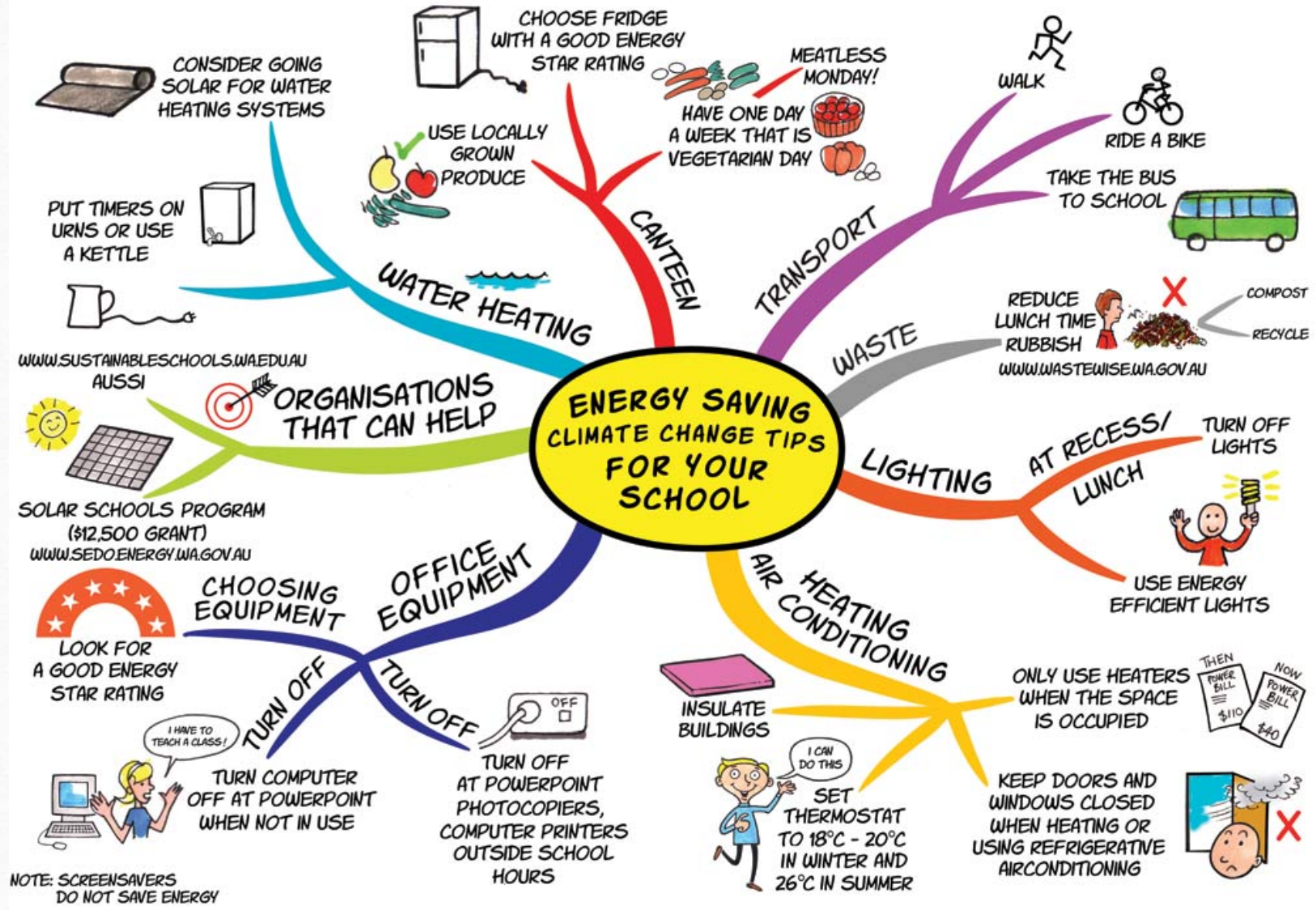


Developing an innovative approach to the **sustainable management of the portfolio of buildings of the metropolitan city of Turin**, which facilitates the **transformation of existing school buildings in sustainable school facilities.**



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ASSESS: Whole school sustainability framework



Environmental performance

- Mobility
- Site sustainability
- Operational energy usage
- Water energy usage
- Operational waste management



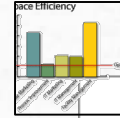
Social performance

- Accessibility
- Adaptability
- Health and comfort
- Maintenance
- Safety and security
- Loading on neighborhood
- Stakeholder involvement
- Joint use of facilities
- Educational program



Economic performance

- Building-related facility management costs, cleaning, maintenance;
- Building- related insurance costs;
- Energy and water related costs;
- Taxes, subsidies and incentives;
- Other economic aspects



Functional and technical requirements

- Space efficiency
- Technical quality of building envelope



Process quality

- Monitoring/metering of building performance
- Sustainable procurements
- Policy

Sustainable school as an opportunity

“High-performing schools result in high-performing students, and green schools go far beyond bricks and mortar.

We see an opportunity to educate a new generation of leaders – sustainability natives – capable of driving global market transformation.”





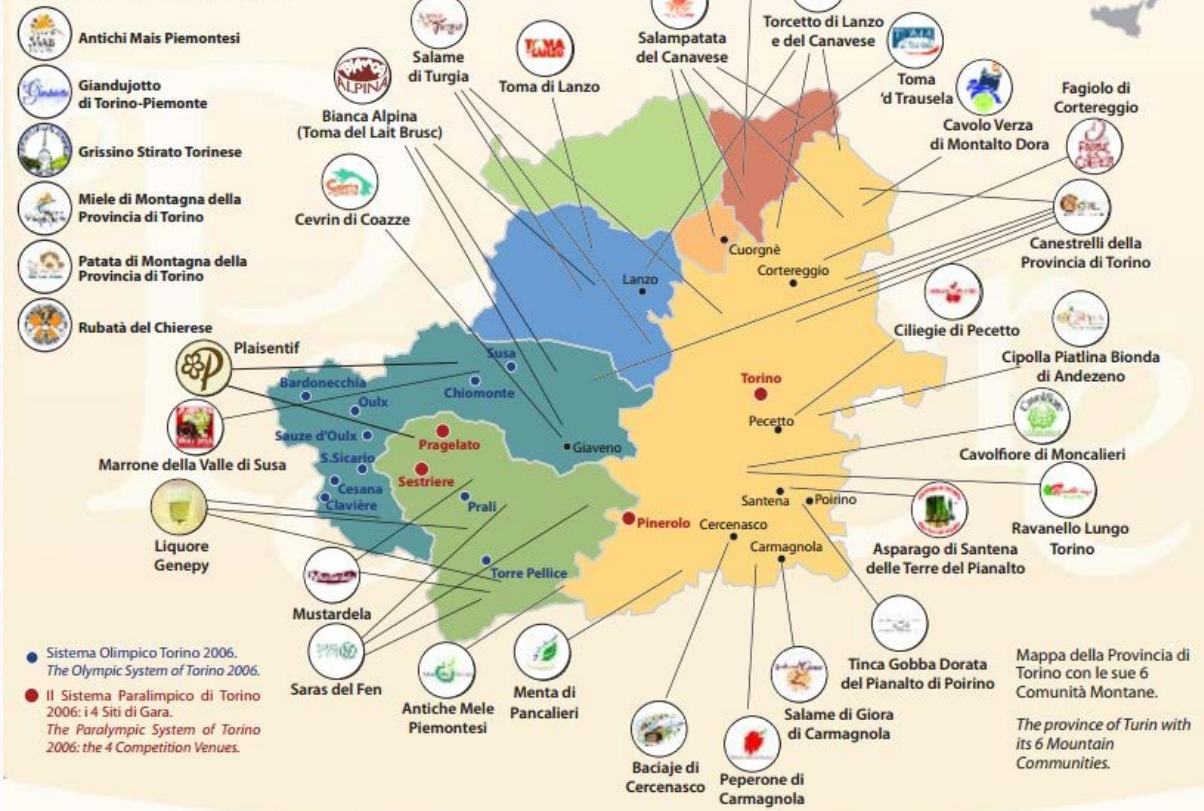
The Metropolitan city territory joins a mix of natural landscape, ancient traditions, historical and cultural heritage but also a **huge variety of agricultural and food products.**

For this reason was born the brand "**Prodotti del Paniere**" that means "Basket of typical products", a trademark **that protects and guarantees the typical food of the area.**

Il territorio della Provincia di Torino e il Paniere dei Prodotti Tipici

The Territory of the Province of Turin and the "Basket of Typical Products"

Prodotti presenti in tutto il Territorio Provinciale.
Products found throughout the Province.



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On the basis of technical-scientific testing this products:

- are produced using only **traditional methods** by local manufacturers;
- are part of the local, historic tradition;
- are produced using **local ingredients**;
- Represent an opportunity of development for the territory.



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The network, **in connection with other national and international network**, now includes:

- 32 products, in addition to the DOC wines;
- 900 local producers;
- 30 shops and 60 restaurants participating in the promotion

Torino hosts every Year: “Terra Madre Salone del Gusto”

This year 5,000 delegates from 160 countries, over 800 exhibitors, 300 Slow Food Presidia and 500 Terra Madre food communities will take part in **the most important international event dedicated to food culture.**



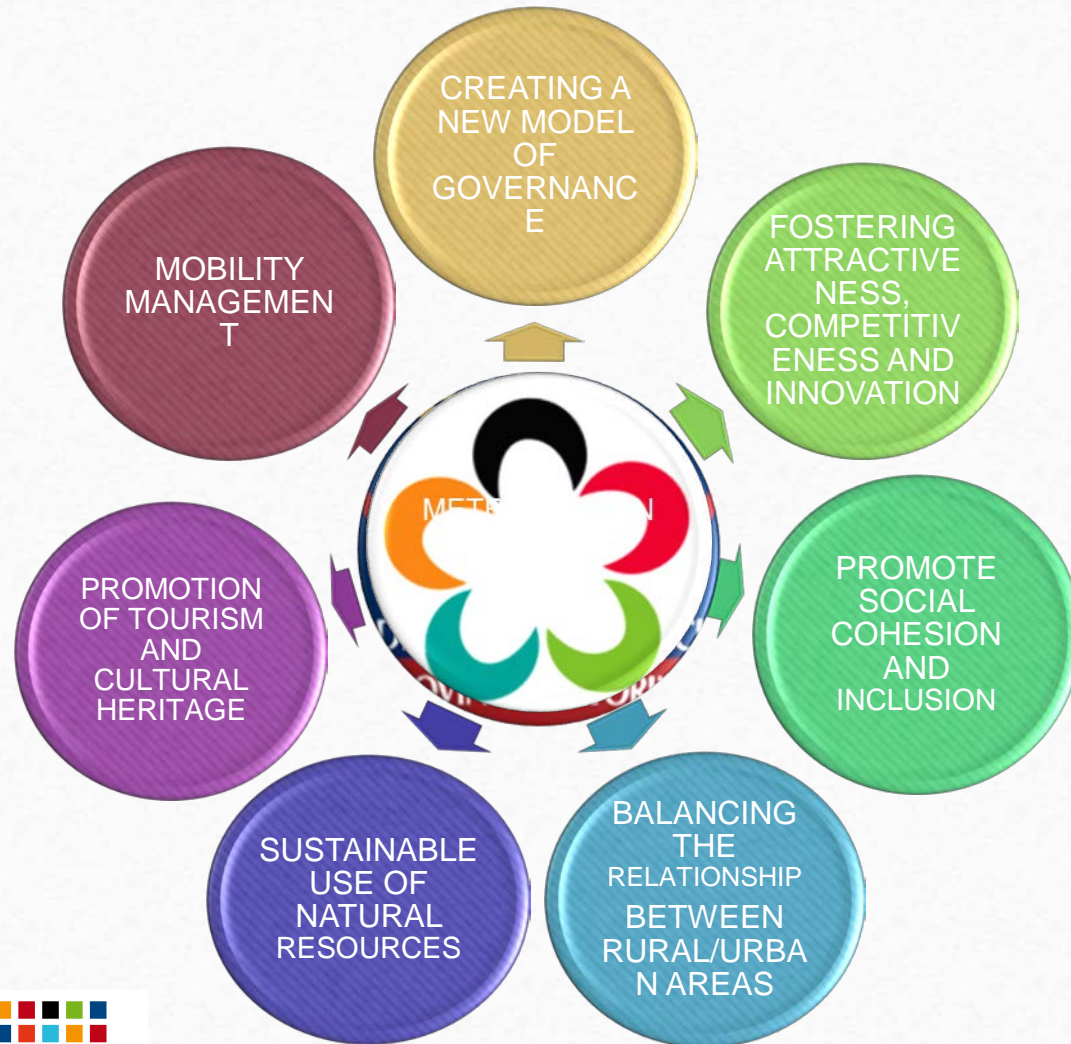
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THANK YOU FOR YOUR ATTENTION



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