

# SUSTAINABILITY

Learning Activity: Reflections on Housing, Task: Identifying critical concepts,  
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Sustainable development is defined from 1987 UN conference as those that **"meet present needs without compromising the ability of future generations to meet their needs"**(WECD, 1987). Robert Gillman, editor of the In Context magazine, extends this goal oriented definition by stating **"sustainability refers to a very old and simple concept (The Golden Rule)...do onto future generations as you would have them do onto you."**

**Sustainable architecture is not so much a matter of a low energy performance coefficient or the use of ecologically sound materials.** Perhaps leasing, multifaceted buildings and neighbourhoods that challenge and stimulate us are more important than a low EPC. Buildings must resist the throwaway society so that they can continue functioning long into the future. By combining these attributes with architectural solutions to limit energy consumption and indeed to generate energy, it is these that will be the genuinely sustainable buildings.

*'Sustainable architecture should be sensual and emotional, not just rational. Sustainability isn't only about the sparing use of materials and energy, even if that is what most publications concentrate on. It also has important social, economic and cultural facets.'*  
*Ashok Bhalotra, Urban banner, director of Kuiper Compagnons*

Measures for **sustainable urban development**, divides into three sectors:

## **Urban design and technologies**

Architecture and environmental building  
Heat and electricity supply  
Water and journey management  
Waste reduction and recycling  
Green spaces, protection of the environment  
Urban climate, air quality  
Food supplies and health

## **Communication on environmental matters and local democracy**

Participation and responsibility of individuals concerned  
Information and consultation on the environment  
Creation of energy, water and waste agencies  
New housing and neighbourhood development models

## **Economics and environment**

Energy tax  
Pollution tax  
Payment according to consumption

Environmental accounting for businesses and institutions  
Employment creation in the environmental sector  
Environmental services, commercial and activity centres

*'Sustainable architecture is really effective when set in an urban planning context which itself is based on sustainable principles.'*

*Dominique Gauzin Muller*



## **Apartment building, Innsbruck**

### **Baumschlager and Eberle**

Two blocks of housing with a total sixty apartments. Technical installations produce an overall energy saving of some 70%, and the total building cost per dwelling is 20% less than for comparable apartments.

*This building really cares about ecology, is low cost, mass housing, cares about nature and environment like each sustainable house should do.*

- facade cladding - consists of narrow strips of oak wood  
- one central staircase - from each floor gives access to 8 dwellings

- heating - outside air is conducted through a system of conduits. The air can be blown to the apartments or heated further  
- rooftop solar collectors - they meet 70% of the water heating energy requirement



## **GWL Site, Amsterdam, Kees Christianse Architects and Planners**

*This sustainable project is combining a very high residential density, is ecology friendly and offers living of high quality.*

And ample greenery - private hedges mark off areas of greenery around the apartment blocks to form localized 'paradises', between which collective spaces are left. The disused water towers and a number of historic buildings are being restored. The tall blocks have green sedum roofs. Rainwater is used for flushing the toilets and there is a central combined heat and power plant for the whole site. Domestic waste is collected by means of metro system.