Lecture 1: Introduction

Waste Management and Recycling -Introduction

Waste management

Waste management includes

- the collection and transport of waste
- recovery of waste
 - Separation
 - Further use of materials
 - Use of energy content
- disposal of waste
 - Rendering the waste harmless
 - Permanent deposition
- supervision of such operations
 - Regional environmental centres
 - Municipal environmental authority
 - o Yourself!
- after-care of disposal sites



KUN POISTAT KÄYTÖSTÄ VANHOJA LAITTEITA KIERRÄTYKSEEN, MUISTATHAN POISTAA NIISTÄ YLIMÄÄRÄISET ESINEET KUTEN PÖLYIMUREISTA PÖLYPUSSIN...

Waste Policy in Finland

- Is in line with the EU waste policy
- Sets the wider perspective to waste management actions and legislation in Finland
- **Prevention**: The production and harmful impacts of wastes should be reduced and wherever possible prevented at source.
- The Polluter Pays: The producers of wastes take responsibility for the costs of waste management.
- **Producer Responsibility:** Manufacturers and importers of certain product types must bear the responsibility for the management of their products when they become wastes, instead of waste producers.
- The Precautionary Principle: Potential problems related to wastes and waste management should be anticipated and avoided.
- The Proximity Principle: Wastes should be disposed of near to their source.
- The Self-sufficiency Principle: The EU and member states should remain self-sufficient with regard to the disposal of wastes.

Waste policies

European Union's 3 principles prevent - recycle and re-use and improve final disposal

1. Waste prevention:

- If we can reduce the amount of waste generated in the first place and reduce its hazardousness by reducing the presence of dangerous substances in products, then disposing of it will automatically become simpler. (EU REACH)
- Waste prevention is closely linked with improving manufacturing methods and influencing consumers to demand greener products and less packaging.

The 4 R concept

Sound use of natural resources according to sustainable development guidelines

Sound Material cycle Mass consumption The 4R concept Society society **Included** in the Finnish - Integration of environment - Mass production Waste policy and economy - Mass consumption - Promotion of 3Rs - reduce. Reduce - Mass disposal П reuse and recycle Reuse Π - Proper management of Recycle wastes Π Recover Π - Increased burden on the - Reduced burden on the environment environment - Increased use of natural - Minimized use of natural resources resources

Practising the 4 R concept

• Reducing waste requires activities in the whole product chain and planning of durable products.

