

# Geography Chapter 3

## Cities and sustainable development

### Introduction

- The majority of the global population lives in cities

The global urbanization rate is over 50 %

(Europe 75 %)

- Strong urban growth (population and space)



Overpopulation, pollution, traffic jams...

- Sustainable development a solution ?

Definition : «Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. »

Three pillars : economy, environment, society

**HOW TO DEVELOP SUSTAINABLE CITIES ?**  
**ARE ECO DISTRICTS A MODEL FOR SUSTAINABLE CITIES ?**

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### Cities and sustainable development

#### BedZED – Beddington Zero Energy Development - London

300 inhabitants – created in 2002 – cost 28 million dollars

18 kms from the city center

#### Environment

Zero carbon / zero waste /  
Energy efficient homes /  
Solar panels / bicycle and  
public transports

#### Society

Social mixity promoted  
(poorer inhabitants  
Regrouped = failure)

#### Economy

2500 m<sup>2</sup> of offices  
(transformed  
in appartements)

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**BedZED – Beddington Zero Energy Development - London**



Solar panels

Hothouses

15 m<sup>2</sup> garden  
per flat

Few parking lot (0.6 per flat) public  
transport and bicycles privileged

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### Cities and sustainable development

#### Valdespartera – Saragoza - Spain

30 000 inhabitants – finished in 2011 – cost 150 million dollars

7 kms from the city center

#### Environment

**Solar panels / minimal energy  
Consumption / public transports  
and bicycle / modern waste  
Management / green spaces**

#### Society

**97 % of social housing**

#### Economy

**Only public workers**

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### Valdespartera – Saragoza - Spain

7 kms from the city center



A district isolated from the city center ?

The « ideal city » caught up with the reality of environmental unconsciousness ?

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#### Masdar – Abu Dhabi - UAE

40 000 inhabitants – finished in 2011 – cost 30 000 million dollars

17 kms from the city center

#### Environment

100 % renewable energy / solar panels  
Windmills / electric cars /  
pneumatic trains /  
traditionnal architecture

Society  
none

#### Economy

70 000 workplaces  
Researchers / University

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## Cities and sustainable development

### Masdar – Abu Dhabi - UAE



The dream  
of Masdar...

... the reality  
of Abu Dhabi



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### Cities and sustainable development

#### Definition of eco-district

An eco district or neighborhood is a part of a city built in accordance with the sustainable development principles, to reduce the ecological footprint. They are located on former unoccupied spaces inside the city to avoid the spatial expansion of the city.

**Society** : the social balance is important and social housings are promoted to create a social mixity. The population is associated to the creation of the district.

**Environment** : Preservation of natural resources. Many green spaces, few cars and many low carbon transports (bicycle, public transports...), low energy consumption buildings, specific waste and water managements, renewable energies are favoured (solar panels and windmills).

**Economy** : It must be a place with economic activities (firms, shopping areas...) to avoid long travel between work and home.