# **Sustainable Urban Development**

# INTRODUCTION

- This Sustainable Urban Development training seminar is focused on planning, development and sustainability of urban centers which are existing or being developed, as they all share same or similar characteristics, which are: high concentration of people on a limited space, high requirement for transportation, dependence on outside resources and creation of pollution and waste.
- As the challenges mount the sustainability of these urban centers is challenged as they need to invest more and more in tackling the issues. This training course is designed to present the students with the solutions for these problems with focus on developing urban environments in a way that will make them sustainable in terms of living, transportation, climate-change and finances.

This training seminar will highlight:

- Urban planning principles
- Influence of urban development on people lives and habits
- Transportation requirements for people and goods
- Influence of globalization on urban landscape
- Climate change and financial sustainability of urban centers

# **OBJECTIVES**

• This Sustainable Urban Development training course is focused on providing the delegates with the adequate knowledge of the issues arising within the urban development and the solutions of the issues which the existing cities are facing. As the world becomes more mobile and globalized, and the areas of the world whiteness exponential growth, the issues with the livability of the cities becomes a frustrating problem of the urban planners, as the growth of the population inevitably leads to the problems with the required space and transportation within the cities.

## At the end of this training seminar, you will learn to:

- Properly asses demographic of the cities
- Adequately determine possible settlement transitions associated with urban development
- Determine policies for ensuring energy security in urban development
- Chart and develop pathways to sustainable road transport
- Recognize influence of automated rail on urban mobility
- Develop methods for ensuring financial sustainability of urban development

# TRAINING METHODOLOGY

• This training course will use proven adult learning techniques, with the focus on case studies and solving of actual problems through the guided examples. Instructor will use theoretical basis, extended onto the practical examples of success and mistake stories, backed up with the videos and tabletop exercises.

# **ORGANISATIONAL IMPACT**

- The urban design and development has achieved a peak point as the cities are developing at enormous rates, however, this growth puts a high level of strain on the urban planners and developers, and their focus is usually limited onto the development of the specific part of the urban environment, whereby other influencing factors are diminished or even ignored, thus creating the problem of sustainability of these urban blocks as they become the part of the larger urban environment. The mobility gets largely affected with the urban development and the immediate influx of settlers with their own habits and approach to transport and urban living creates a problem for sustaining the growth of the urban centers.
- The approach where the construction of one residential area is the source of funds for the next residential areas becomes widespread and the stall in further development creates sometimes reverberating impact on the financial sustainability of the cities, affecting their development and livability. Organizations and institutions involved in urban planning and development will greatly benefit from having their people knowledgeable about the issues related to the sustainability of urban development as they would be able to avid shocks of the market and regain or preserve sustainable growth.

# PERSONAL IMPACT

• The urban planning is the art of managing a process concerned with the development and design of land use and the built environment, including air, water, and the infrastructure passing into and out of urban areas, such as transportation, communications, and distribution networks, and the people who can provide the solutions that will avoid the pitfalls of pollution, high maintenance costs, traffic congestion, and financial sustainability are the ones who will be in the high demand, therefore learning the techniques of sustainable urban development will not only enhance the knowledge of the students but also provide the strong basis for their carrier development.

# WHO SHOULD ATTEND?

- This Sustainable Urban Development training course is designed for decision makers and planners within the political, technical, transport, financial and environmental sectors.
- Urban Planners
- Transportation Engineers
- Policy Makers
- Rail transport Professionals
- Environmental Engineers
- Financial Managers
- Supply Chain Managers

• Professionals involved in the planning and maintaining the city infrastructure

## **Course Outline**

#### Sustainable Urban Development Introduction

- Cities of the Past and Cities of the Future
- Housing
- Transportation
- Infrastructure
- Ecology
- Policy and Governance of Urban Planning
- Examples of Sustainable Urban Planning for the Cities

### Influence of Urban Growth on Sustainability

- Growth Models
- Urban Demographics and Settlement
- Capacity Planning for Urban Infrastructure
- Scarcity of Natural Resources for Urban Centers
- Sustainable Living Environment Planning
- Dealing with the Remnants of the Past

#### The Sustainability of Economics

- Housing Bubbles
- Risky Models of Urban Development Financing
- Painful Lessons of Economic Slowdown
- Financial Sustainability of Urban Development
- Ensuring the Financing of Critical Services

## Sustainable Mobility

- Sustainable Road Transport
- Capacity Planning
- Parking Issues
- Reserve Capacity
- Rail Transport
- Water Transport
- Air Transport
- Multimodal Transport
- Resources and Delivery Planning

Sustainable Urban Development in the Age of Digital Technologies

- Use of Data for Urban Planning
- Development of Smart Cities
- Use of Simulation for Creating the Digital Twins of the Cities
- Centralized Traffic Monitoring and Control
- Assurance of Compliance