

Determination and Analysis of Factors Enabling the Development of an

Eco-City

Data of Your Paper

Topic

Energy

Title of the Paper

Determination and Analysis of Factors Enabling the Development of an Eco-City

Form of Presentation

Presentation

Short Description (maximum 2500 characters)

A sustainable city, or eco-city is a city designed with consideration of environmental impacts, inhabited by people and is dedicated to minimizing the requiring input energy, water and food waste, air pollution - CO₂, methane, and water pollution.

In recent years many cities around the world have invested hundreds of millions to develop new technologies that contribute to the overall transformation into eco-cities.

The creation an eco-city requires strategy:

Diagnosis, adoption of specific objectives, intervention tools and rational methods.

Assessing the effectiveness of the adopted strategy is an essential ingredient of the entire effort.

Ecoefficiency(economic and ecological) is a promising path for vision and commitment of cities willing to move towards sustainable development.

Ecoefficiency demands more and better with less impact on the environment. It is achieved by the delivery of competitively priced goods and services that satisfy quality of life, while progressively reducing resource intensity and ecological impact through the life cycle. Energy intensity, material minimization, service intensity of goods, minimization of the toxic dispersion, enhancement of the life cycle and maximization of the use of renewable resources are key criteria for eco-efficiency.

This article introduces some significant environmental guidelines to the creation of an "eco- city" and examines their effectiveness.

In the context of sustainable waste management, it is suggested sorting and recycling and their effectiveness is examined. These procedures are estimated to bring, except of economic benefits, significant benefits by reducing the environmental impacts resulting from the treatment and disposal and extend the value of raw materials, maximizing the value derived from their exploitation.

The use of photovoltaic systems utilizing solar energy is a viable strategy which contributes to the reduction of both private and municipal costs and minimizes the environmental impacts.

A case study in the Municipality of Nafpaktos illustrated the effectiveness of the above.