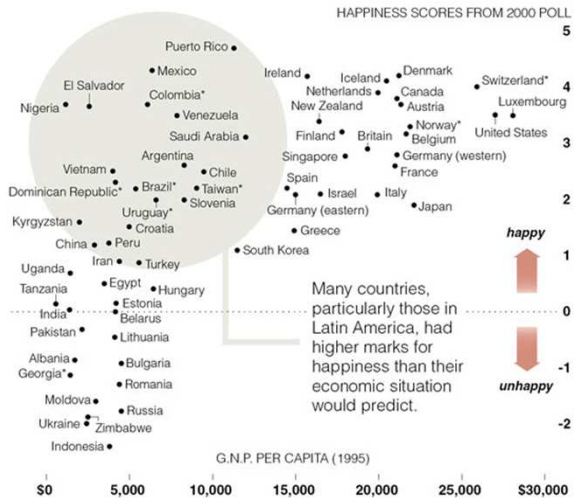




A Plateau of Happiness

A country's wealth may not always dictate the happiness of its people.

As part of the World Values Survey project, inhabitants of different countries and territories were asked how happy or satisfied they were. Below is a sampling of happiness rankings, along with economic status.

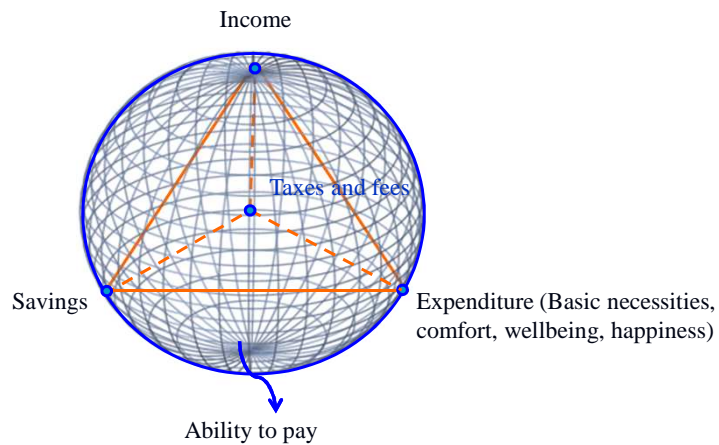


*Poll results for these countries were from 1995.

Source: Ronald Inglehart, "Human Beliefs and Values: A Cross-Cultural Sourcebook Based on the 1999-2002 Values Surveys"

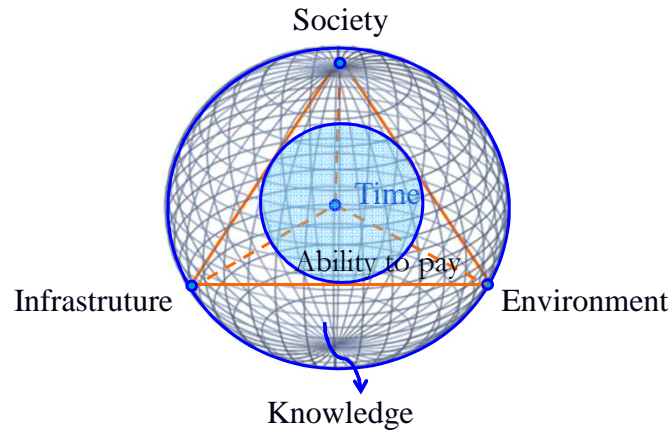


Ability to society pay (invest)





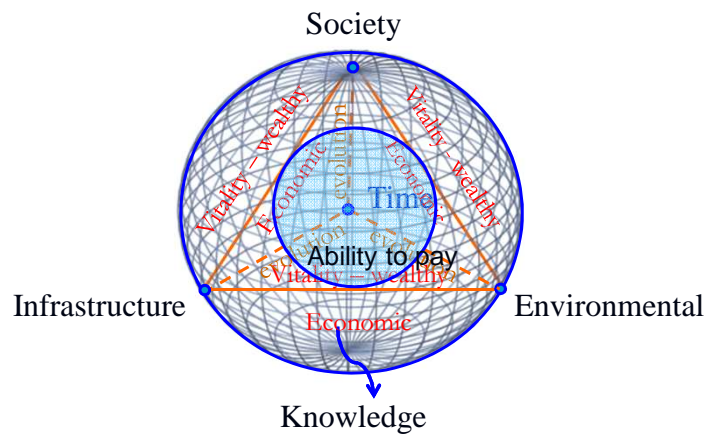
The six dimensions of sustainability



5



The six dimensions of sustainability and their interrelations



6



Buildings

❖ Globally, buildings are responsible for

- ❖ 40% of annual energy consumption
- ❖ Up to 30% of all energy-related greenhouse gas (GHG) emissions
- ❖ Collectively, this sector is responsible for one-third of humanity's resource consumption, including 12% of all fresh-water use
- ❖ Production of up to 40% of our solid waste.
- ❖ The sector also employs, on average, more than 10% of our workforce.

(Source: UNEP-SBCI)

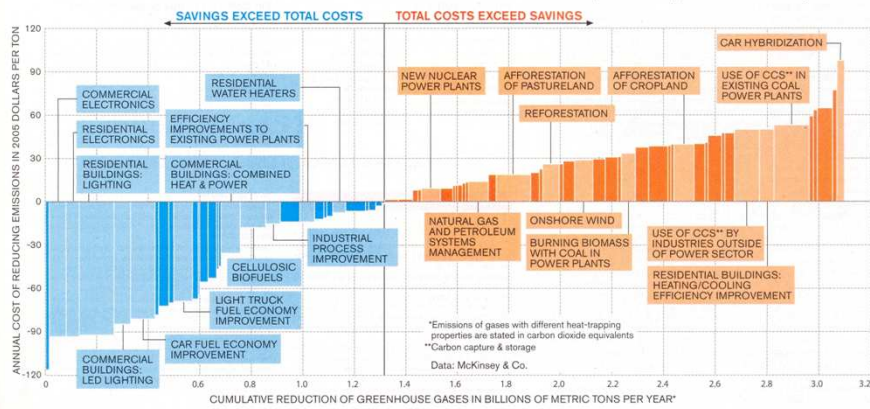
- ❖ Opportunity to reduce around 30% to 50%
- ❖ Use and operation phase > 80%

7



MEASURES AGAINST WARMING

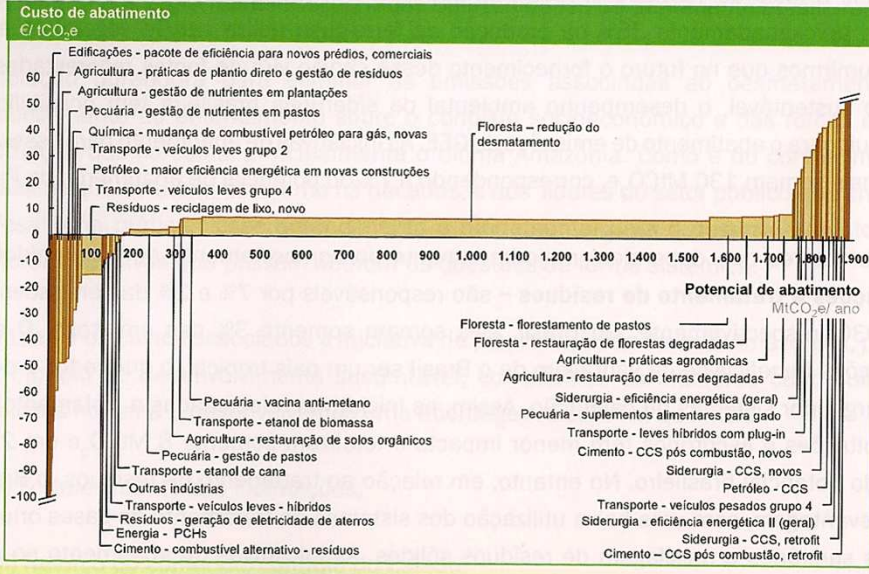
To cut greenhouse gases as cheaply as possible, start with the measures on the left that pay for themselves, then take the more expensive steps on the right. McKinsey says that doing all the things below, including those unlabeled, would cut 3 billion metric tons of emissions per year in 2030 vs. what they would be at current growth rates. That would put emissions below current levels. The width of each bar is the volume of emissions reduction, and the height is the cost in today's dollars.



MARCH 10, 2008 | BUSINESSWEEK

Fonte: McKinsey

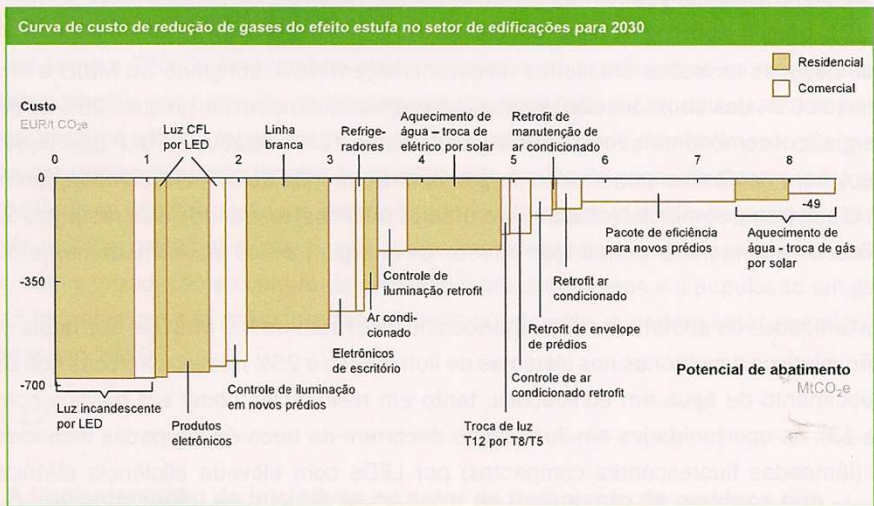
Curva de custo de redução de gases do efeito estufa do Brasil em 2030



FONTE: Global Abatement Cost Curve v2.0, estudo "Caminhos para uma Economia de Baixa Emissão de Carbono no Brasil"

O custo inclui a somatória dos investimentos e custos operacionais menos benefícios econômicos auferidos
 Fonte: McKinsey

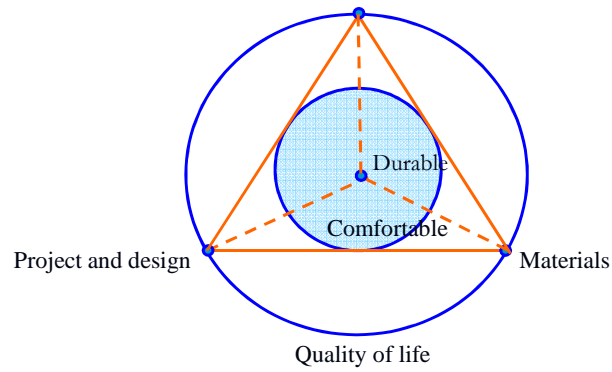
A implementação de iniciativas no setor de edificações tem potencial para reduzir as emissões em 8,5 MtCO₂e anuais em 2030



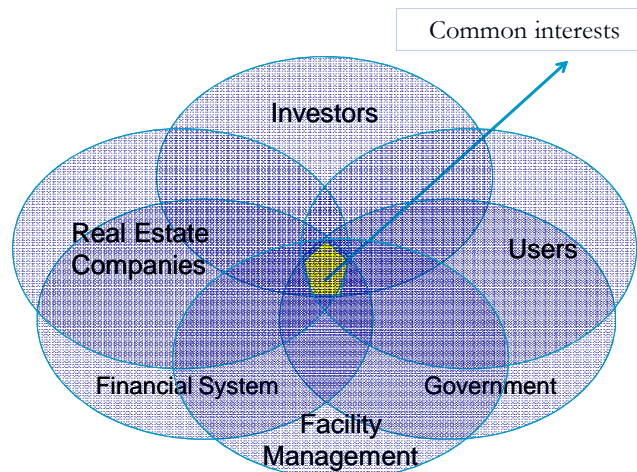
FONTE: Global Abatement Cost Curve v2.0, estudo "Caminhos para uma Economia de Baixa Emissão de Carbono no Brasil", IEA
 Fonte: McKinsey

Buildings

Efficiency in resource use (construction, use and operation, upgrading, demolition)
(Economic, social and environmental)

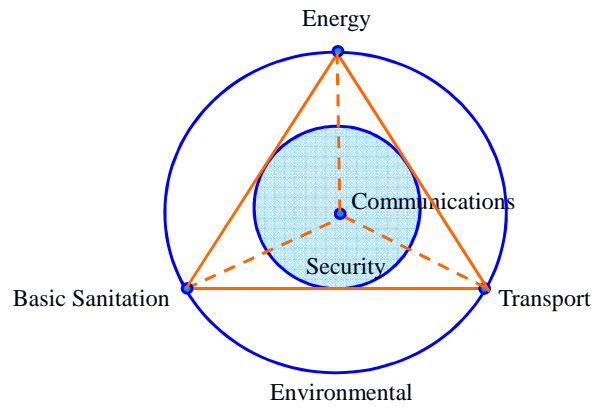


Stakeholders expectations





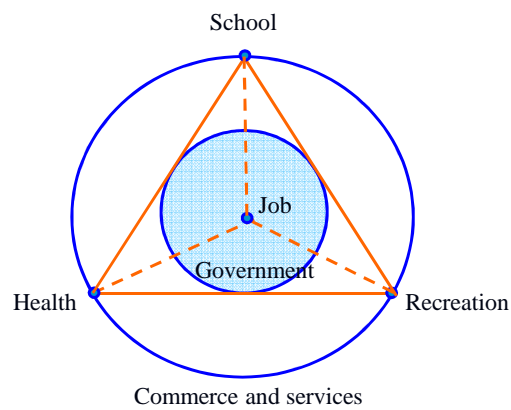
Urban Infrastructure (infrastructure)



13



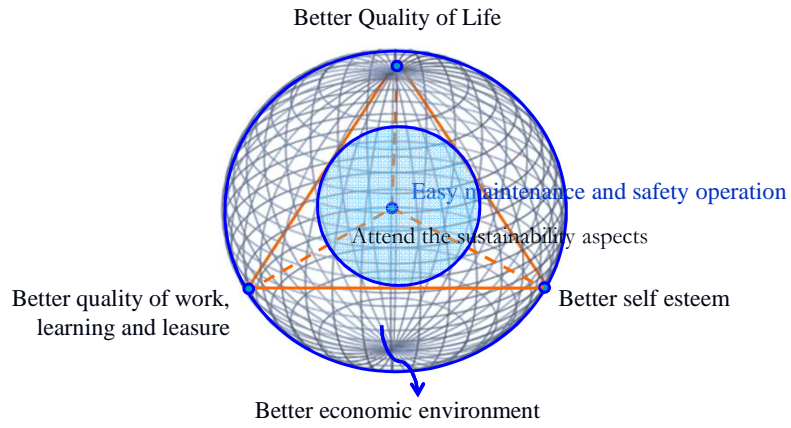
Urban Infrastructure (Urban equipment)



14



Results (vision) (integrated solutions)



15



Sustainability (Social)



16



Sustainability

The higher the efficiency of the design and deployment of these assets, it is possible to have lower costs of operation and administration of these assets and better results for its investors and users.