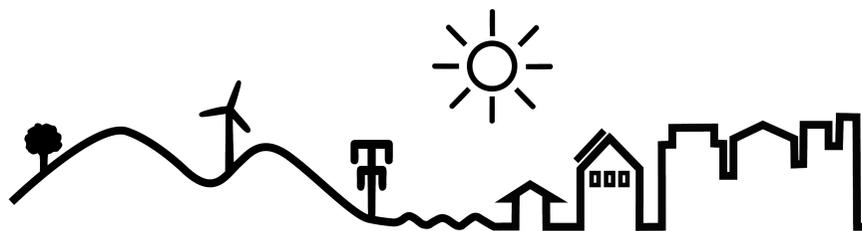


# M3

**Mobilità, Trasporti  
ed Energia**



**SPECIAL**  
**SPATIAL PLANNING and ENERGY for**  
**COMMUNITIES IN ALL LANDSCAPES**

**MODULI PER LA  
FORMAZIONE A  
LUNGO TERMINE**



Centro  
Nazionale  
Studi  
Urbanistici



Co-funded by the Intelligent Energy Europe  
Programme of the European Union

# M3

## Mobilità, Trasporti ed Energia



1. Trasporti urbani ed efficienza energetica (1/2)
2. Trasporti urbani ed efficienza energetica (2/2)
3. Integrazione fra sistemi di trasporto ed ambiente urbano
4. Comunità locali energeticamente autosostenibili



Centro  
Nazionale  
Studi  
Urbanistici



Co-funded by the Intelligent Energy Europe  
Programme of the European Union

# M3

**Mobilità, Trasporti  
ed Energia**

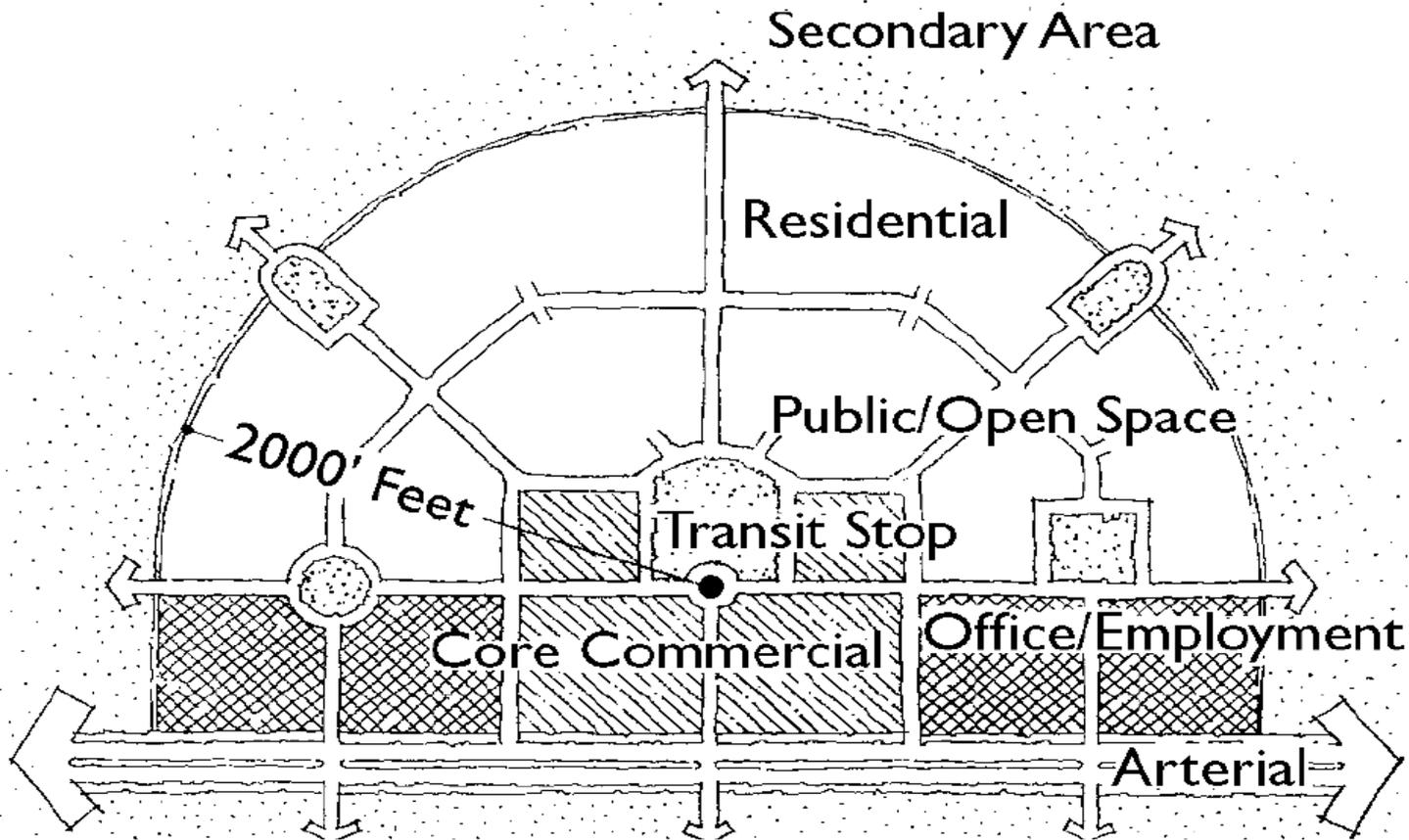


**3** Integrazione fra sistemi di trasporto ed  
ambiente urbano



Co-funded by the Intelligent Energy Europe  
Programme of the European Union

# TOD concept [Calthorpe]



Efficienza energetica per la pianificazione urbana e territoriale

# Amsterdam



Efficienza energetica per la pianificazione urbana e territoriale



Amsterdam



Efficienza energetica per la pianificazione urbana e territoriale

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# Amsterdam



Efficienza energetica per la pianificazione urbana e territoriale

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Amsterdam

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# Amsterdam



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# LIBRINO - CATANIA

MASIER PLAN  
DEL CENTRO URBANO  
DI LIBRINO - CATANIA

*Kenzo 1992*  
KENZO TANGE ASSOCIATES  
S. T. A. PROGETTI  
*for the future*

SCALA 1:1000

TOKIO - JAPAN

CATANIA - ITALIA



# FREIBURG GREEN CITY

APPROACHES TO SUSTAINABILITY

Sustainable  
**ECONOMY**



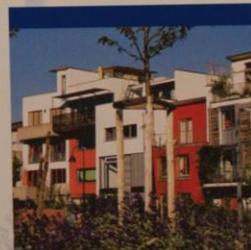
Sustainable  
**MOBILITY**



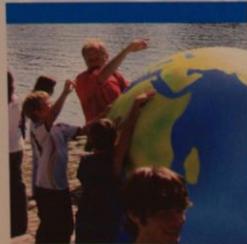
The City's Resource Capital:  
**NATURE**



Sustainable Urban  
**DEVELOPMENT**



Citizen  
**COMMITMENT**



Freiburg   
IM BREISGAU

 **FWTM**  
Management and Marketing  
for the City of Freiburg

Verkehrsberuhigung – Umgestaltung von Straßen

# VAUBAN



Efficienza energetica per la pianificazione urbana e territoriale

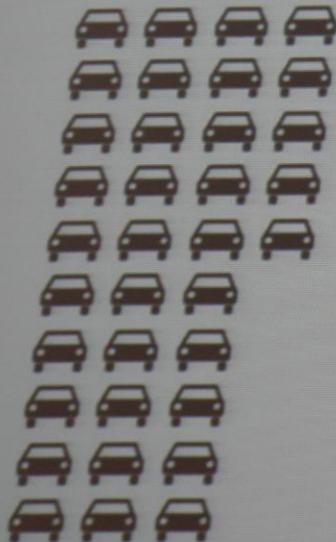
SPATIAL PLANNING and ENERGY for COMMUNITIES IN ALL LANDSCAPES

## Vauban - zones without parking space

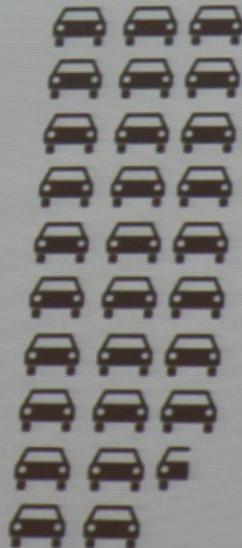


## Vauban - Density of private cars

**35 Cars/100  
inhabitants in  
Freiburg**



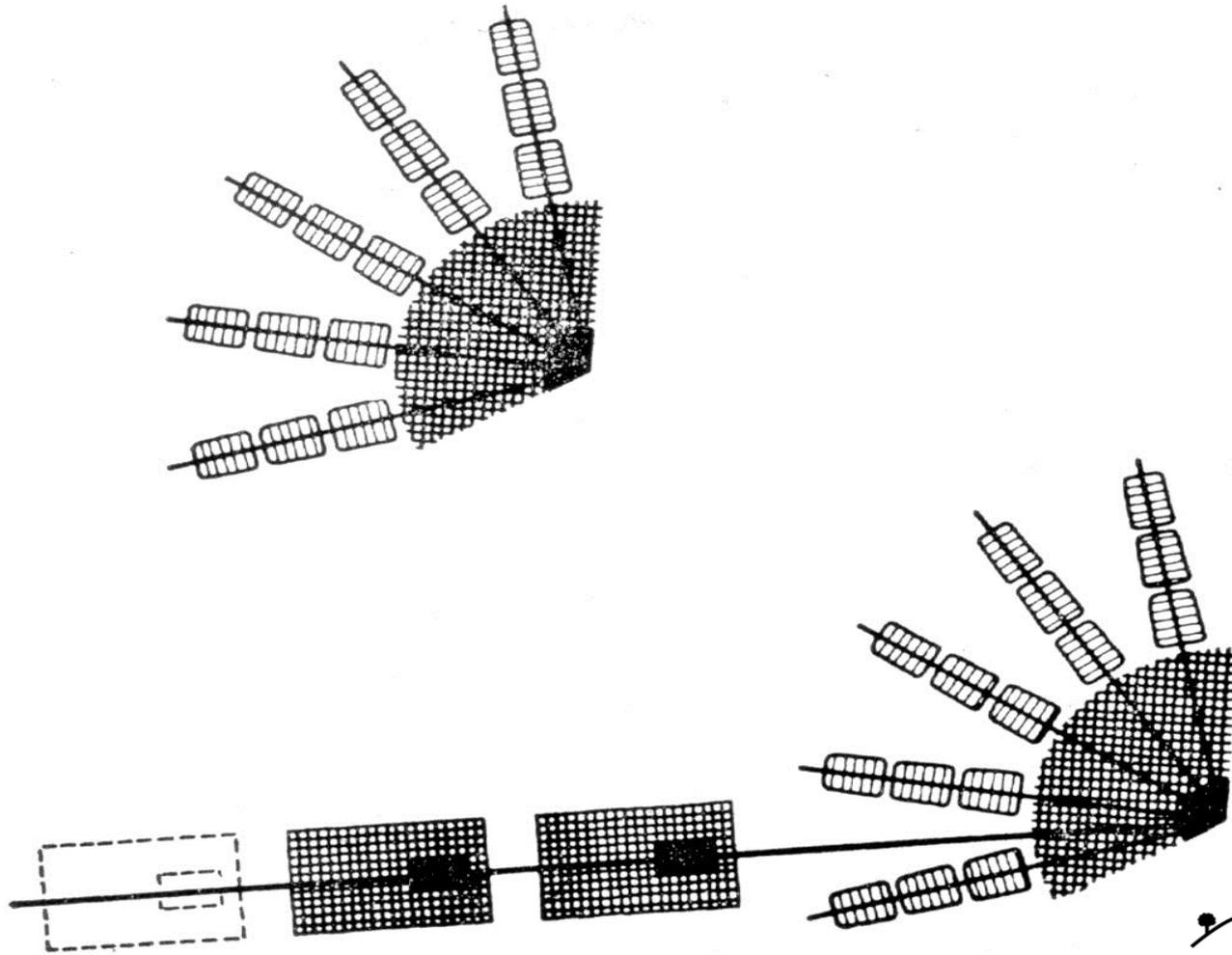
**28,5 Cars/100  
inhabitants in  
Rieselfeld**



**16 Cars/100  
inhabitants in  
Vauban**



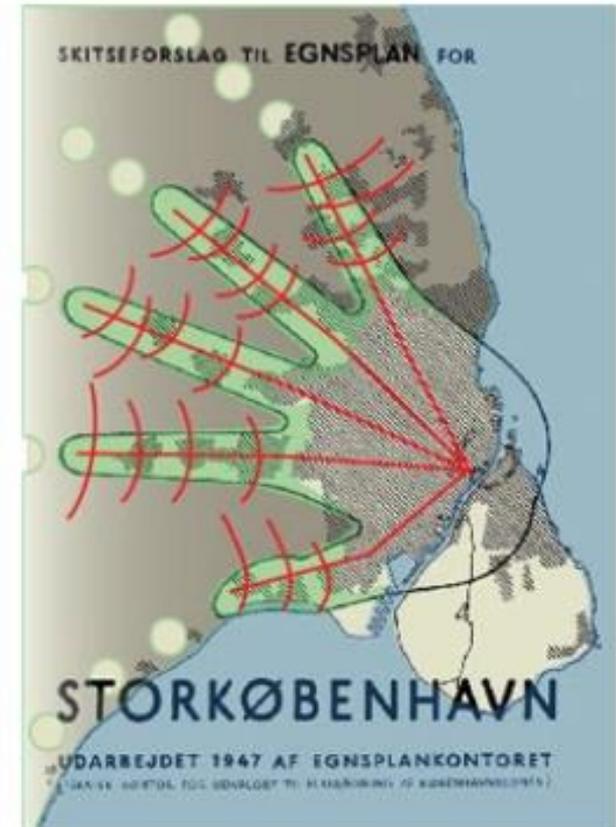
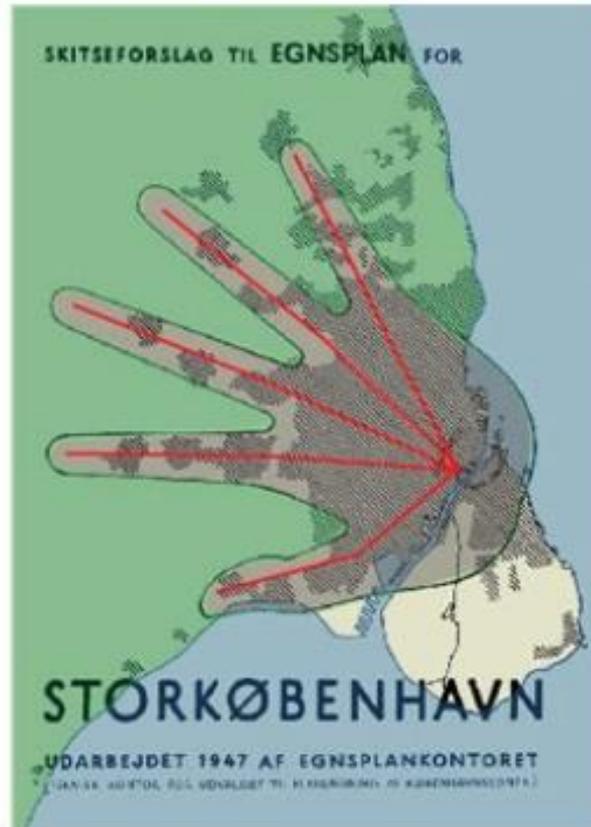
# COPENHAGEN



Efficienza energetica per la pianificazione urbana e territoriale



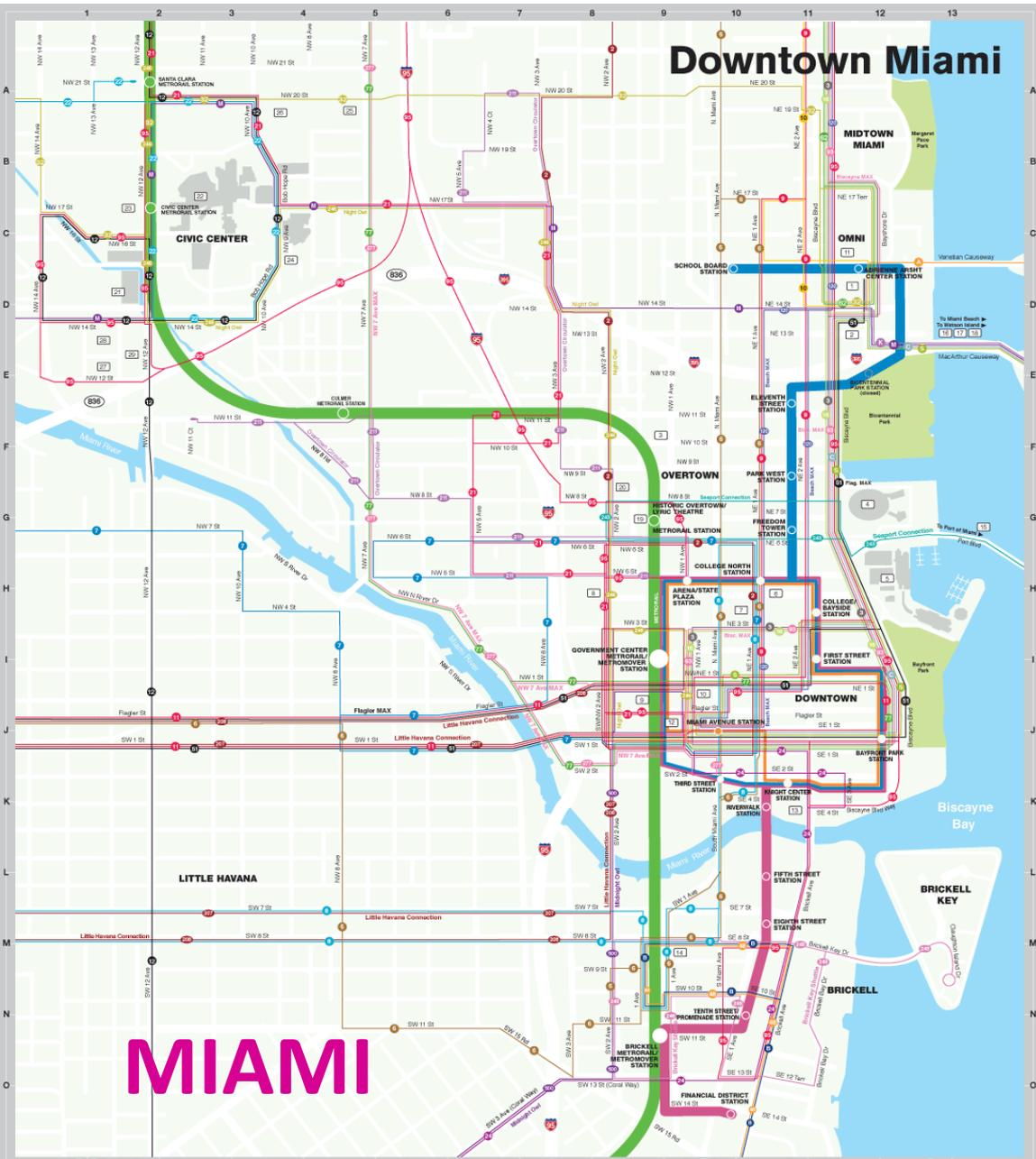
# COPENHAGEN



Da ACER (Roma, 2014)

# COPENHAGEN

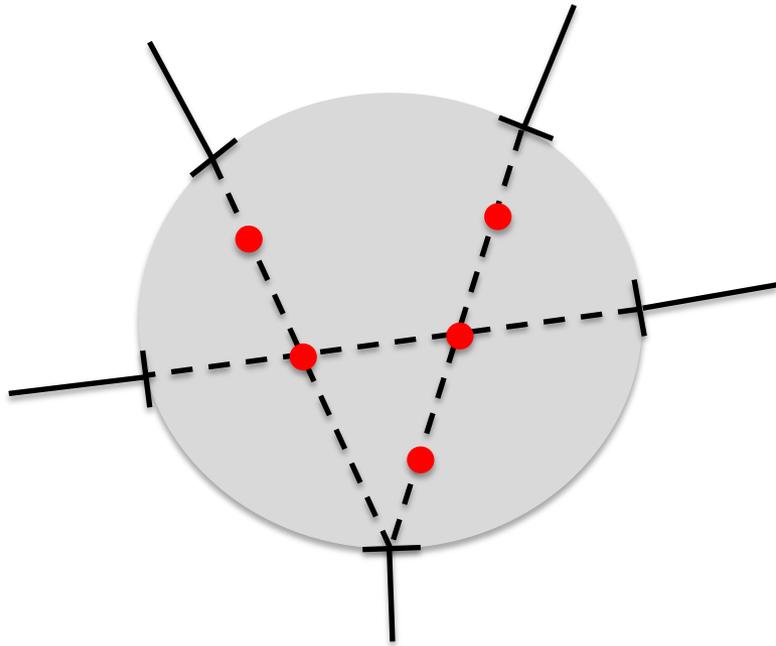




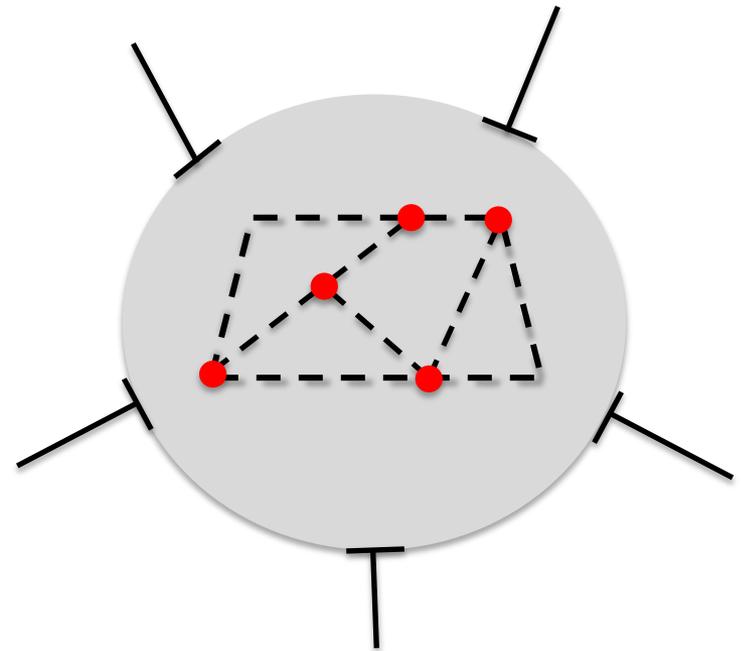
Efficienza energetica per la pianificazione urbana e territoriale

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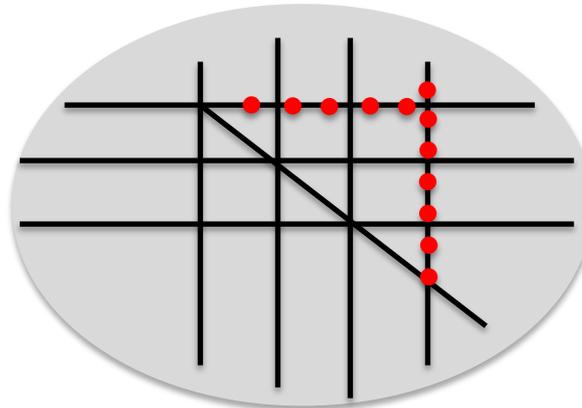
# Metropolitane



Underground - Londra



Metro - Parigi

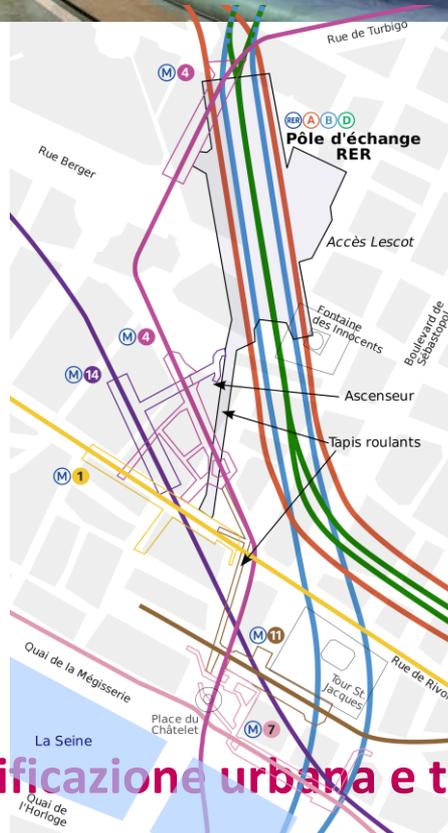
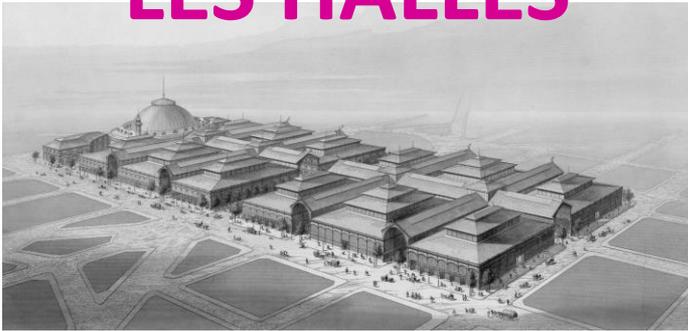


Subway - New York

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# LES HALLES



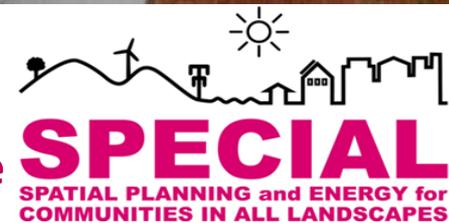
Efficienza energetica per la pianificazione urbana e territoriale

  
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COMMUNITIES IN ALL LANDSCAPES

# GRAZ- AUSTRIA STROLLING ZONES



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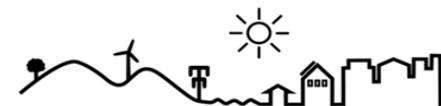


# PIANO RETE CICLABILE PER CATANIA

Via Marchese di Casalotto



Viale XX Settembre



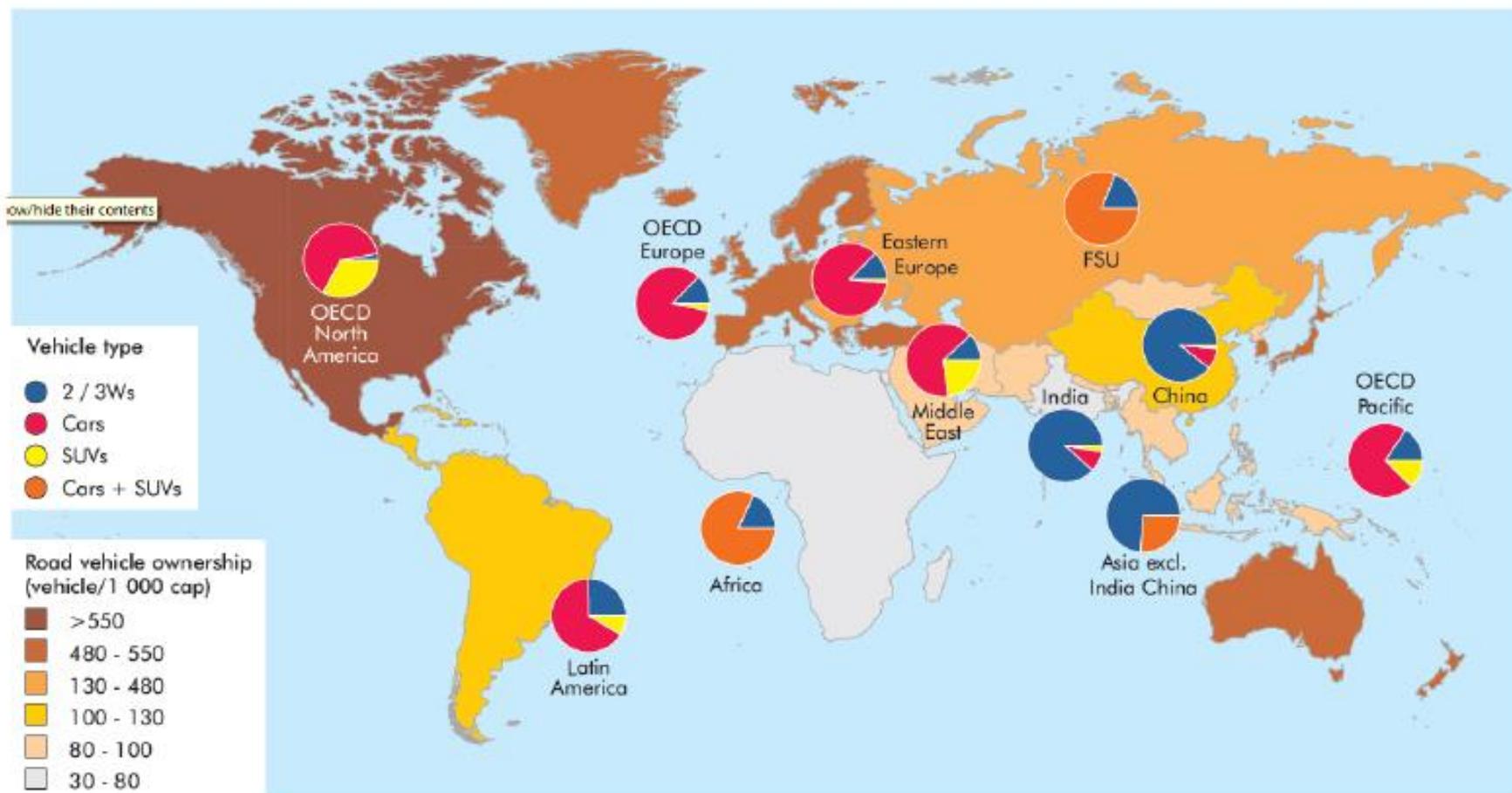
**SPECIAL**  
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Efficienza energetica per la pianificazione urbana e territoriale

# Car ownership rate

Figure 1.5 ▶ Passenger LDV stock, by type and region, 2005

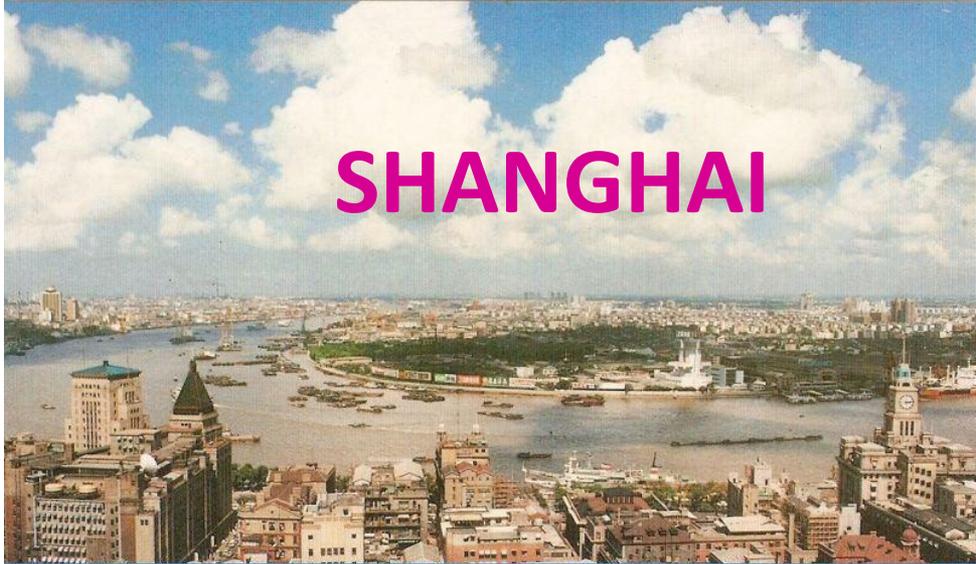


IEA/OECD 2009. Transport, Energy and CO<sub>2</sub>- Moving Toward Sustainability



Efficienza energetica per la pianificazione urbana e territoriale

# SHANGHAI



Efficienza energetica per la pianificazione urbana e territoriale



Module 1: Climate Change and Sustainable Development

Module 2: Frameworks for Spatial Planning and Energy

Module 3: Strategies, Instruments and Tools

Module 4: Implementation of Sustainable Planning

4.1 Heat supply

4.2 Power supply

4.3 Mobility

1. Good Practice Example: Sustainable transports In Malmö

2. Good Practice Example: The first Bus Rapid Transit (BRT) line (Catania, Italy)

3. Good Practice Example: Sustainable Urban Mobility Plan (City of Judenburg / Styria, Austria)

4. Good Practice Example: Automatic light metro system (Brescia, Italy)

Module 4: Implementation of Sustainable Planning

## 4.3 Mobility

### Introduction -

[Introduction](#) [Summary](#) [Integration of Mobility and Climate Issues Sustainable Urban Mobility Plan \(SUMP\)](#) [City of Short Distances](#) [Finance related aspects](#)

Mobility and transportation are significant drivers of carbon dioxide emissions that is growing very rapidly. 23 percent of the world wide CO2 emission are related to traffic. To achieve significant reductions in greenhouse gas emissions, transport must be de-carbonised and mobility behaviour has to change.

### Summary +

[Introduction](#) [Summary](#) [Integration of Mobility and Climate Issues Sustainable Urban Mobility Plan \(SUMP\)](#) [City of Short Distances](#) [Finance related aspects](#)

### Integration of Mobility and Climate Issues +

[Introduction](#) [Summary](#) [Integration of Mobility and Climate Issues Sustainable Urban Mobility Plan \(SUMP\)](#) [City of Short Distances](#) [Finance related aspects](#)

### Sustainable Urban Mobility Plan (SUMP) +

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1. Good Practice Example: Sustainable transports In Malmö

2. Good Practice Example: The first Bus Rapid Transit (BRT) line (Catania, Italy)

3. Good Practice Example: Sustainable Urban Mobility Plan (City of Judenburg / Styria, Austria)



4. Good Practice Example: Automatic light metro

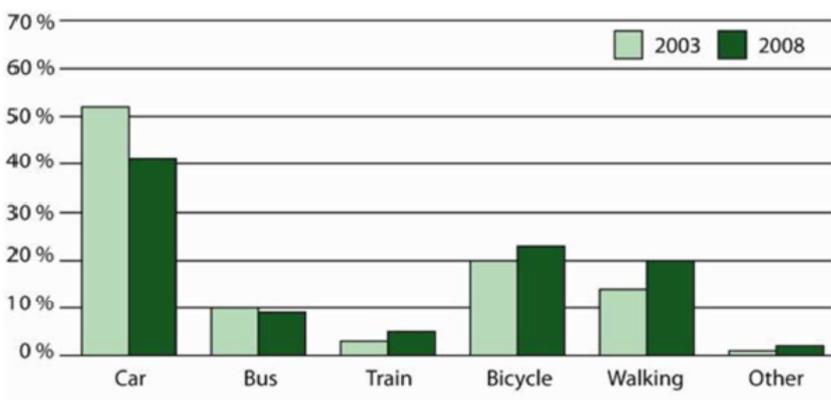
# GOOD PRACTICE EXAMPLE

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# modal split 2003-2008

## MALMO - SUSTAINABLE TRANSPORTS



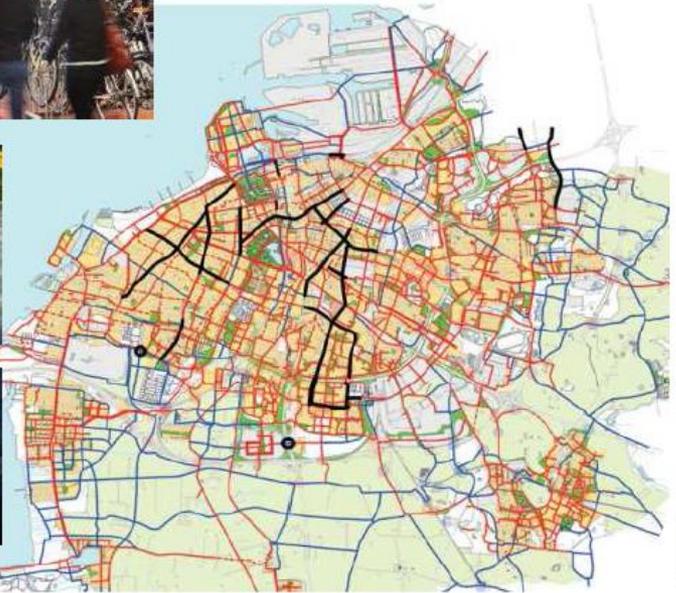
Changes in modal split between 2003 and 2008.

- Mobility planning
- Mobility management
- Modal split
- SUMP

### pedestrians



### cyclists



### freight transports





public transport



car traffic

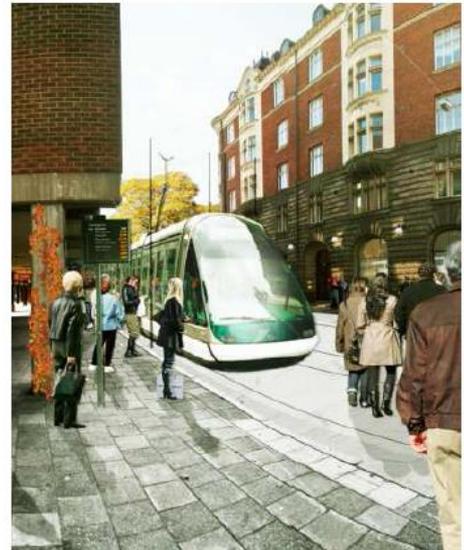
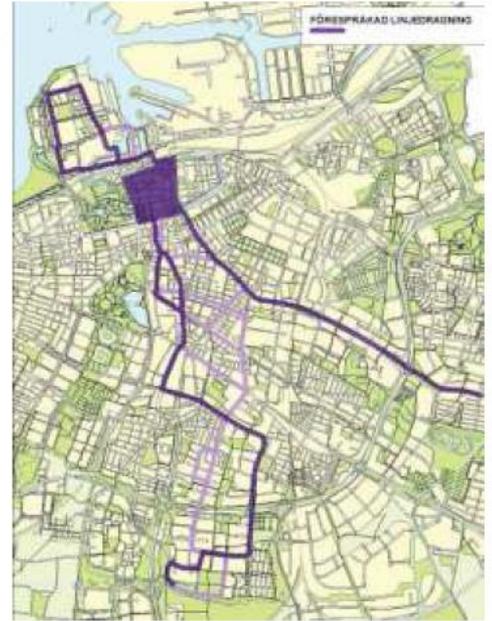


# Malmöexpressen



## MALMO - SUSTAINABLE TRANSPORTS

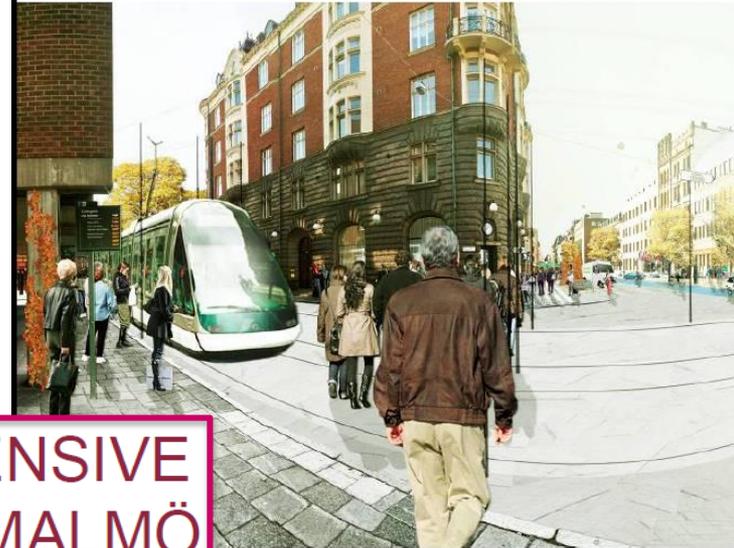
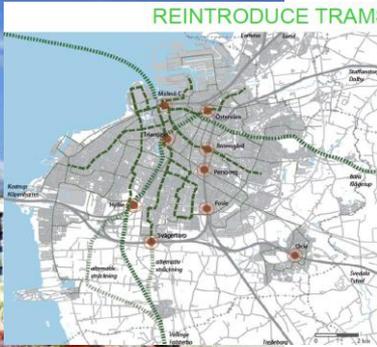
planning for the tram...



REINTRODUCE TRAMS

# MALMO

PUBLIC TRANSPORT



## COMPREHENSIVE PLAN FOR MALMÖ ÖP2012

A DENSER CITY

REORGANIZE

REDUCE BARRIER EFFECTS  
FOSIESTRÄKET

GREENERY &  
RECREATION

MEETING PLACES

MAGNETS

HOUSING DIVERSITY



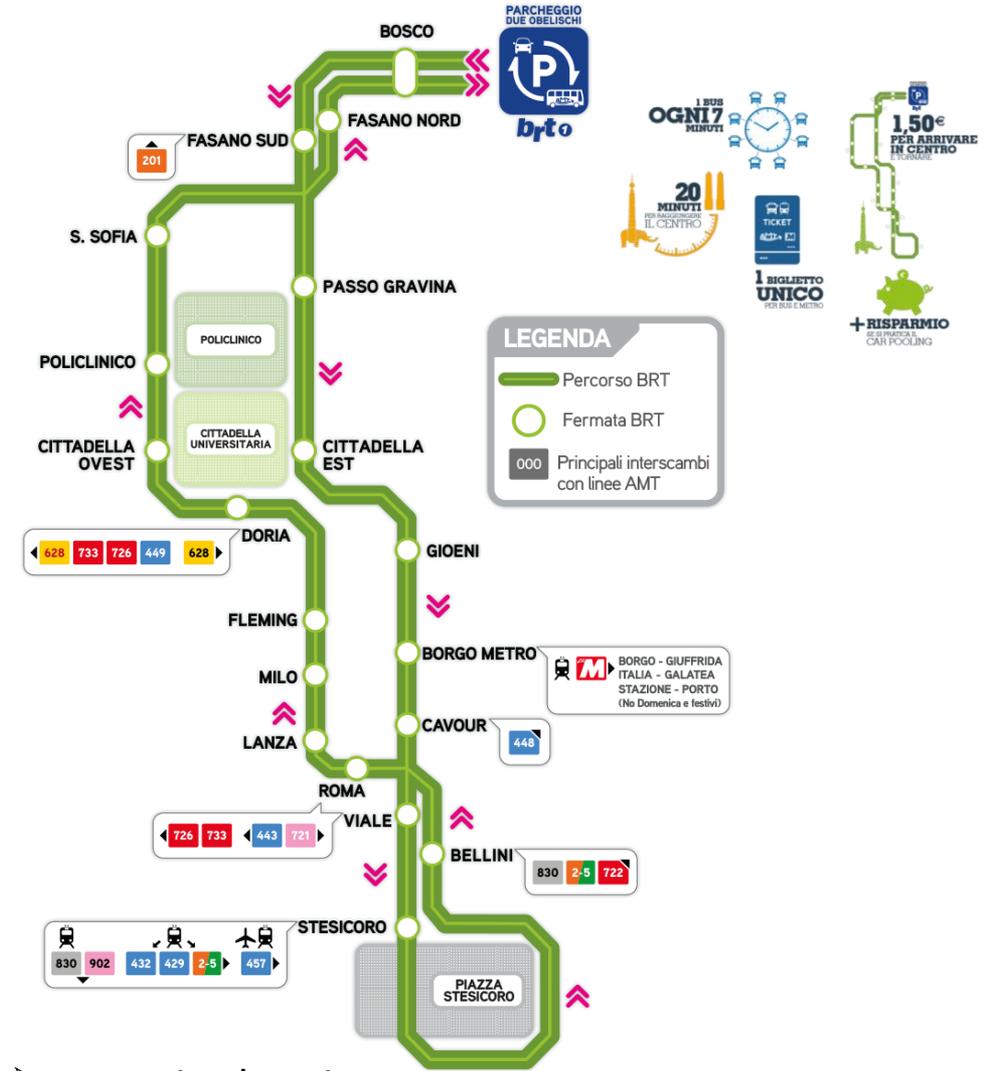
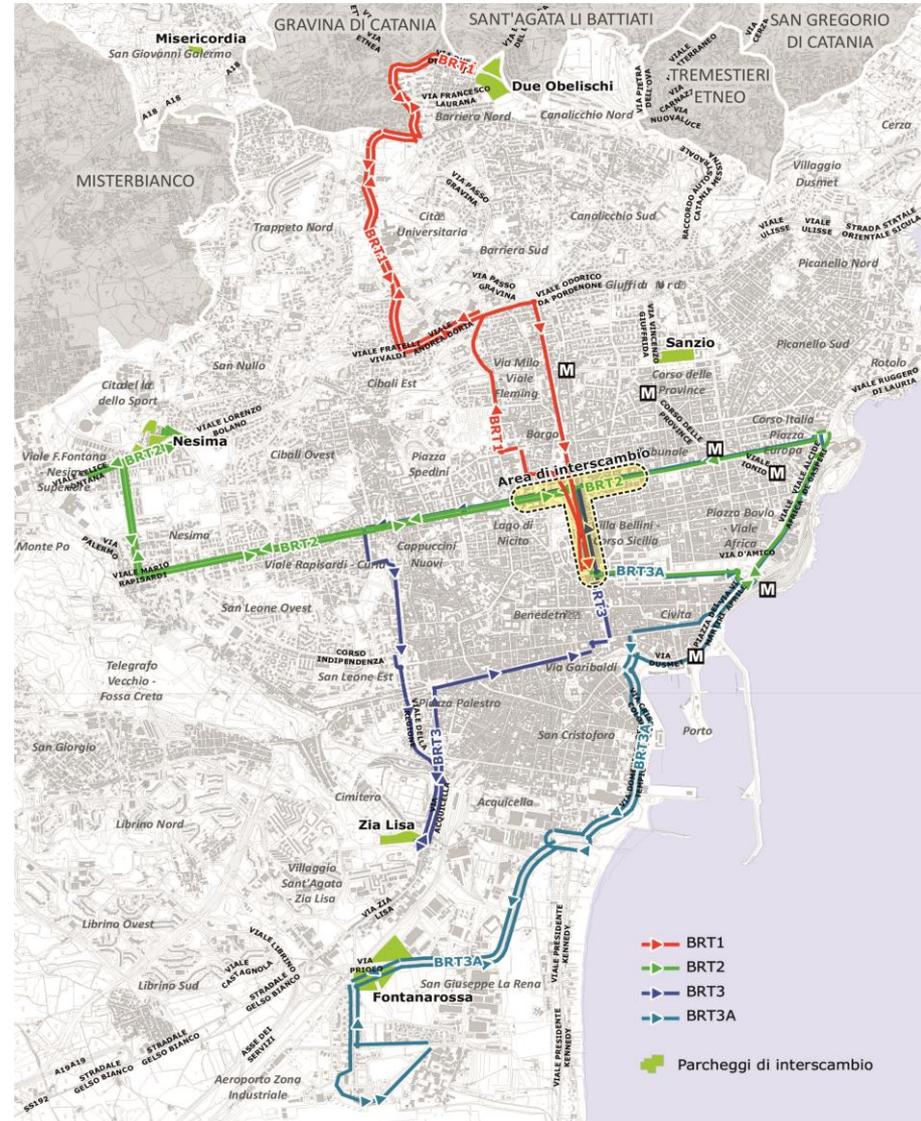
DENSE AND MIXED CITY



# CATANIA – BUS RAPID TRANSIT

Il Bus Rapido scambia con bus di linea urbana e metropolitana per raggiungere centro storico e commerciale.

## Rete BRT Catania (PGTU, 2013)



- Transit Planning
- Bus Rapid Transit
- Sustainable Mobility

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# Bus Rapid Transit (BRT)



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# CATANIA BRT 1



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# JUDENBURG – AUSTRIA

## Sustainable Urban Mobility Plan



- Sustainable Urban Mobility Plan
- Audit
- Certification
- Mobility



Graph of Audit Process



# GREIFSWALD – GERMANIA

## Transport Development Planning



- Climate protection measures
- Environmental alliance
- Residential building area development plan

District heating is climate protection! Green electricity is climate protection!



GREIFENGas is climate protection! Public transport is climate protection!



### Legend

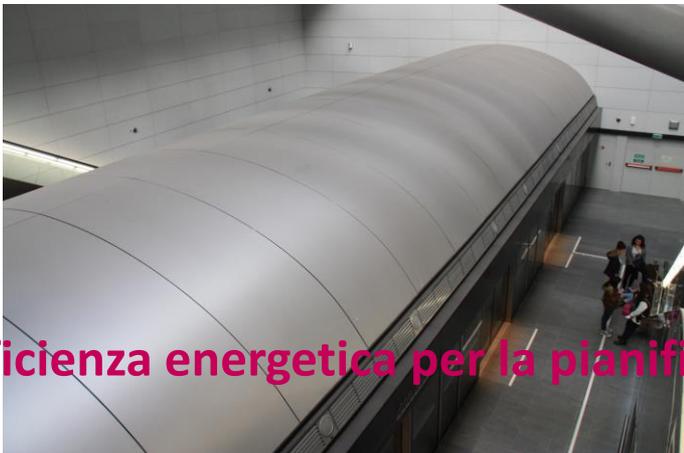
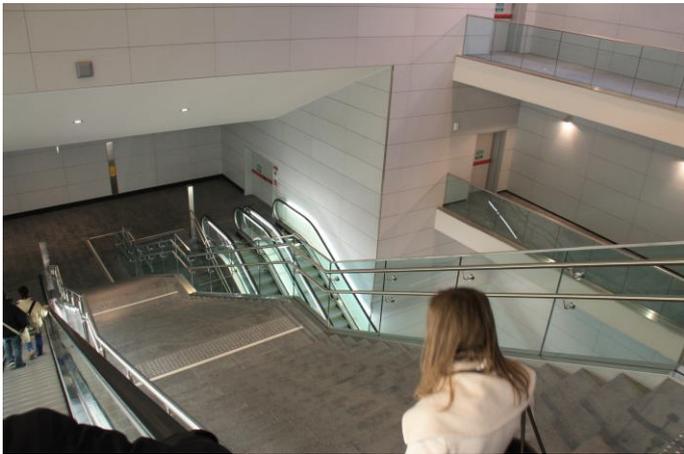
- Binding land-use plan
- Binding land-use plan number
- Residential building areas according to the preparatory land-use plan
- Preparatory land-use plan number
- Inner-city brownfields (follow-up use)
- Brownfield number

### Significance of the residential building areas

- Already realized
- Legally binding land-use plan resp. with procedural bindings
- 1. Priority
- 2. Priority
- No longer pursued



Efficienza energetica per la pianificazione urbana e territoriale



Efficienza energetica per la pianificazione urbana e territoriale

