

# Building Resilience through Empowerment


Paul Timmers  
Director ICT addressing societal  
challenges  
European Commission

# Vision

In a “constrained” world...

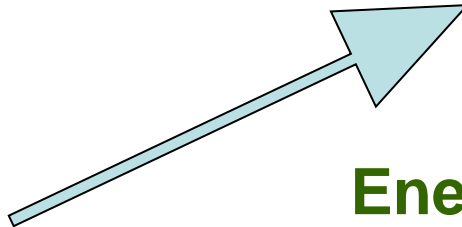
- Making Europe a better place for working and living **user empowerment**
  - in energy
  - mobility
  - government services
  - technology design
  - quality of care
  - education
  - working patterns
- Making technology work for our dreams

# Opportunities

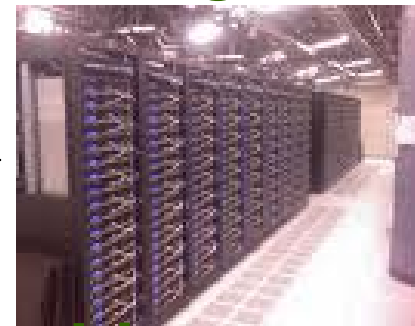
- **More than Moore**      computing power still doubles and costs halve
- **Science convergence**      ICT + nano + bio + photo + neuro =  solutions
- **Making sense of data**
  - from information society to knowledge
  - from data analysis to data anticipation
  - from interpretation to modelling
- **Managing technology complexity**
  - from attention to components to holistic approaches, life cycle attention, multi-purpose technologies

# Making MORE for LESS - Energy

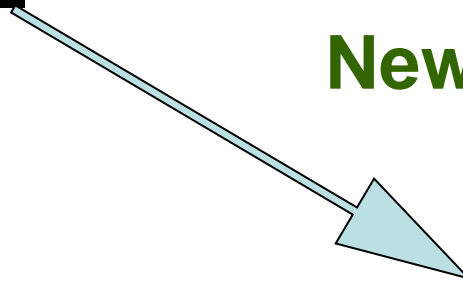
**Fossil fuel squeeze**  
→  
**ICT becomes ubiquitous & requires energy**



**Energy Saving ICT**



**New Architectures**

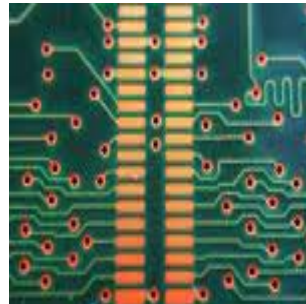
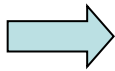


**Smart Grids**

# Making MORE for LESS - Resources



**High Price  
of  
Rare Earths**



**High Price  
of  
chips**



**Threat to  
Industry  
& Innovation**



**Synthetic  
materials  
Bio-inspired  
computing**

# Making sense of data

Congestion

Policy challenge

Charge cars?

eDriving Licenses

Patterns of usage / demography

Fuel Saved

Less CO2

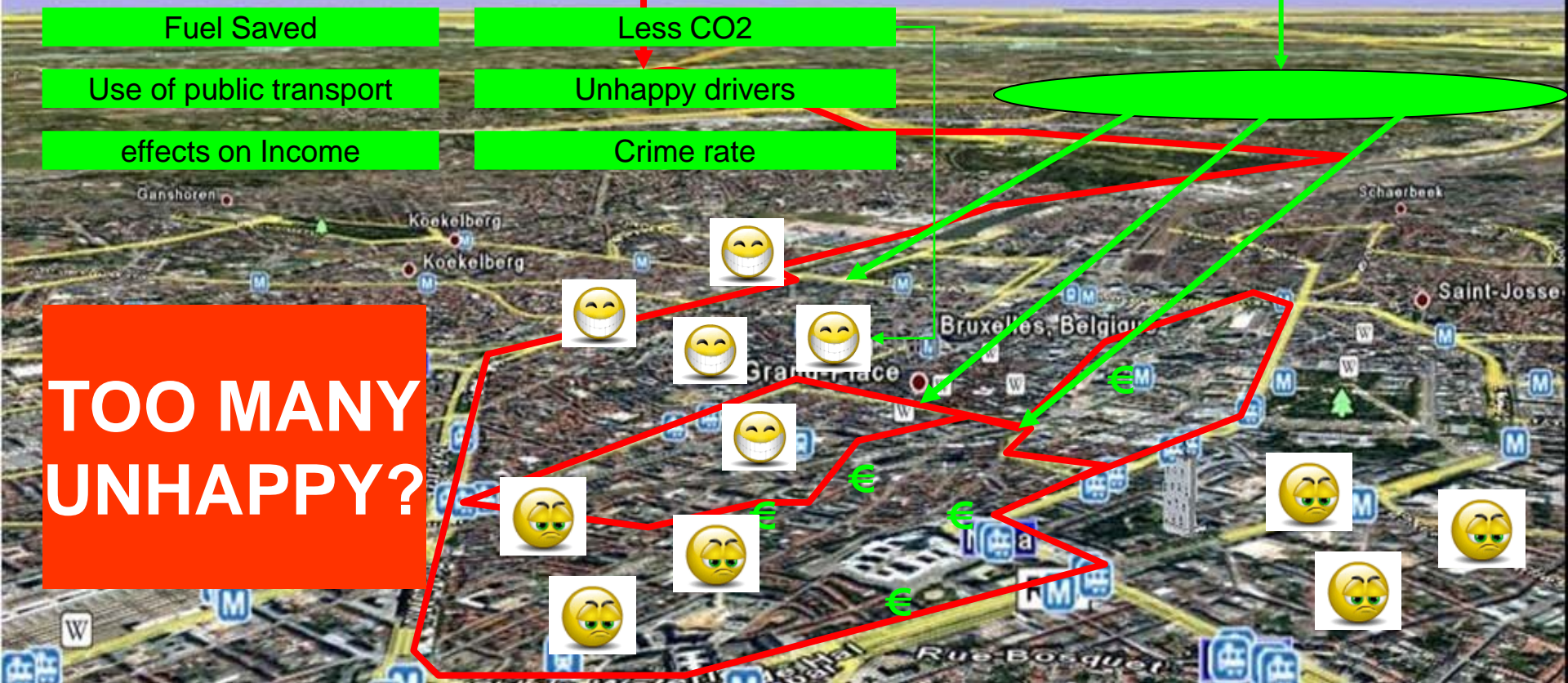
Use of public transport

Unhappy drivers

effects on Income

Crime rate

TOO MANY UNHAPPY?



# Making sense of data



**Users solve challenge**

**eID - eParticipation**

Build Trams + Metro

How to raise taxes

Car sharing solutions

New jobs

**Policy Co-Making**

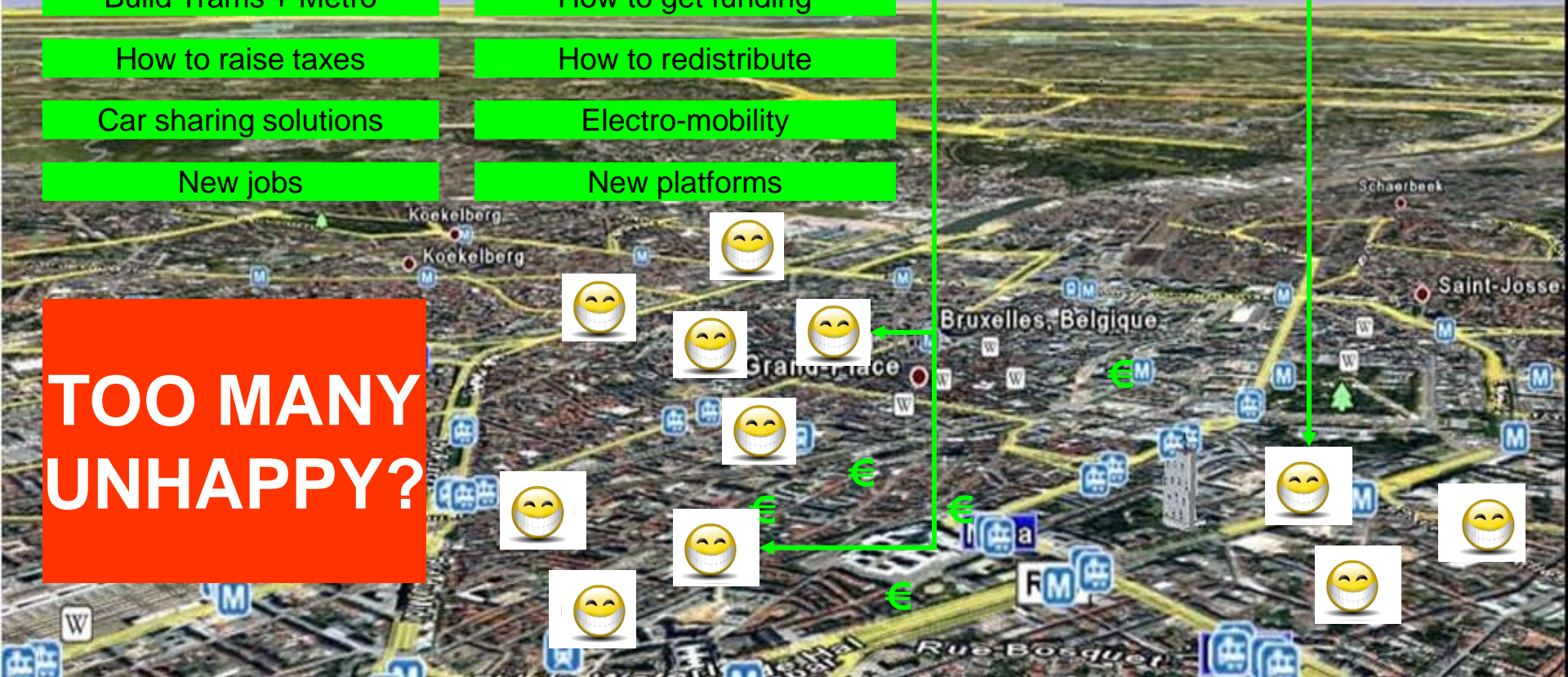
How to get funding

How to redistribute

Electro-mobility

New platforms

**TOO MANY UNHAPPY?**



# Concrete examples



## **Electronic Participation Tools for Spatial Planning and Territorial Development – CIP ICT PSP**

### **City State of Hamburg (Germany)**

Participatory Urban Planning in Seven City Districts (“Bezirke”)

### **University of Palermo (Italy)**

Recovery Plan of the “Maredolce” Castle in the Brancaccio District of Palermo

### **Four locations in Ulster (UK)**

Inclusion and Engagement in Policy Making of Elderly People from Rural Dwellings

# Concrete examples



## Developing Energy Life system

Wireless sensors and a smartphone that turns energy consumers into active players

Energy Life participants play through different levels collecting scores in savings and through advice tip reading and quizzes.

# Thank You

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