



WASTECOSMART

**Increasing regional innovation capacities
for resources efficiency and integrated
waste management through cooperation,
research and technological development**

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WASTECOSMART stands for "Optimisation of Integrated Solid Waste Management Strategies for the Maximisation of Resource Efficiency" and has received funding from the European Union's Seventh Framework Programme for research, technological development and demonstration under grant agreement no 319969.

Resource efficiency: Europe's challenges

- ▶ Demand for materials exceeds ability of generating what Europe needs
- ▶ Import 6 times more resources than export
- ▶ Threat of shortages in primary materials
- ▶ Loss of 60% of 3 billion t/a of solid waste to landfill and incineration



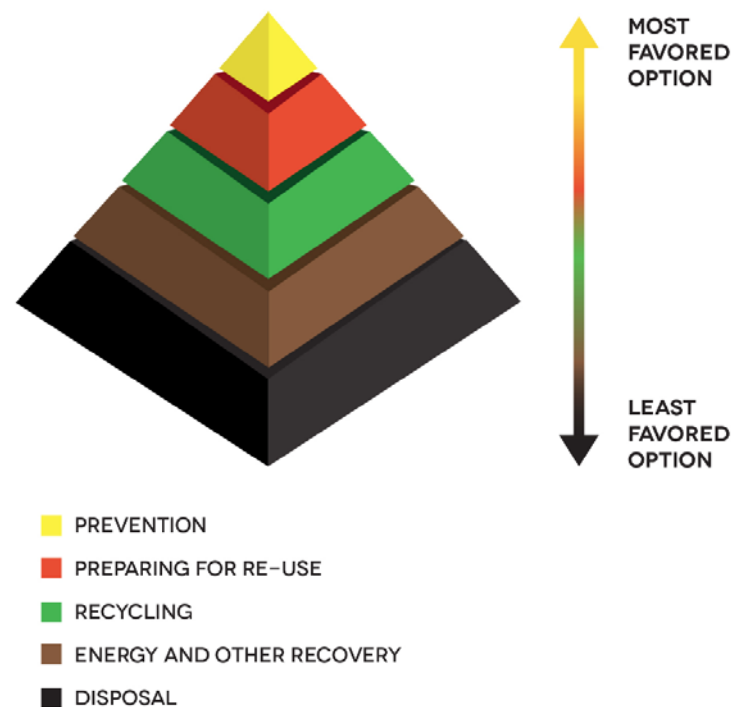
Resource efficiency: Europe's opportunities

- ▶ 1998-2007: 19-38% increased recycling rate
- ▶ Solid Waste management and recycling industry today
 - Turnover: 137 billion Euro
 - Jobs: over 2 million
- ▶ With 70% recycling
 - Jobs: + 0.5 million



Towards resource efficiency

- ▶ 2008: Waste Framework Directive
 - Five-step waste hierarchy
- ▶ 2011: Resource Efficient Europe flagship initiative



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The partnership

► Six regional triple helix clusters

- Science
- Industry
- Public sector



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Objectives

- ▶ To promote **transnational cooperation** of research-driven waste management clusters
- ▶ To strengthen and to increase the **innovation capacity of regional research-driven clusters in resource efficiency**
- ▶ To foster **research and technological development** within the waste sector



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Joined actions

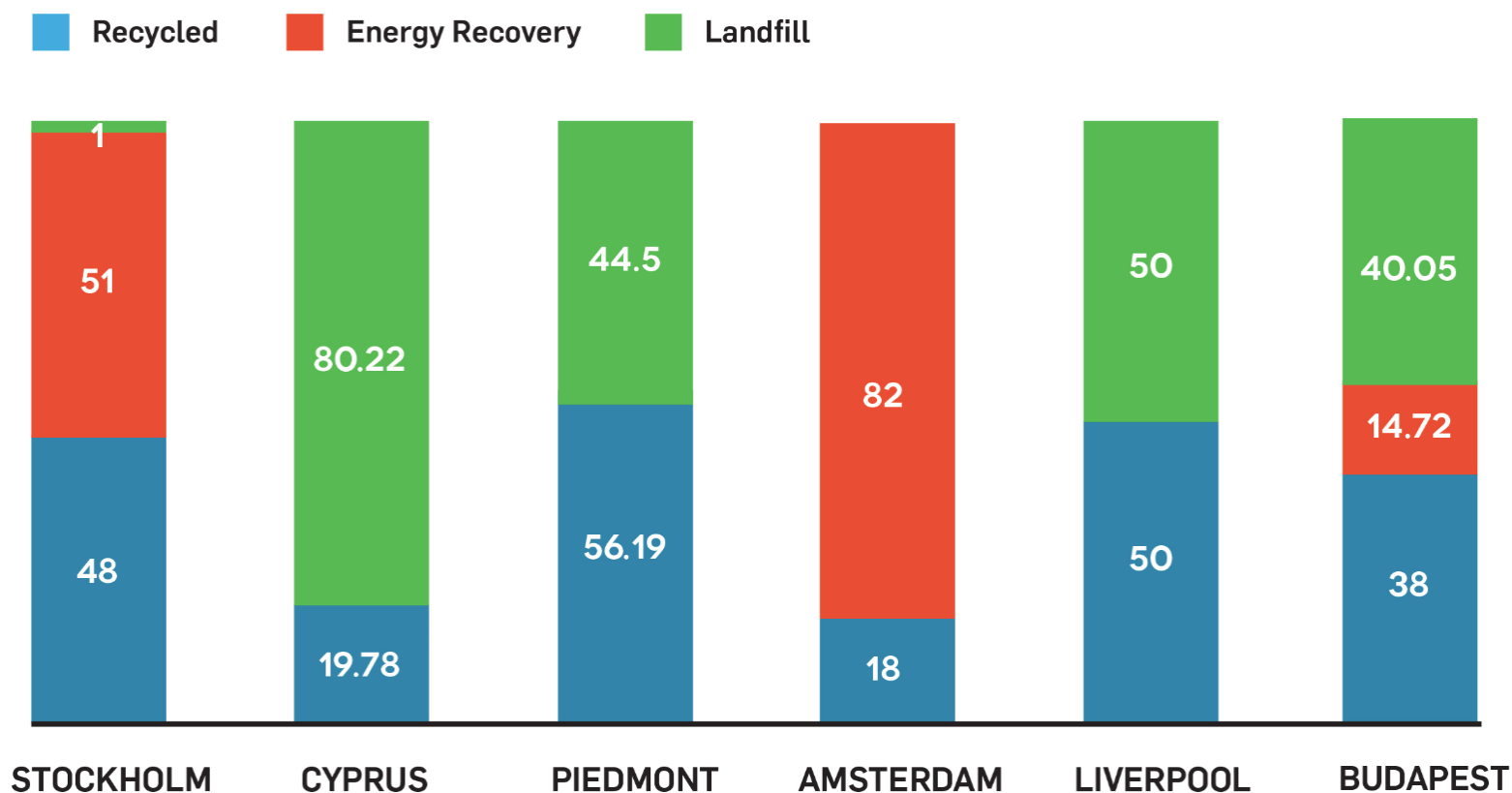
- ▶ Assess regional research and innovation needs in the waste management sector;
- ▶ Elaborate Joint Action Plan (JAP) and measures towards implementation in each region;
- ▶ Develop a Decision Support Framework to formulate waste management strategies;
- ▶ Support less developed regions in waste management.



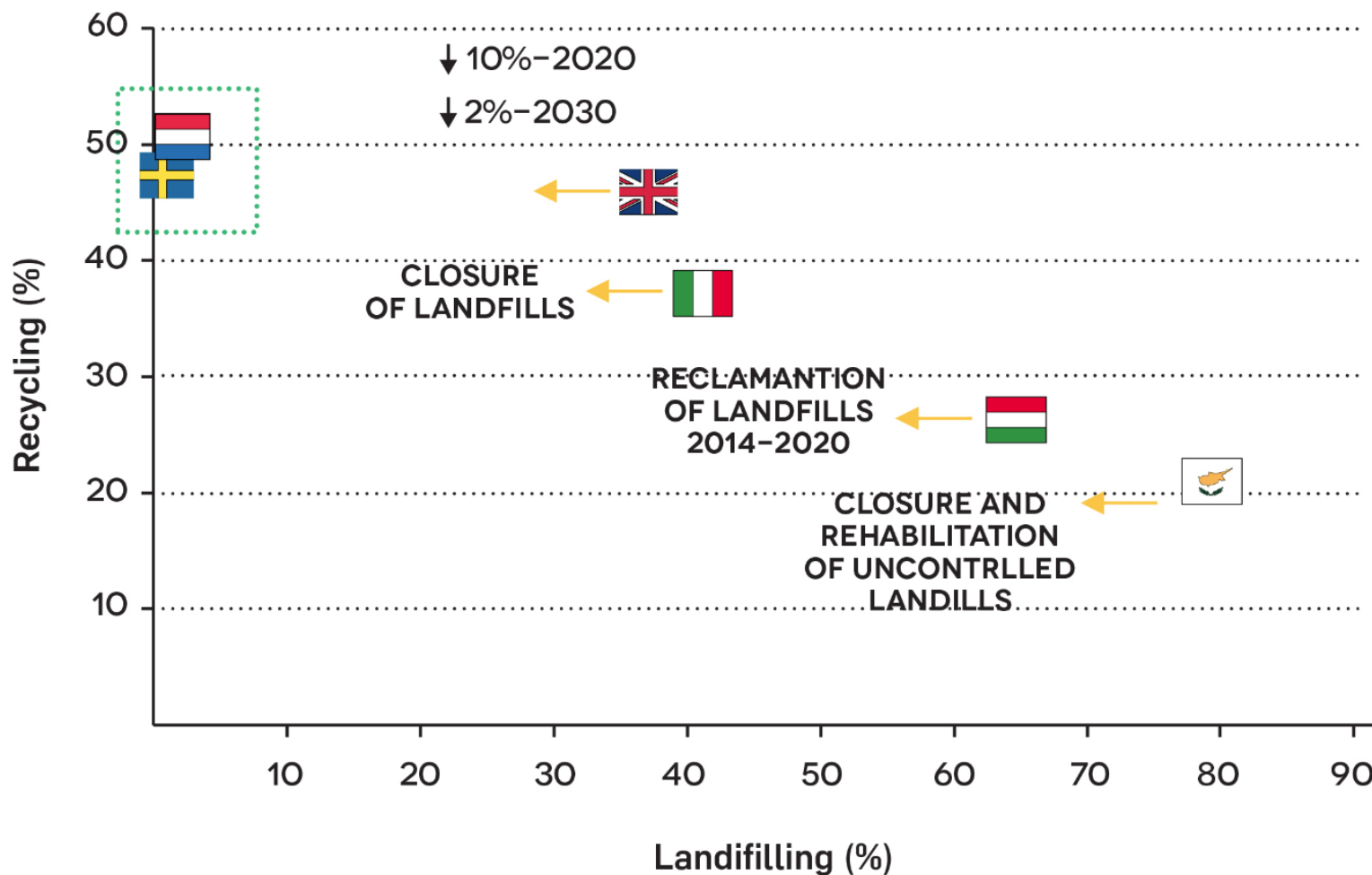
Generation of Joint Action Plan



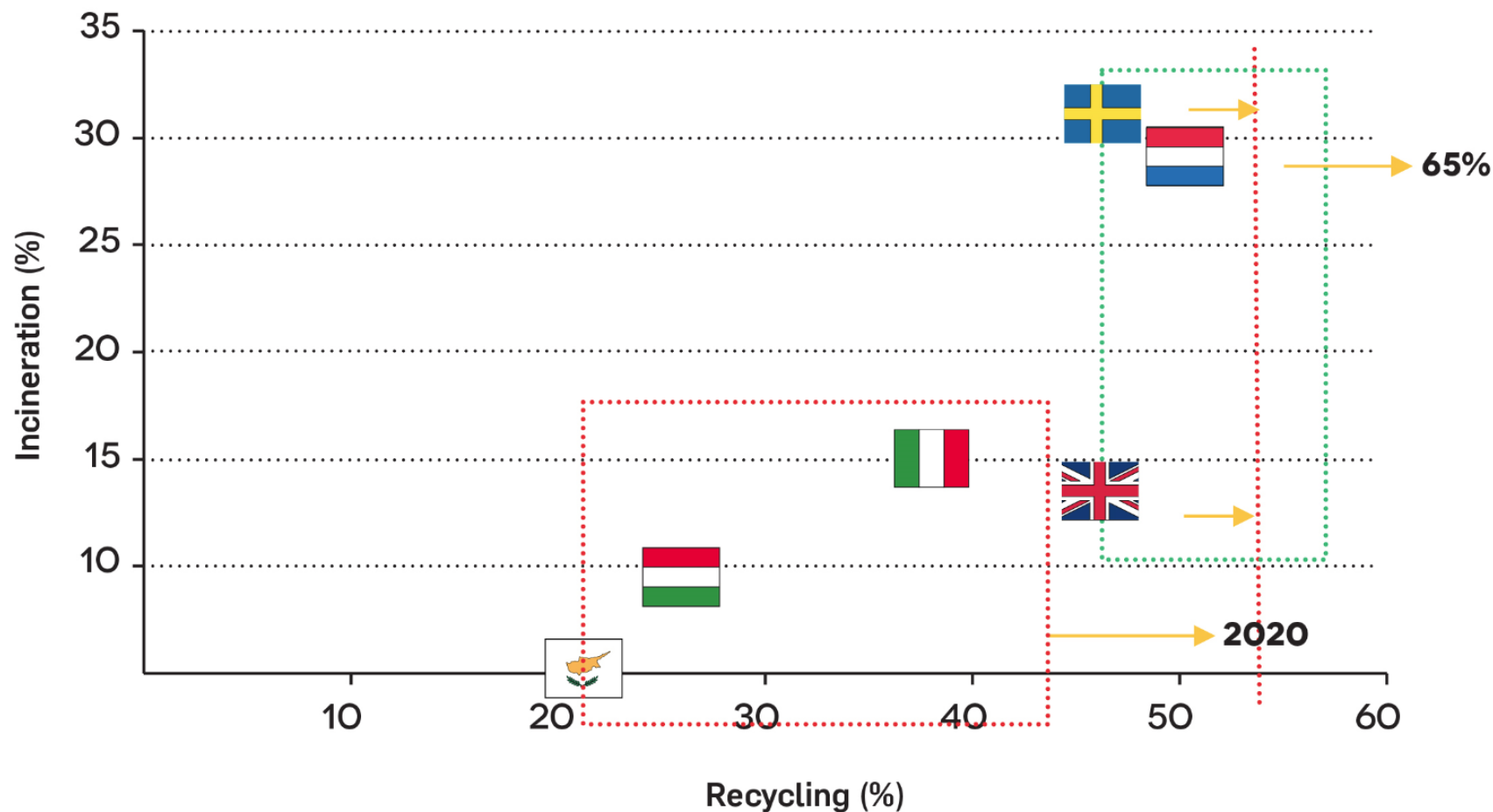
Assessment of dominant treatment methods for Municipal Solid Waste



Landfilling vs Recycling rates



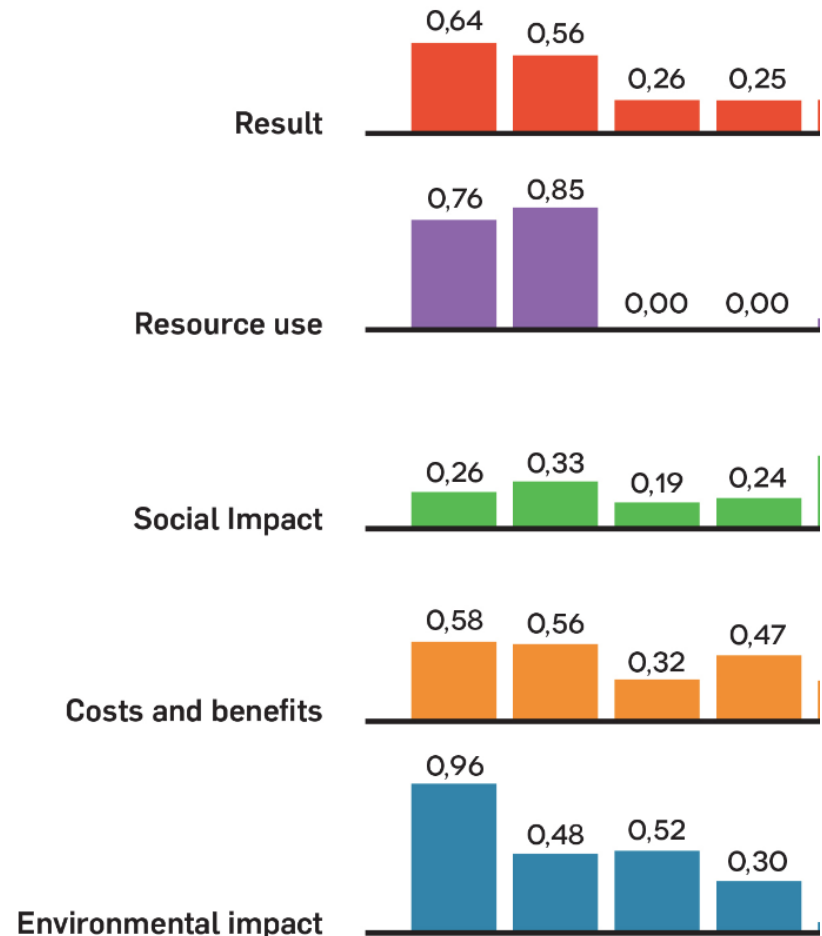
Incineration vs Recycling rates



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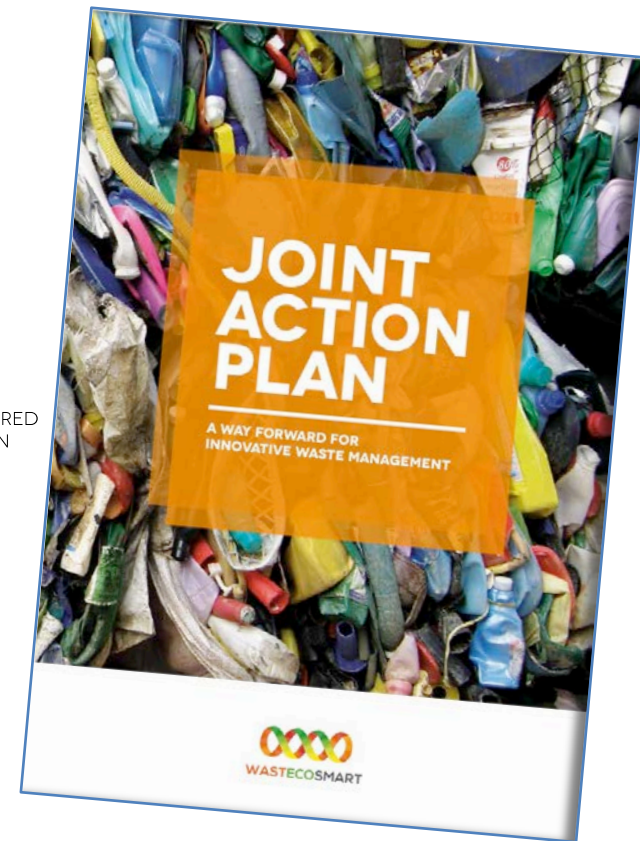
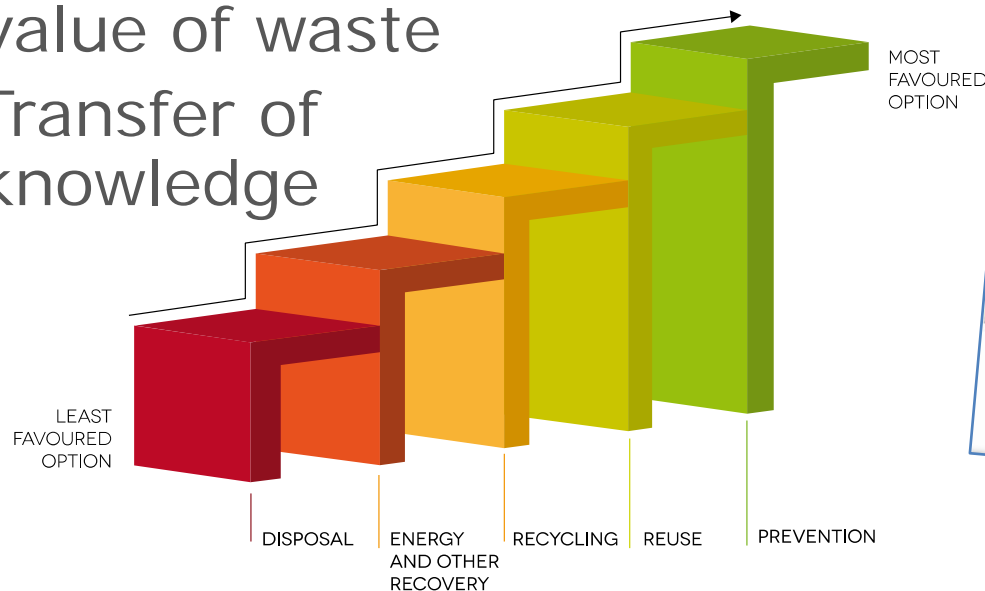
Decision Support

- ▶ Mentoring Guide for policy makers and key stakeholders
- ▶ Multi-criteria analysis (resource use, social impact, costs and benefits, environmental impact)
- ▶ Ranking of pre-defined waste management alternatives against business-as-usual scenario



Joint Action Plan (JAP) for innovative waste management

- ▶ A common roadmap for three priority areas:
 - Waste minimisation
 - Maximising the value of waste
 - Transfer of knowledge



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Regional Stakeholder Workshops

- ▶ Testing the use of our tools to develop regional Solid Waste management strategies
- ▶ Possibility for **2 Greek regions** to hold WASTECOSMART stakeholder workshop

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