



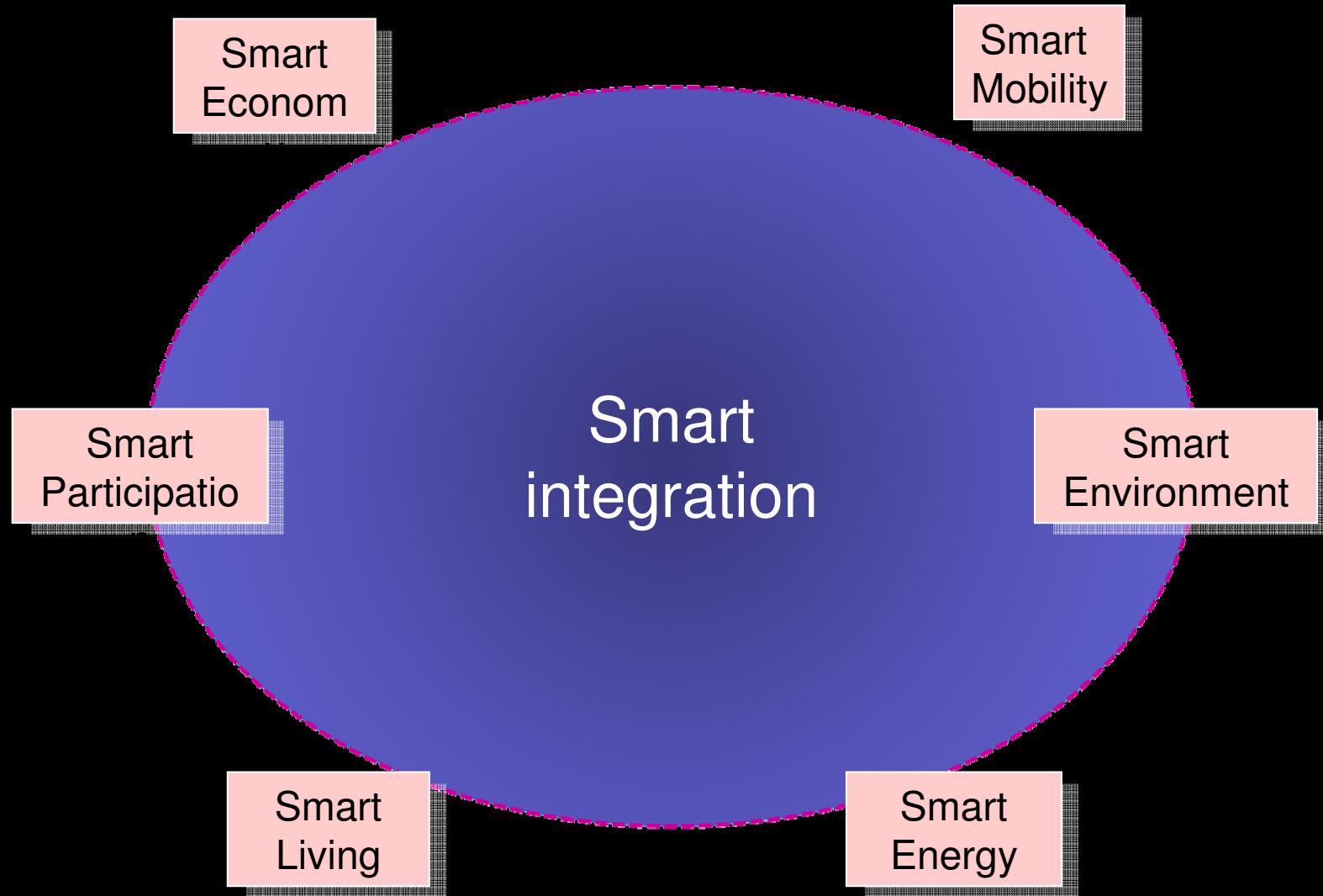
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**SMART CITIES:**  
*La roadmap delle città sostenibili*

**Mauro Annunziato**  
Sub-coordinatore European  
Joint Programme Smart Cities - EERA

# Smart City

l'approccio integrato verso le sostenibilità della città



# Le iniziative europee orientate alle Smart Cities



UE 2020  
Innovazione  
Agenda digitale  
Sviluppo sostenibile

Smart City EERA Joint Programme

(approvato nov. 2011, time: 2012-2015, 200 au/a)

Smart City Stakeholders Platform

(in fase di avvio: prima conferenza giugno 2012)

Smart City Member State Initiative

(avviata dic. 2012)

Research & Dev

Industry

Government



Covenant of Mayors

(avviata 2009)

Municipalities



Urban Europe

(in fase di avvio)

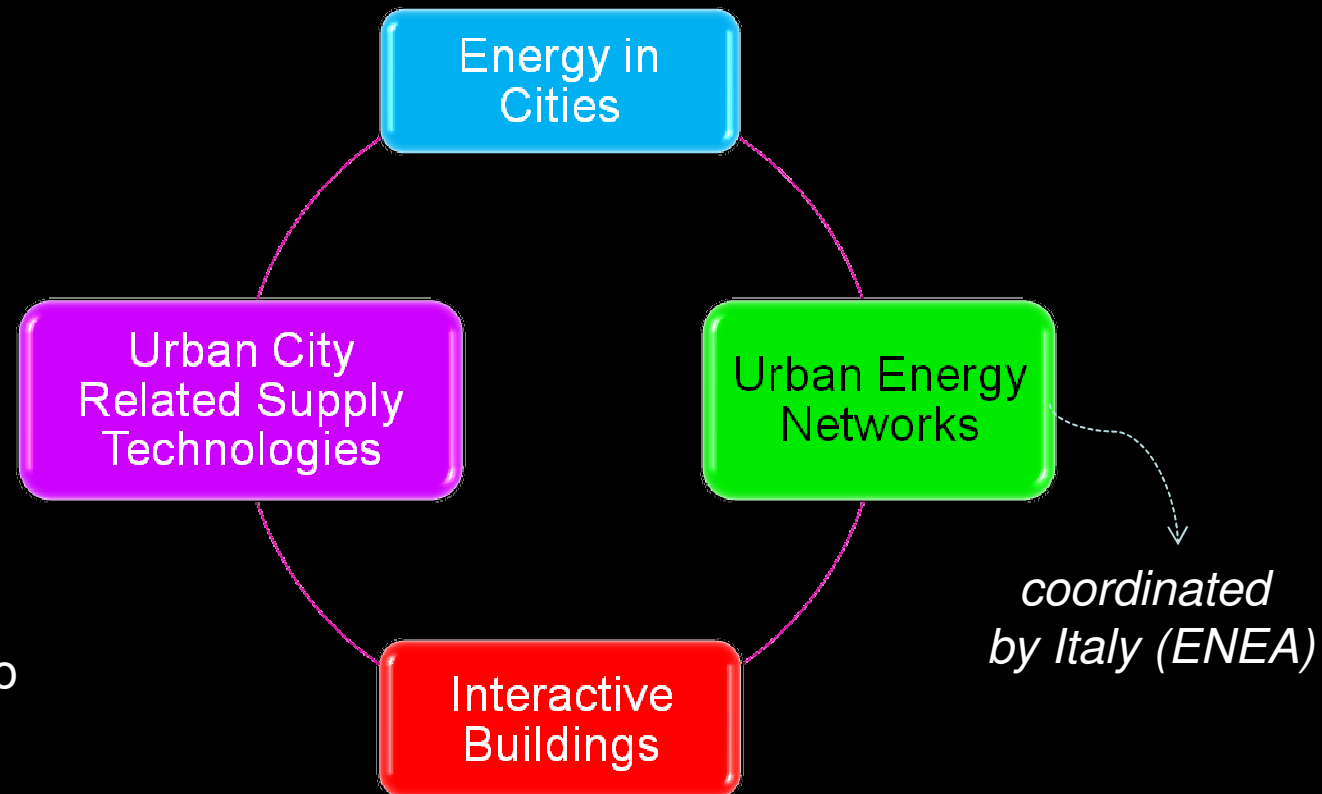
Government +  
R&D



Horizon 2020



## Joint Programme Smart City



27 countries  
2012-2015  
196 anni uomo/anno

# Actors & technologies for smart cities

**CITY  
government**

DECISION  
SUPPORT  
SYSTEMS

City  
Government



Campagne di  
misure  
Report annuali  
Pianificazioni  
periodiche



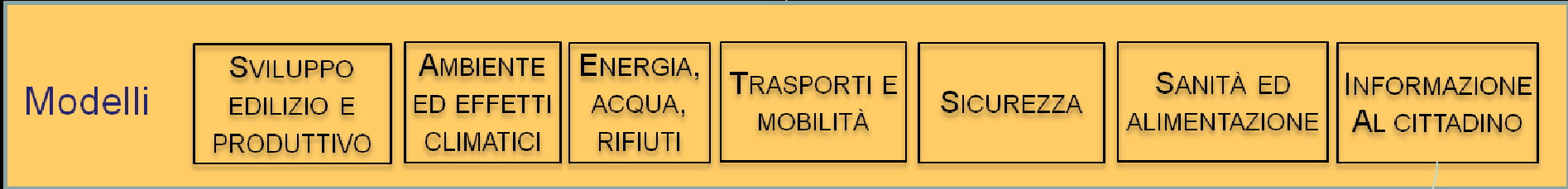
**“Living Labs”**  
Monitoraggio e  
pianificazione  
continui

- Sensori a basso costo/consumo
- Trasmissione di dati innovativa
- Cloud Computing

Nuove tecnologie

*CITY government*

*“la stanza del sindaco”*  
(controllo del territorio,  
pianificazione, gestione  
emergenze)

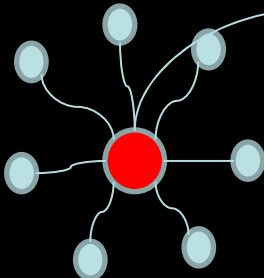


cittadino

CLOUD/OPE  
N DATA



SENSOR  
NETWORKS  
TERRITORIALI



FONTI DI  
DATI

CITTADINI ED  
URBAN  
UTILITIES

# URBAN NETWORKS

## CITY 2.0: THE USER-PRODUCED CITY

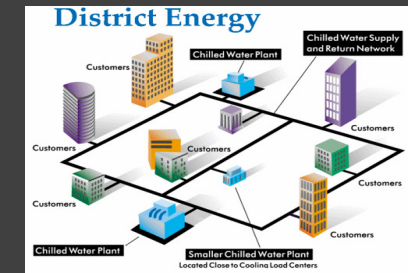
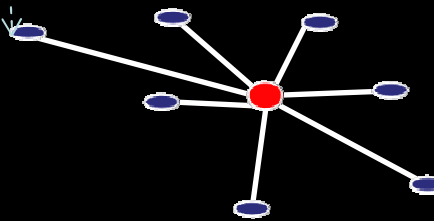
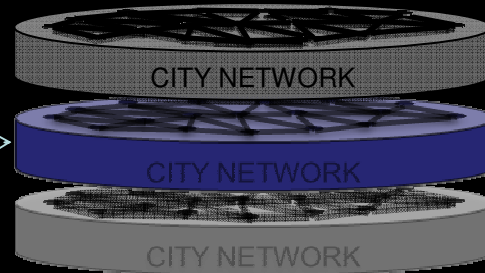
*plasmare la città sulle persone*



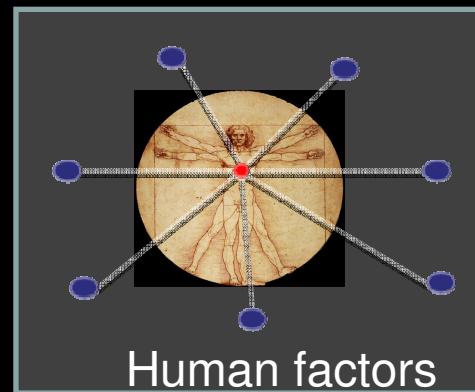
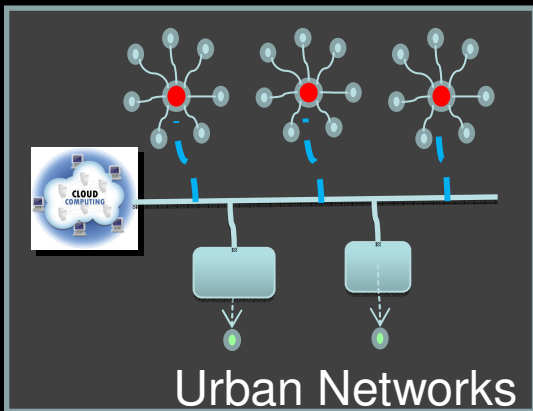
*resource on demand*



LA CITTÀ COME  
UN INSIEME DI  
RETI TRA LORO  
CONNESSE

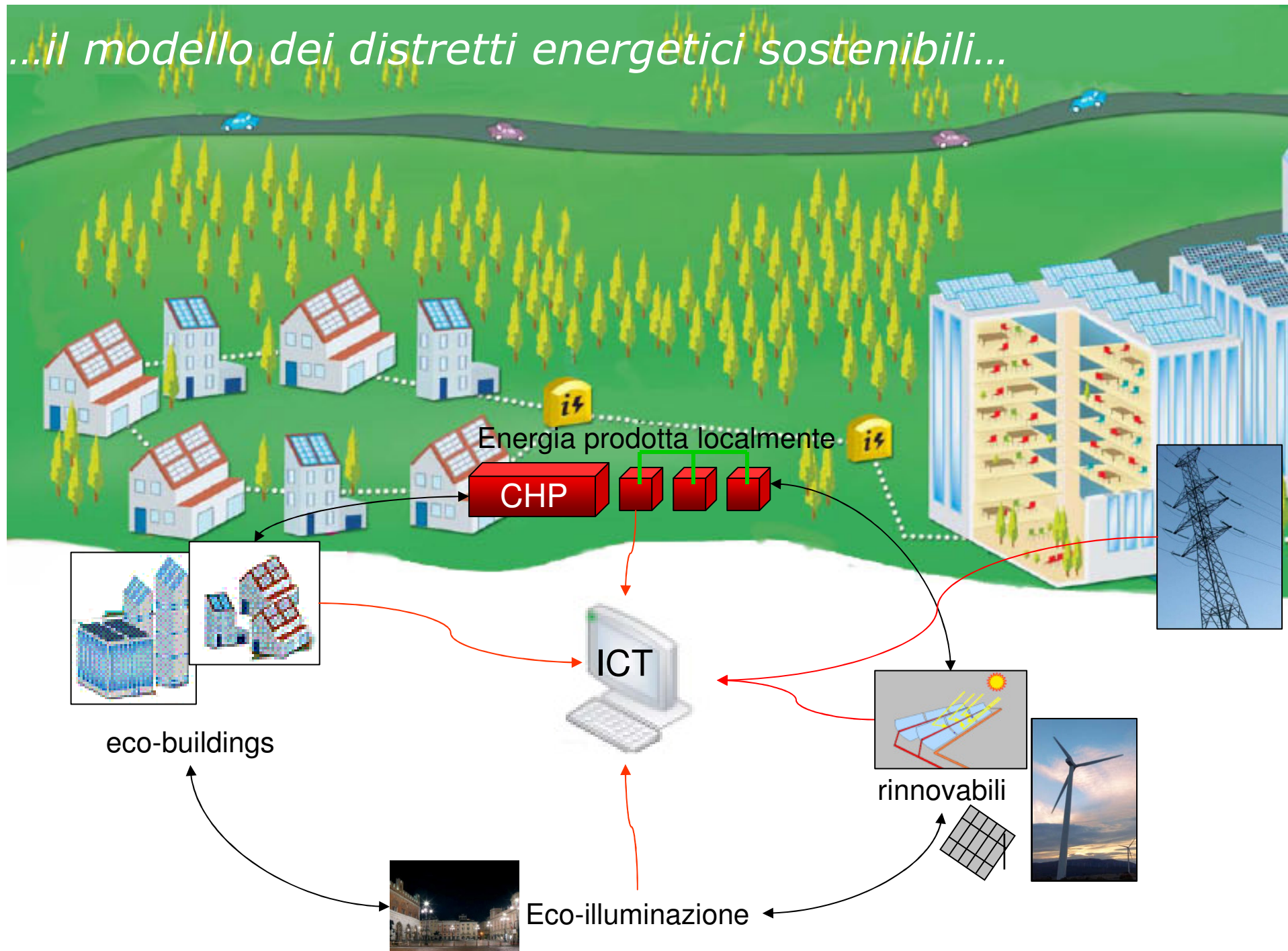


Smart Districts



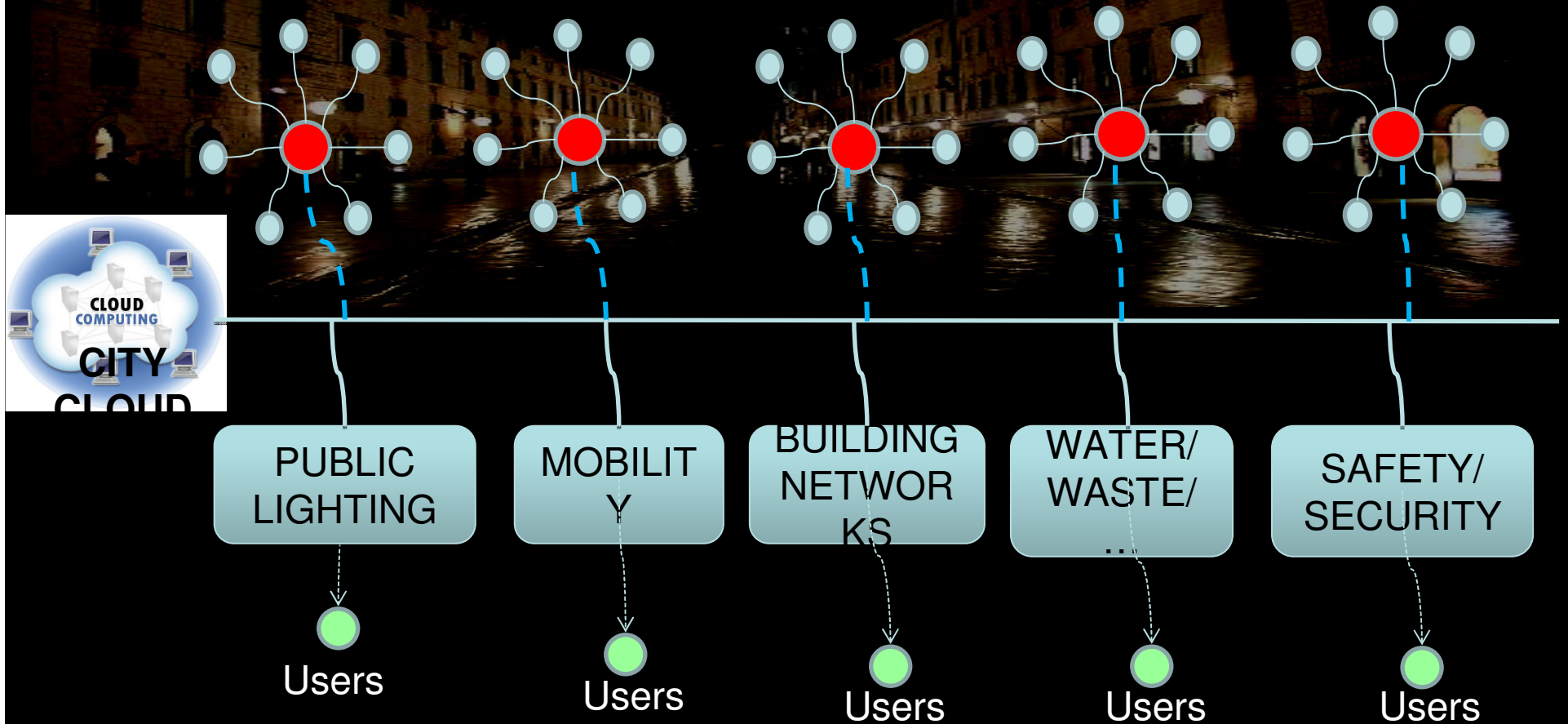


*...il modello dei distretti energetici sostenibili...*



# Urban Network Integration

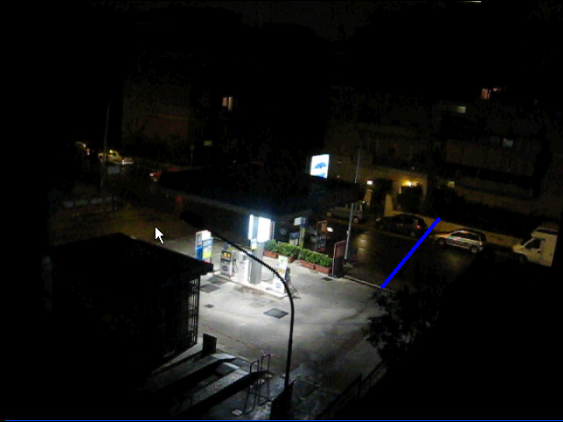
*Urban Sensor Networks*





# SMART LIGHTING

MISURA DEI VEICOLI E PERSONE



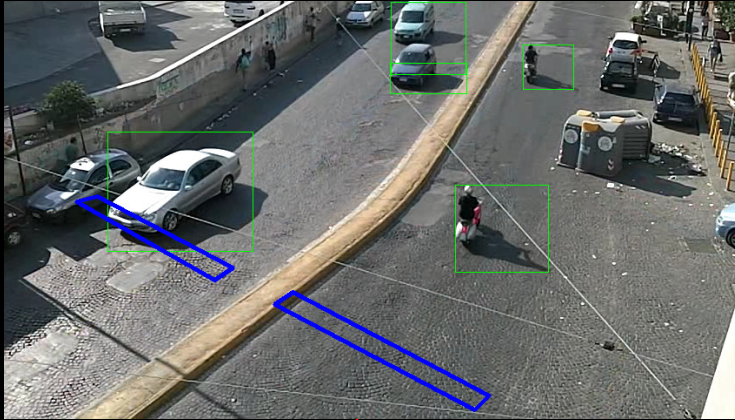
LIGHT CONTROL  
- ENERGY ON DEMAND





# SMART LIGHTING & MOBILITY

TRAFFIC AND PEOPLE MONITORING



CITY CONTROL ROOM



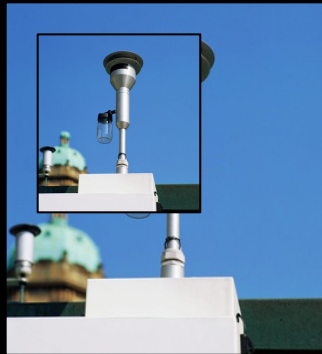
INFOMOBILITY





# SMART ENVIRONMENT

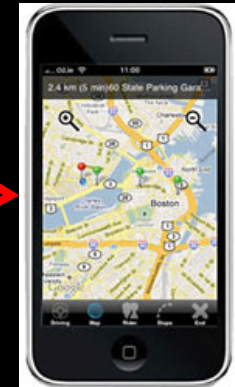
INFO-  
ENVIRONMENT



AIR  
MONITORING



ENVIRONMENT CONTROL



MOBILE ENVIRONMENT SYSTEM





# Interactive Building Network

*dall'edificio  
passivo/attivo ...*

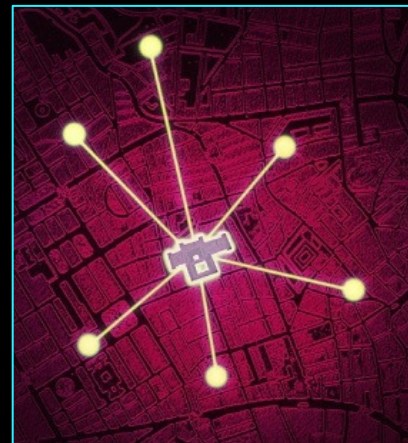
*Passive Building*



*Nearly Zero Energy  
Building*



*alla rete di smart  
buildings interattivi...*



Creare una infrastruttura urbana per la interazione tra edifici e rete



# Building Network Management

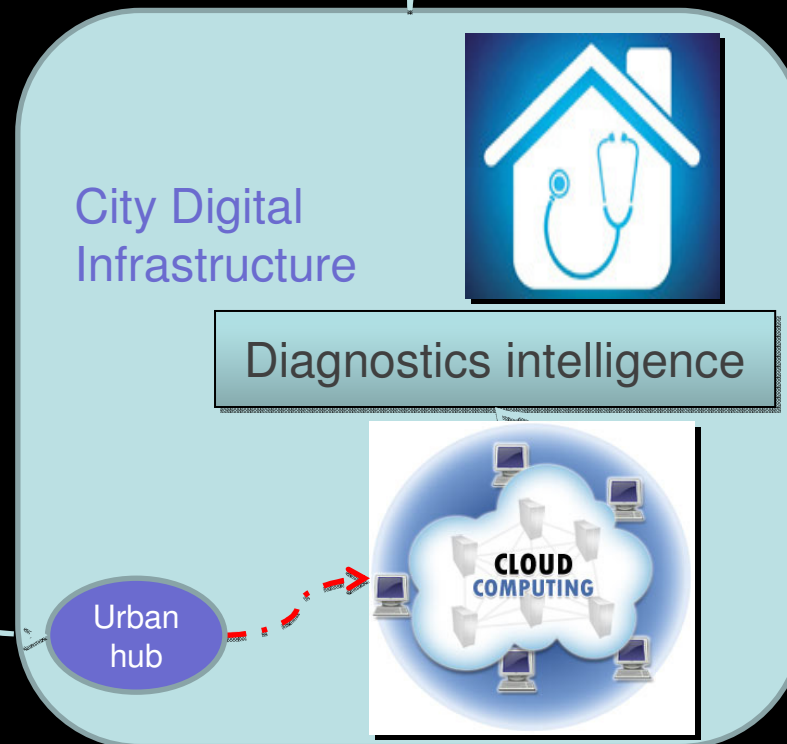


REMOTE  
MONITORING

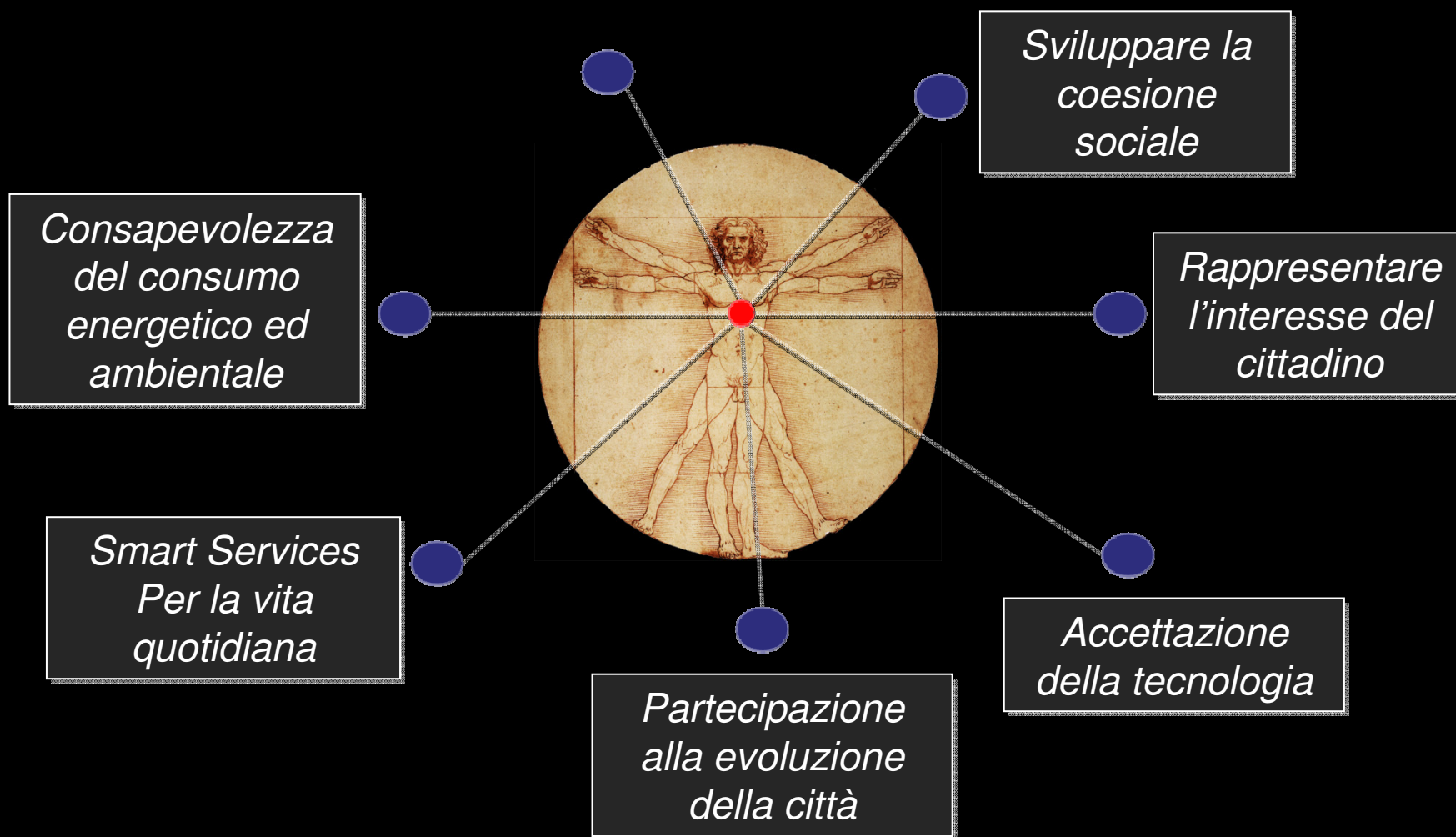
MANAGEMENT  
OPTIMIZATION



DIAGNOSTICS

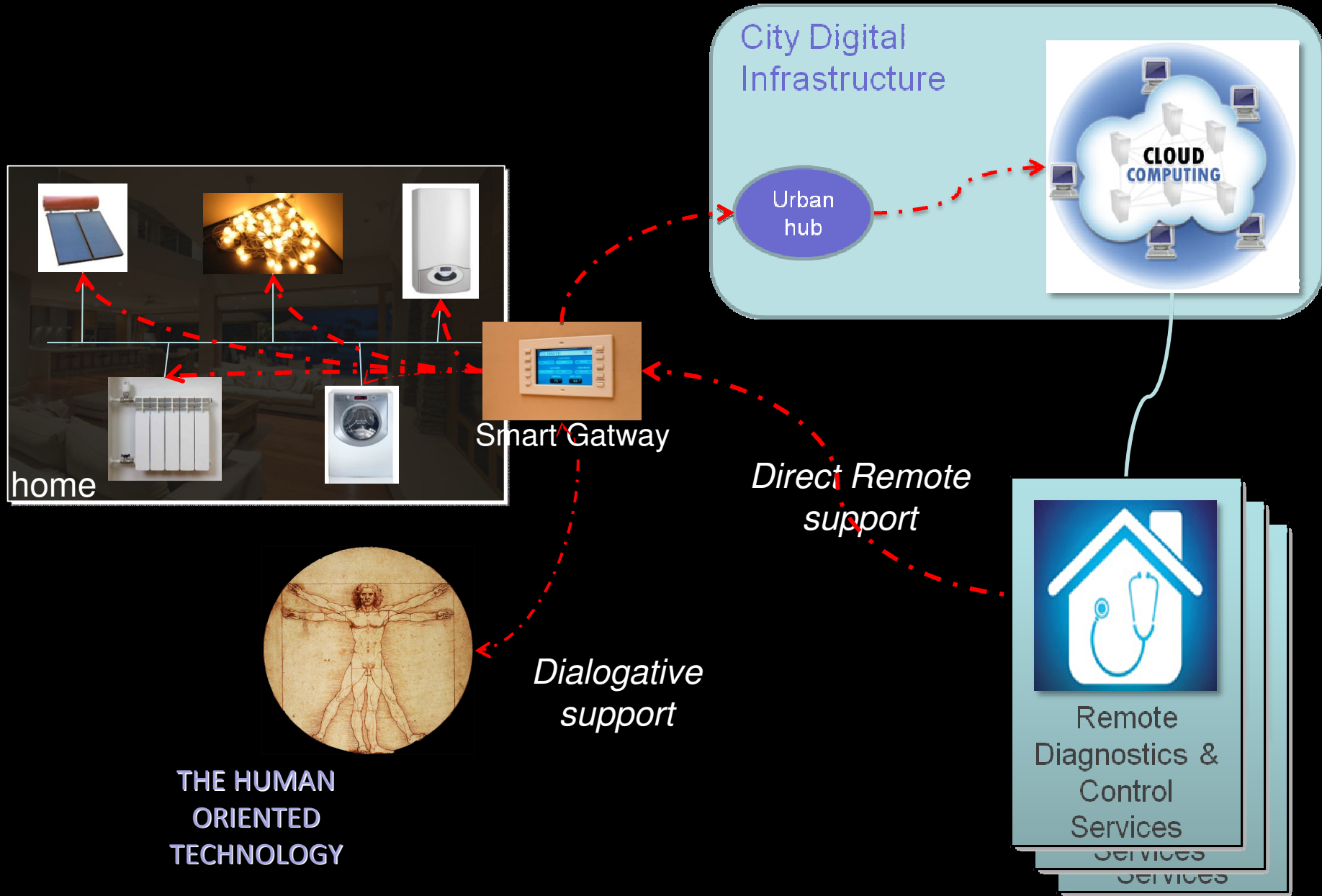


# La tecnologia orientata all'uomo: le **Smart Communities**



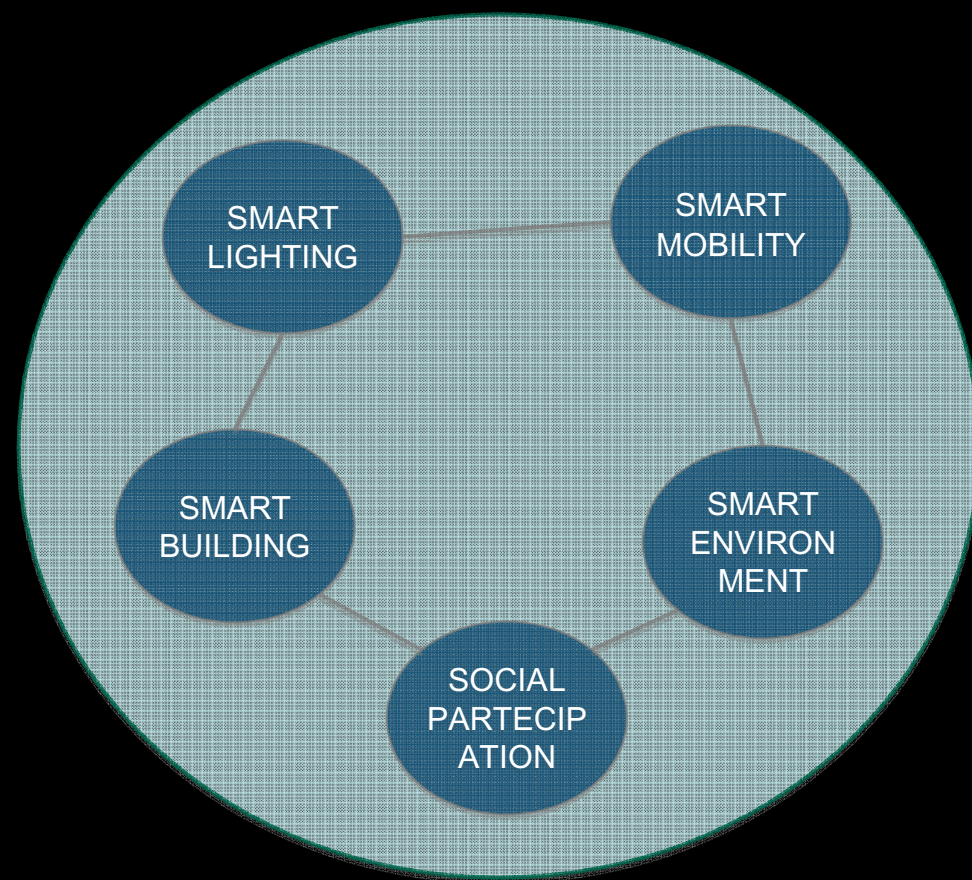


## Smart Home



# Il progetto CITY 2.0 dell'ENEA

Sviluppo di un modello di *smart town*

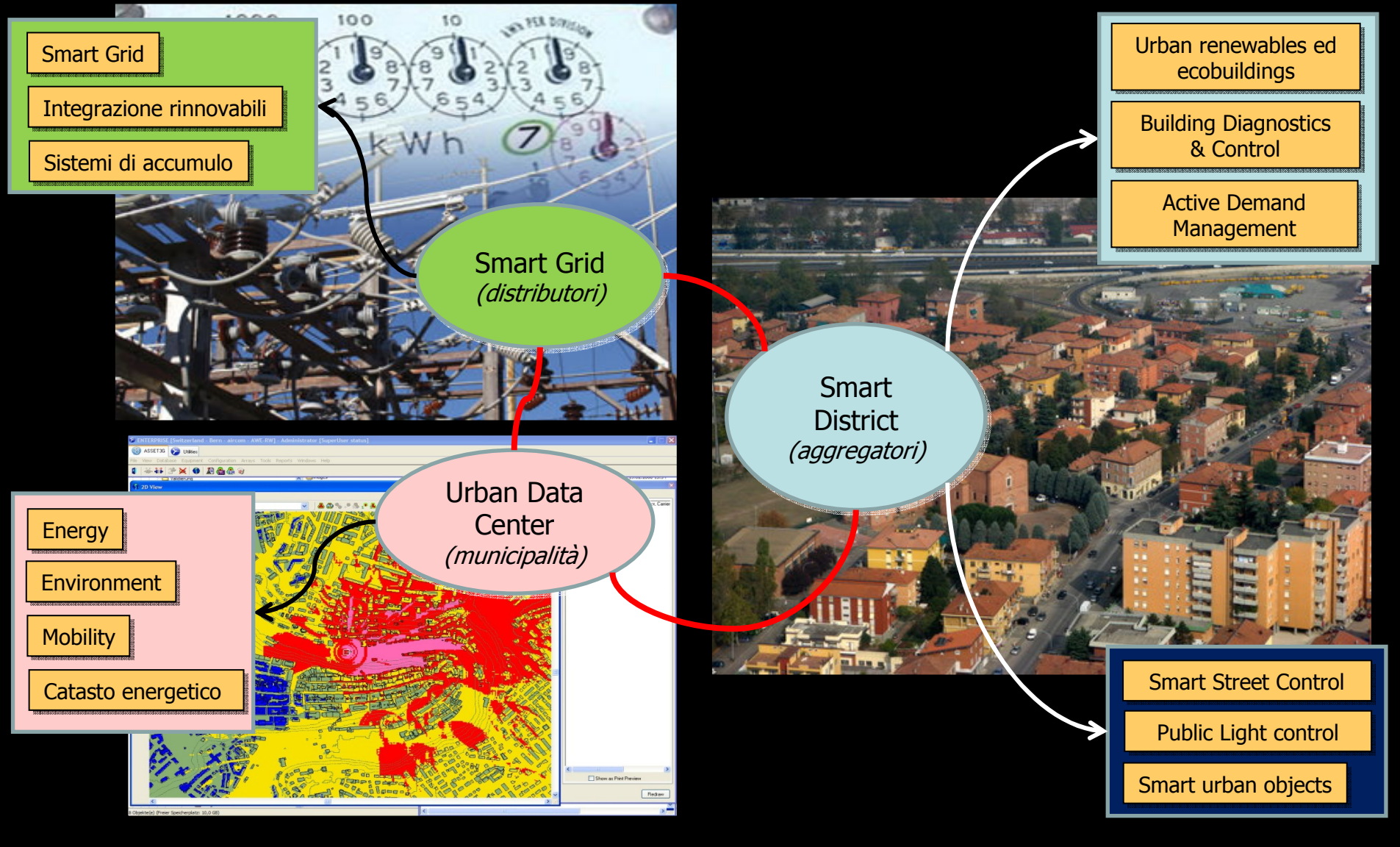


*Smart Ring a L'Aquila*

# Progetto – Res Novae -

(ENEL, IBM, GE, Data Management, Elektronika, ENEA, CNR, Poliba, UniCal, 23 ML Euro )

-> Demo: BARI, Cosenza





*Grazie per l'attenzione*

[mauro.annunziato@enea.it](mailto:mauro.annunziato@enea.it)