



Green Logistics

Course Venue: Turkey - Istanbul

Course Date: From 4 Oct 2020 To 29 Oct 2020

Course Place: Taksim Square

Course Fees: 22200 GBP



Introduction

The main objective of logistics is to co-ordinate the movement of products through the supply chain in a way that meets customer requirements at minimum cost. In the past this cost has been defined in purely monetary terms. As concern for the environment rises, companies must take more account of the external costs of logistics associated mainly with climate change, air pollution, noise, vibration and accidents.

On completion of this practical course you should be able to:

- Analyze the environmental consequences of logistics and understand how to deal with them.
- Examine ways of reducing the externalities and achieve a more sustainable balance between economic, environmental and social objectives.
- Gain a wide knowledge on green logistics research and discuss its model.
- Determine and assess the external impact of freight transport and measure the environmental impact.
- Discuss the framework for assessing the environmental impact of warehouses and examine ways of reducing the environmental impact.
- Identify and discuss the role of government in promoting green logistics.

Course Outline

Module 1: Assessing The Environmental Effects Of Logistics

Environmental Sustainability: A New Priority For Logistics Managers

- A brief history of green logistics research
- Green logistics: rhetoric and reality
- Future scenarios
- A model for green logistics research

Assessing The External Impacts Of Freight Transport

- External impacts
- Environmental standards
- Measuring the environmental impact of freight transport

Carbon Auditing Of Companies, Supply Chains And Products

- Guidelines for carbon foot printing
- The carbon foot printing process
- Success factors in carbon foot printing

Case Study: Carbon Auditing Of Road Freight Transport Operations In The UK

Evaluating And Internalizing The Environmental Costs Of Logistics

- Arguments for and against the internalization of environmental costs
- Monetary valuation of environmental costs
- Internalization of the external costs imposed by road freight vehicles in the UK

Module 2: Strategic Perspective



Restructuring Road Freight Networks Within Supply Chains

- Traditional network design
- Green network design
- Uncertainty in transport and supply chains
- Uncertainty mitigation approaches in road freight transport networks
- Gaps in our understanding and priorities for research
- Consequences and conclusions

Transferring Freight To 'Greener' Transport Modes

- Characteristics of the main freight transport modes
- Environmental impacts of the main freight transport modes

Case Study: Container Train Load Factors

- The policy framework
- Examples of measures aimed at achieving modal shift for environmental benefit
- Rail and water industries

Development Of Greener Vehicles, Aircraft And Ships

- Road freight
- Rail freight operations
- Air freight
- Shipping

Reducing The Environmental Impact Of Warehousing

- Scale of the environmental impact
- Increasing resource intensity
- Framework for assessing the environmental impact of warehouses
- Ways of reducing the environmental impact

Module 3: Operational Perspective

Opportunities For Improving Vehicle Utilization

- Measuring vehicle utilization
- Factors affecting the utilization of truck capacity

Optimizing The Routing Of Vehicles

- Vehicle routing problems
- Types of problem
- Environmental impact

Increasing Fuel Efficiency In The Road Freight Sector

- Fuel efficiency of new trucks
- Vehicle design: aerodynamic profiling
- Reducing the vehicle tare weight
- Vehicle purchase decision
- Vehicle maintenance
- Increasing the fuel efficiency of trucking operations



- Benchmarking the fuel efficiency of trucks
- More fuel-efficient driving
- Fleet management

Reverse Logistics For The Management Of Waste

- Waste management in the context of reverse logistics
- The impact of waste treatment legislation
- Reuse, refurbishment markets and take-back schemes
- Managing waste as part of a sustainable reverse process

Module 4: Key Issues

The food miles debate: is shorter better?

- Transport and GHGs: is further worse?
- Transport, the second-order impacts and the implications for GHGs
- Local versus global and the self-sufficiency question

Sustainability Strategies For City Logistics

- Urban freight research and policy making
- Efficiency problems in urban freight transport
- Urban freight transport initiatives
- Urban consolidation centers
- Joint working between the public and private sectors
- Environmental zones

Benefits And Costs Of Switching To Alternative Fuels

- Market developments of alternative fuels
- Current use of alternative fuels in the freight industry
- The future

E-Business, E-Logistics And The Environment

- Business-to-business (B2B)
- Business-to-consumer (B2C)
- Restructuring of the supply chain
- The future
- Public policy perspective

Module 5: The Role Of Government In Promoting Green Logistics

- Objectives of public policy on sustainable logistics
- Policy measures
- Reducing freight transport intensity
- Shifting freight to greener transport modes
- Improving vehicle utilization
- Increasing energy efficiency
- Cutting emissions relative to energy use
- Government-sponsored advisory and accreditation