





Module 4 – Conflict Resolution in the Agro-food sector

Topic 2: Digital transformation and active listening

SESSION 2

“ Introduction

Digital transformation has impacted each and every sector and industry, including the agro-food and waste management.

In this session, we are going to have a general overview over the **means and objectives** of this digital transformation on the **waste management sector** and its main drivers and inhibitors.






Outline

A- Digital transformation in waste management – an overview

B- The drivers and inhibitors

An aerial photograph of a small, white motorboat with a blue cabin, floating on a vast expanse of dark blue, textured water. The boat is positioned on the left side of the slide, near the vertical edge.

A- Digital transformation in waste management



A- Digital transformation in waste management

Robotics

Pneumatic sorting (automation technology) produces waste streams of high purity.



A- Digital transformation in waste management

Robotics (Example)

Robots can sort recyclables through image recognition and IR scanning when dismantling used electronics.



A- Digital transformation in waste management

Artificial intelligence

For classification and pattern recognition in the waste management context, improving the efficiency of sorting.



A- Digital transformation in waste management

**Artificial
(Example)**

intelligence

Self-driving street sweepers



A- Digital transformation in waste management

Staying connected

Containers with sensors can collect data and transfer it to central units.



A- Digital transformation in waste management

Staying connected (Example)

Smart bins with sensors and smart systems.



A- Digital transformation in waste management

Data analytics

To identify patterns and extract information.



A- Digital transformation in waste management

Data analytics (Example)

E-disposition of waste collection vehicles



A- Digital transformation in waste management

Data analytics (Example)

E-disposition of waste collection vehicles
Control of waste incineration plants.

An aerial photograph of a sailboat on a dark blue, textured body of water. The boat is white with a blue stripe and is positioned on the left side of the slide.

B- The drivers and inhibitors



B- Drivers and inhibitors

Drivers

Increasing waste amount and cost pressure



B- Drivers and inhibitors

Drivers

Climate crisis and the need to preserve the environment



B- Drivers and inhibitors

Drivers

Urbanisation



B- Drivers and inhibitors

inhibitors

Lack of digital literacy



B- Drivers and inhibitors

inhibitors

Investment costs



B- Drivers and inhibitors

inhibitors

Security issues



B- Drivers and inhibitors

inhibitors

Missing digital ecosystems



B- Drivers and inhibitors

Opportunities

Extended producer responsibility

Pull towards circular economy

Thank you



Contact us

www.enicbcmmed.eu/projects/mysea

The Lebanese Development Network (LDN)

Jal El Dib, Garden Building

Beirut - Lebanon

P.O.Box: 60-374 Jal El Dib, Lebanon

Tel: +961 4 716 433

Website: www.ldn-lb.org

Email: info@ldn-lb.org

Centro Informazione Educazione allo Sviluppo (CIES) Onlus

Via Merulana 198 - 00185

Rome - Italy

Tel. +39 06 77264636 / +39 06 77264638

Website: <https://www.cies.it/progetti/mysea/>

Emails: mysea.communication@cies.it

mysea.coordination@cies.it