

**nextstation**  
PARIS 2007

**6 & 7 décembre 2007**

2<sup>ÈME</sup> CONFÉRENCE INTERNATIONALE  
SUR LES GARES FERROVIAIRES



**Next Station**

*2<sup>ème</sup> conférence internationale  
sur les gares ferroviaires*



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PARIS 2007

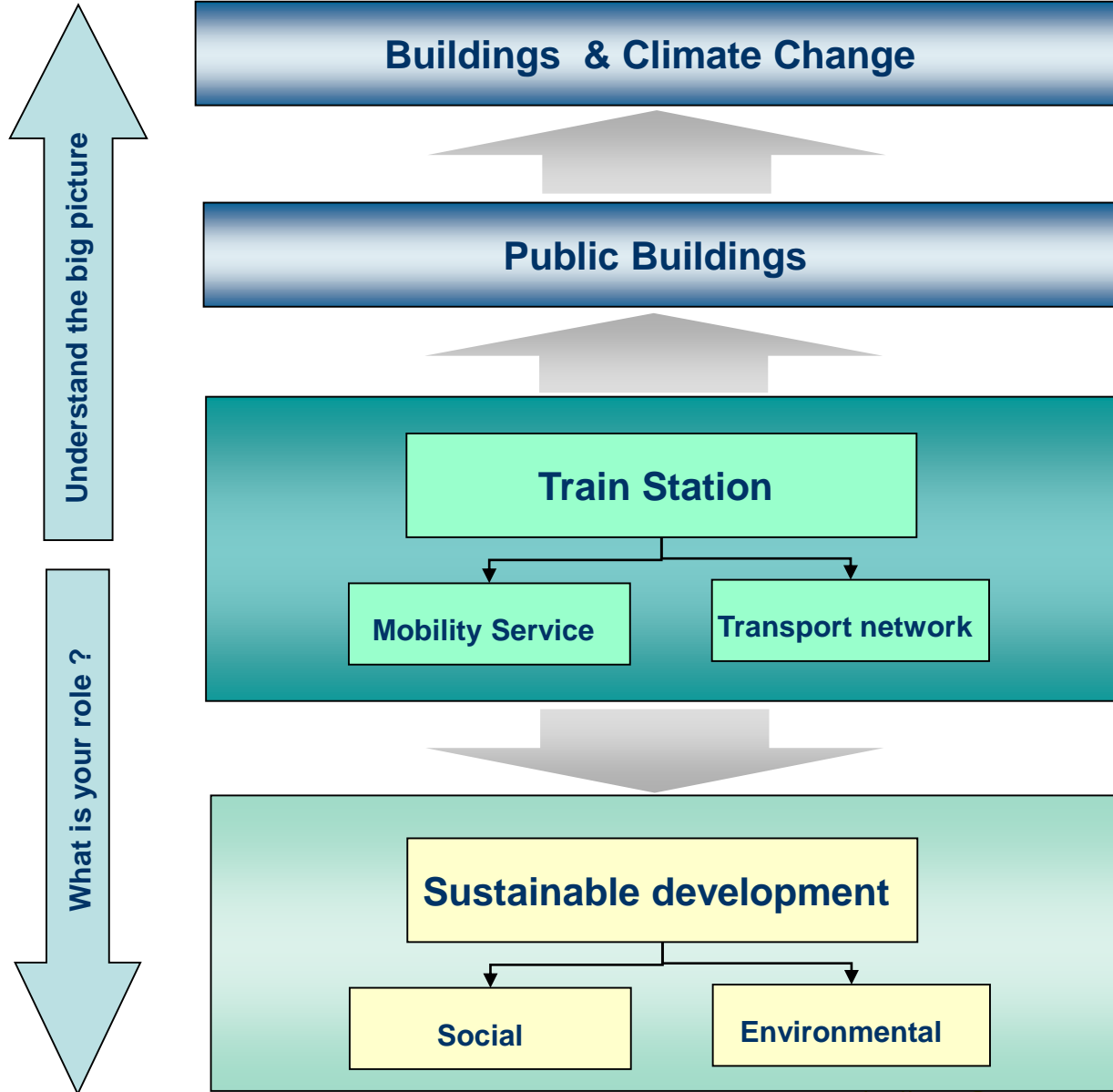
**6 & 7 décembre 2007**

2<sup>ÈME</sup> CONFÉRENCE INTERNATIONALE  
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# **Sustainable Development Perspectives in Train Stations**

***ERNEST Kamala  
Programme Officer  
United Nations Environment Programme (UNEP)***



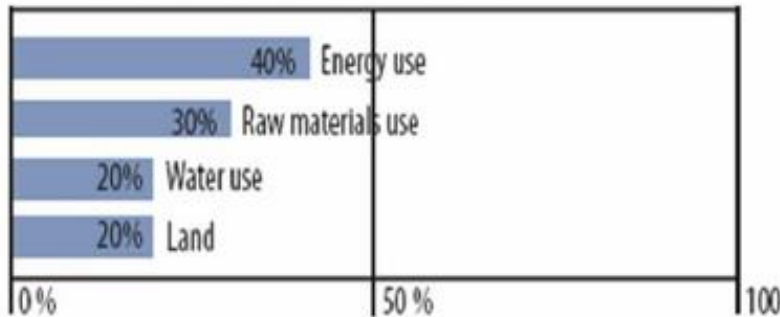


# The role of buildings in society

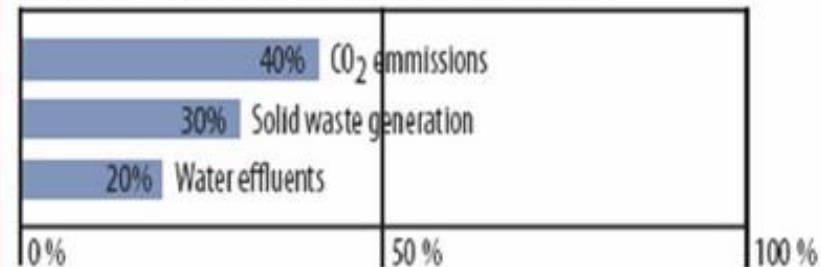
- Providing core services and functions in society (housing, work places, trade centers, health care, education, leisure, cultural profile etc)
- 5-15 % of direct employment
- Investment of US \$ 300 billion / annum (10% of GDP )

**BUT.....**

SHARE OF THE BUILT ENVIRONMENT IN RESOURCE USE

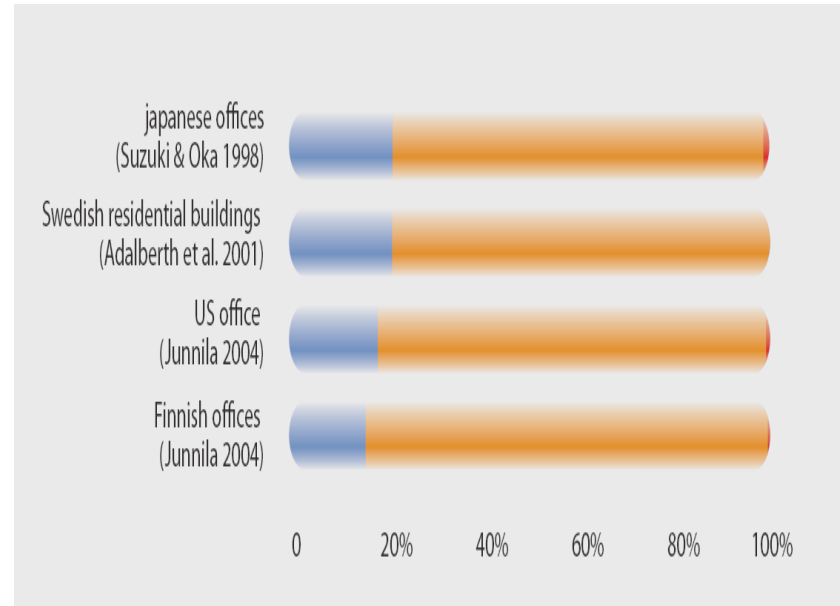


SHARE OF THE BUILT ENVIRONMENT IN POLLUTION EMISSION

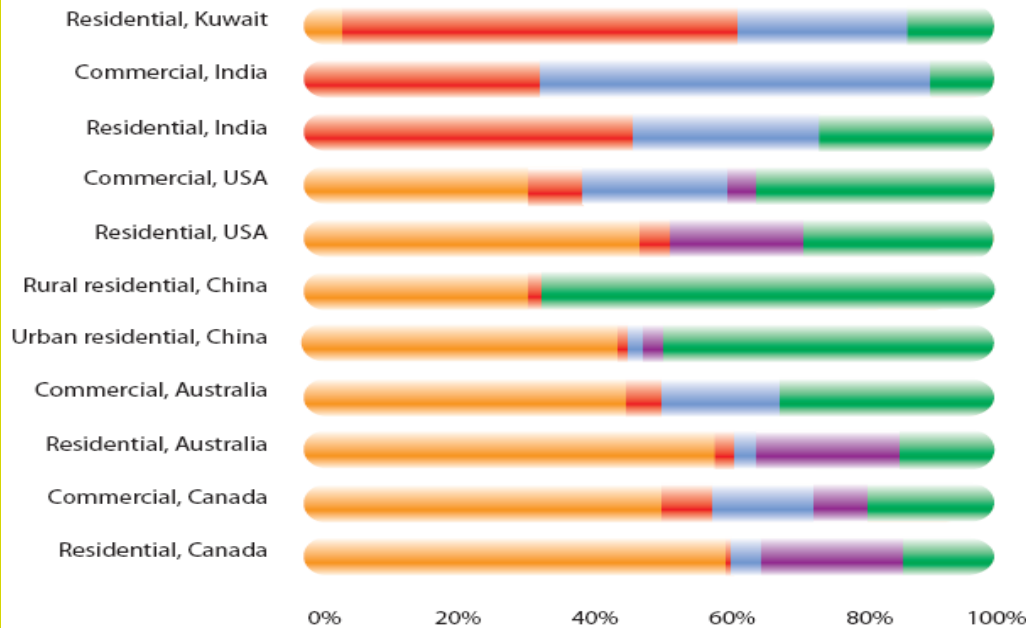


## The life cycle energy use

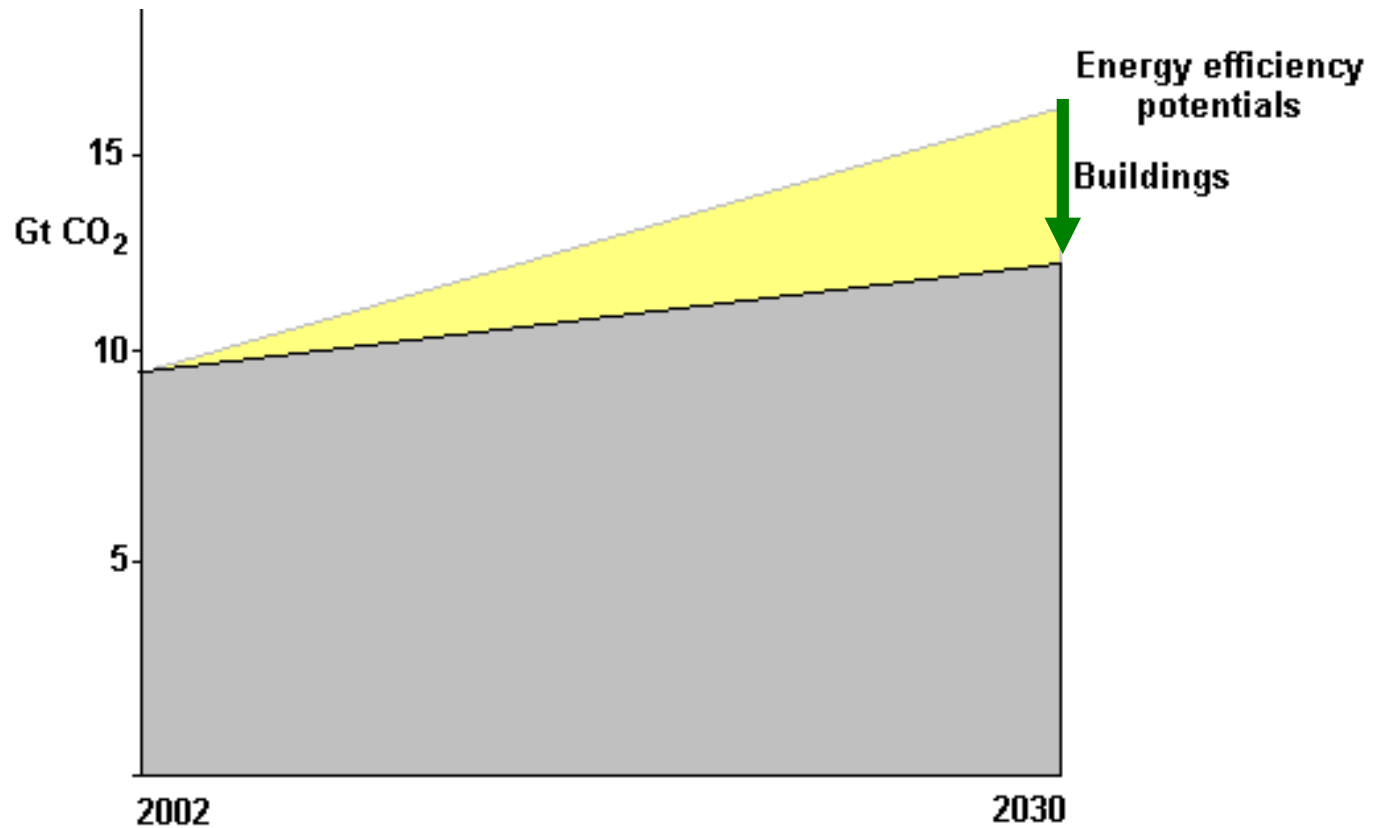
Energy is mainly used during the use of buildings, and only to a smaller part in manufacturing, construction and demolition of buildings.



## What energy is used for



## Potential emission reductions from additional electricity saving in Building sector at <US\$ 50 /t CO<sub>2</sub>



# The three big ones

Energy efficiency in buildings can mainly be achieved through three areas of intervention:

## 1. Building envelope

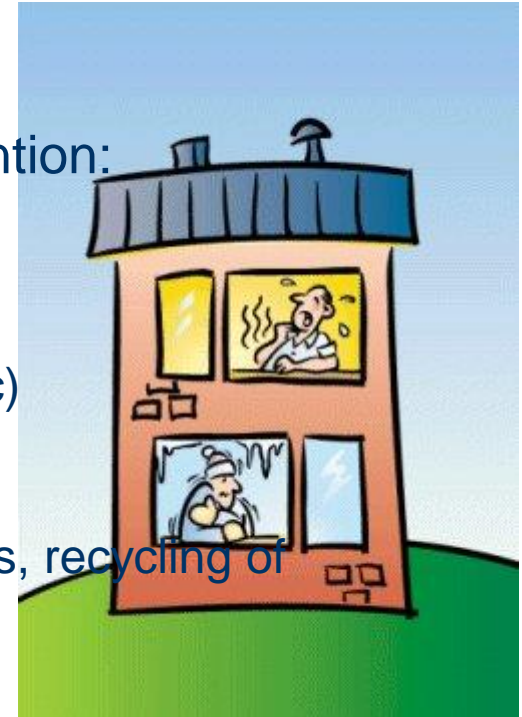
(wall insulation, windows, doors, outside shading, orientation of building, floor mtrls. etc)

## 2 Energy systems

(low energy HVAC, alternative energy sources, recycling of heat/cool loads, high efficiency bulbs etc)

## 3. Human behaviour

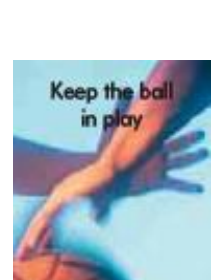
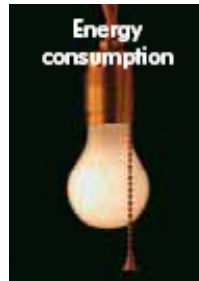
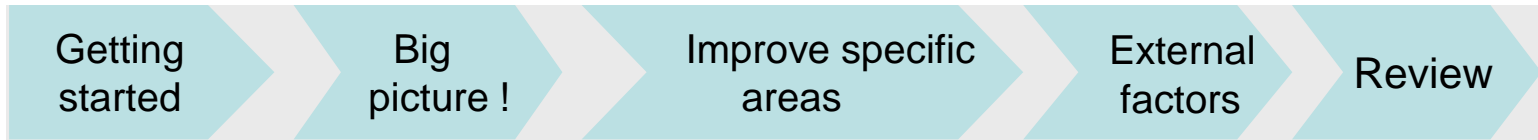
(awareness and education, individual or automatic room controls for energy systems and lights, lazy fallback standard controls etc)



**Building EE models available : LEO, ZEO, Passive buildings**



# Measure and improve your environmental performance every month





# Sustainable Buildings and Construction Initiative (SBCI)



- Partnership between the Private Sector and the United Nations (UNEP).
- Seeks to address common global challenges to sustainability in the B&C sector
- Builds on synergies with other initiatives.

## Focus Areas :

1. Climate Change: Qualify buildings and construction activities as eligible activities for support under the flexible mechanisms of the Kyoto protocol.
2. Economic incentives: Develop and promote economic incentives for a life cycle approach (LCA) in design, construction and financing of buildings, so as to create market conditions favourable to buildings that are optimized from a life cycle perspective.
3. Define global SBC benchmarks to allow stakeholders to identify and quantify benefits from sustainable buildings

## Members

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- Resilience
- Schneider Electric
- Skanska
- Sinotech
- US Green Building Council
- WGBC



# Thank you

## Contact information :

Kamala Ernest

United Nations Environment Programme

Division of Technology, Industry and Economics

15, Rue de Milan, 75441 Paris Cedex 09, FRANCE

Tel: +33144371632 Fax: +33144371474

E-mail: [kamala.ernest@unep.fr](mailto:kamala.ernest@unep.fr)

<http://www.unep.fr/energy>

