SUSTAINABLE ARCHITECTURE
SUSTAINABLE ARCHITECTURAL DEVELOPMENTS

SUSTAINABLE CITIES

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THE CITY

Human settlement

Provides…

Government organisation

security

transportation

housing

culture

science

relationships

business

sanitation

amenities

FACTS AND FIGURES

Half of humanity – 3.5 billion people – lives in cities today

By 2030, almost 60% of the world population will live in urban areas

95% of urban expansion in the next decades will take place in developing countries

828 million people live in slums today and the number keeps rising

The world's cities occupy 3% of the Earth's land, but account for 60-80% of energy consumption and 75% of carbon emissions

Rapid urbanization is exerting pressure on fresh water supplies, sewage, the living environment, and public health

FACTS AND FIGURES

HOW DID WE GET TO THIS POINT?

VIDEO

https://www.youtube.com/watch?v=fKnAJCSGSdk

CITY PROBLEMS NOWADAYS

Globalization

Developmentalism

Pollution

Traffic/transport

Housing

Services (health, education, etc.)

Supplies (food, water, energy, sewage)

Waste

Separation of urban uses

Land footprint

Participation

Corruption

Historic centre desertion

Tourism

Overcrowded

Growing complexity

SUSTAINABLE CITIES

Also referred as Sustainable Urban Developments or Sustainable Communities

"Sustainable communities are defined as **towns and cities** that have taken **steps** to remain **healthy over the long term**. Sustainable communities have a strong sense of **place**. They have a **vision** that is **embraced and actively promoted** by all of the key sectors of **society**, including businesses, disadvantaged groups, environmentalists, civic associations, government agencies, and religious organizations. They are places that build on their assets and dare to be **innovative**. These communities value **healthy ecosystems**, use **resources efficiently**, and actively seek to retain and enhance a **locally based economy**. There is a pervasive **volunteer spirit** that is rewarded by concrete results. **Partnerships** between and among government, the business sector, and nonprofit organizations are common. **Public debate** in these communities is engaging, inclusive, and constructive. Unlike traditional community development approaches, sustainability strategies emphasize: the whole **community** (instead of just disadvantaged neighborhoods); **ecosystem protection**; meaningful and broad-based **citizen participation**; and **economic self-reliance**."
- *Institute for Sustainable Communities*

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SUSTAINABLE CITIES

Four main domains developed

ECOLOGY

ECONOMICS

POLITICS

CULTURE

SUSTAINABLE CITIES

SUSTAINABLE DEVELOPMENT GOALS. GOAL 11 TARGETS

http://www.undp.org/content/undp/en/home/sustainable-development-goals/goal-11-sustainable-cities-and-communities/targets/

EUROPEAN SUSTAINABLE CITIES

1994. 1ST Conference of European Sustainable Cities

Aalborg Charter
Part I. Consensus Declaration: European Cities and Towns Towards Sustainability
Part II. The European Sustainable Cities and Towns Campaign
Part III. Engaging in Local Agenda 21 Processes: Local Action Plans Towards Sustainability

2004. 4th Conference of European Sustainable Cities Aalborg+10

Aalborg Commitments

2016. 8th Conference of European Sustainable Cities (Basque Country)

The Basque Declaration

http://www.sustainablecities.eu/fileadmin/repository/Basque_Declaration_New_Email_Address/Basque-Declaration-ENGLISH-print_NO_Marks.pdf

EUROPEAN SUSTAINABLE CITIES

From here there is a wide range of initiatives…

http://www.sustainablecities.eu/local-sustainability-frameworks/

OTHER PROPOSALS

https://ecocitybuilders.org/

Eco-Cities

Founded in Berkeley, California (1975) by Richard Register
Reconstruction of cities in balance with nature

Origins of further movement of Urban Ecology

International Eco-City Conference. First in California (1990), last in Melbourne (2017).

OTHER PROPOSALS

Slow Cities

"Live slow". Slow food, slow schools, slow living
Traditions and traditional ways of doing things
Against an homogenised world
Less traffic, less noise, fewer crowds
Not applicable to towns or cities with more than 50,000 inhabitants

http://www.slowmovement.com/aboutus.php

OTHER PROPOSALS

Transition Cities

The community organises itself to take responsibility of their own future
Community-led economy

Principles:

- Resilience
- Inclusivity and social justice
- Self-organisation and decision making
- Balance: Reflection, celebration and rest
- Visioning and creativity
- Network

https://transitionnetwork.org/

Transition near me MAP

OTHER PROPOSALS

Low Carbon Cities

Promotion of urban development strategies to reduce carbon emissions

https://www.carbontrust.com/low-carbon-cities/

OTHER PROPOSALS

Smart Cities

Information and communication technologies
Increase operational efficiency
Share information with the public
Improvement of government services and citizen welfare

https://www.youtube.com/watch?v=Br5aJa6MkBc

Trends:

- Automation
- Machine learning
- Internet of Things (IoT)