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# recent developments in **PRE-DEMOLITION AUDITS IN EU COUNTRIES**

**Petr Hradil,  
Margareta Wahlström,  
Malin zu-Castell Rudenhausen**

# Pre-demolition audit

... is activity **organized by the owner** of the **building or infrastructure** resulting in the **inventory of materials and components** arising from the future **demolition, deconstruction or refurbishment** projects, and their management and recovery options.

This audit is sometimes called:

- pre-demolition/renovation audit,

- pre-development or pre-redevelopment audit,

- waste audit,

- waste management audit,

- environmental assessment of construction and demolition activities.



## European activities

### Surveys and market studies

- Resource Efficient Use of Mixed Wastes
- European Demolition Industry report 2016

### Circular Economy Package

- EU CDW Management Protocol (2016)
- Guidelines for the Waste Audits (2018)

### Other on-going European activities

Development of education materials (PARADE-EIT)

Specialized guidance for steel buildings (PROGRESS)

# Resource Efficient Use of Mixed Wastes

Construction and Demolition  
Waste Management in  
**FINLAND**  
V3 – December 2015

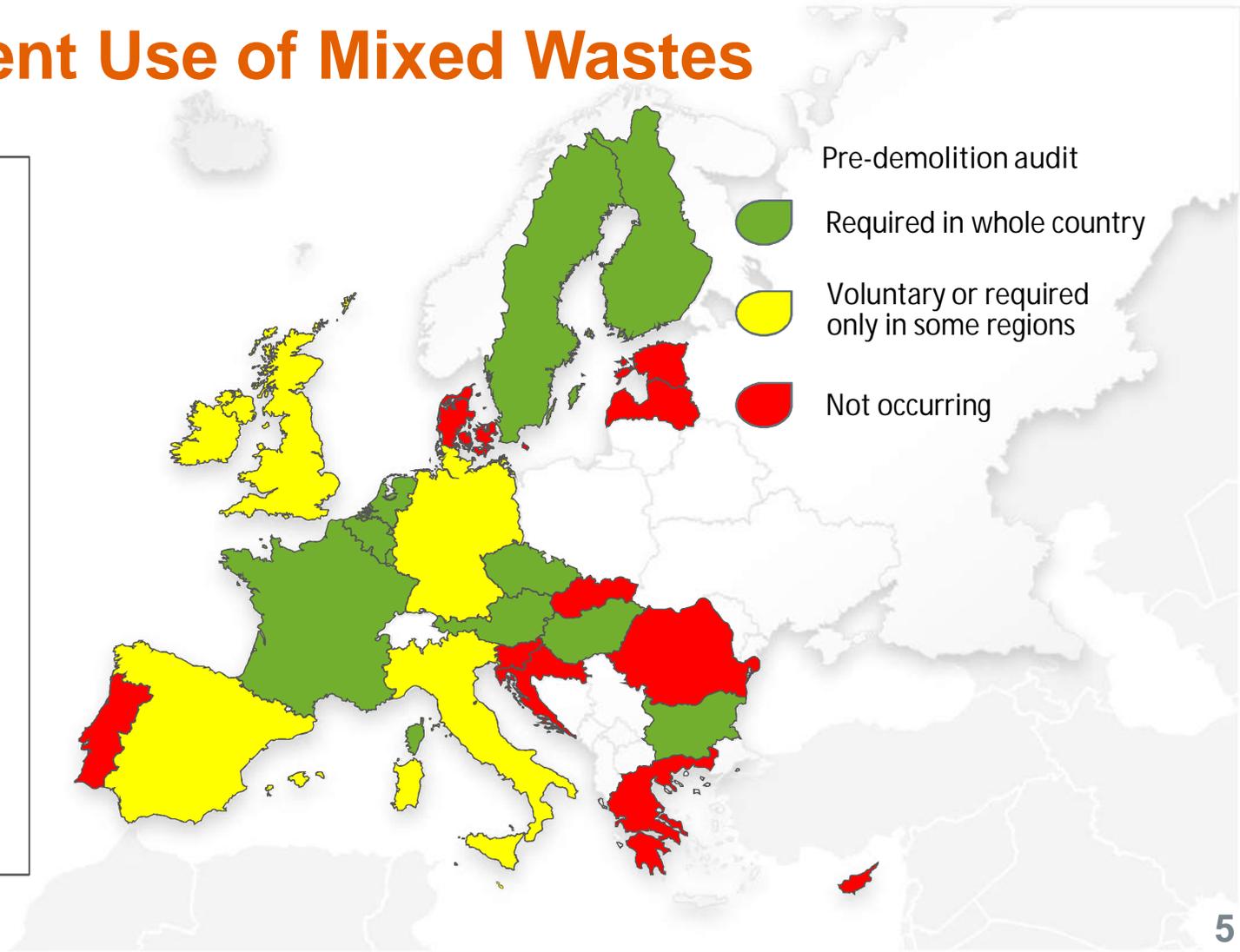
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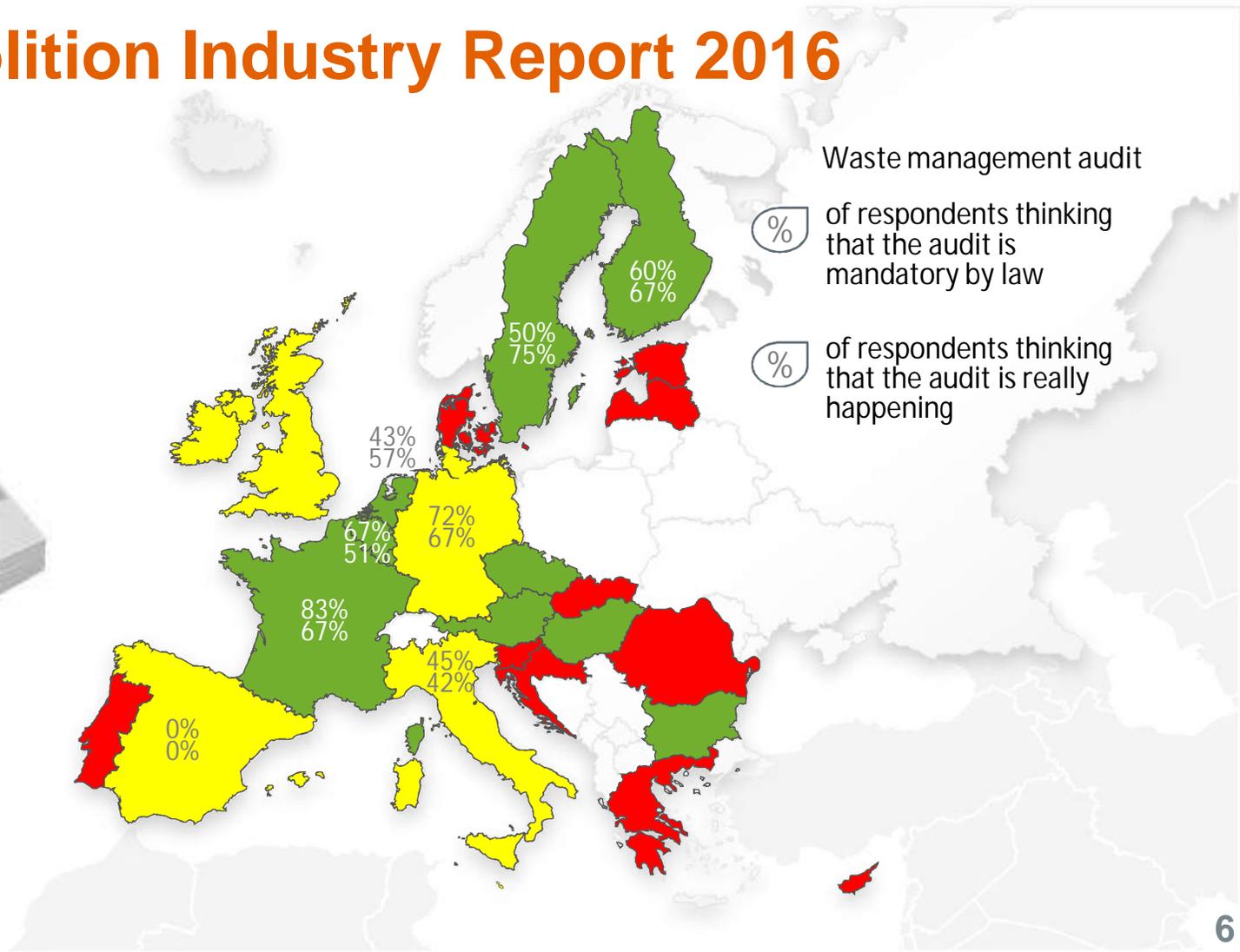
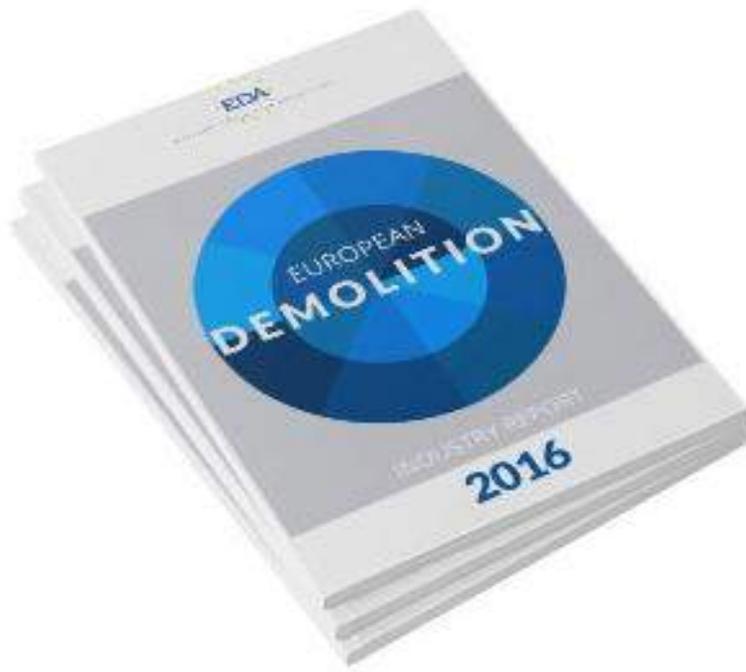
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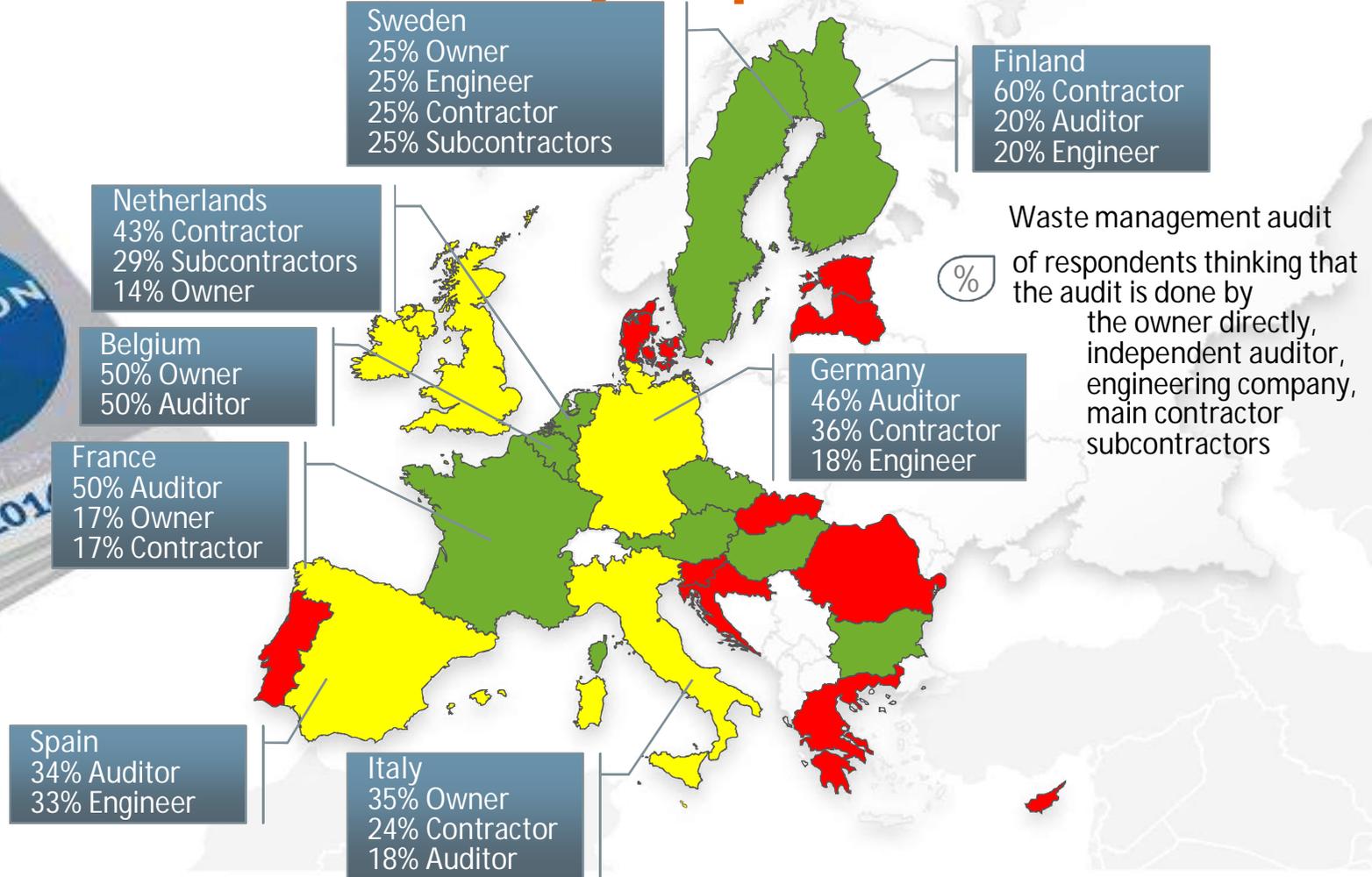
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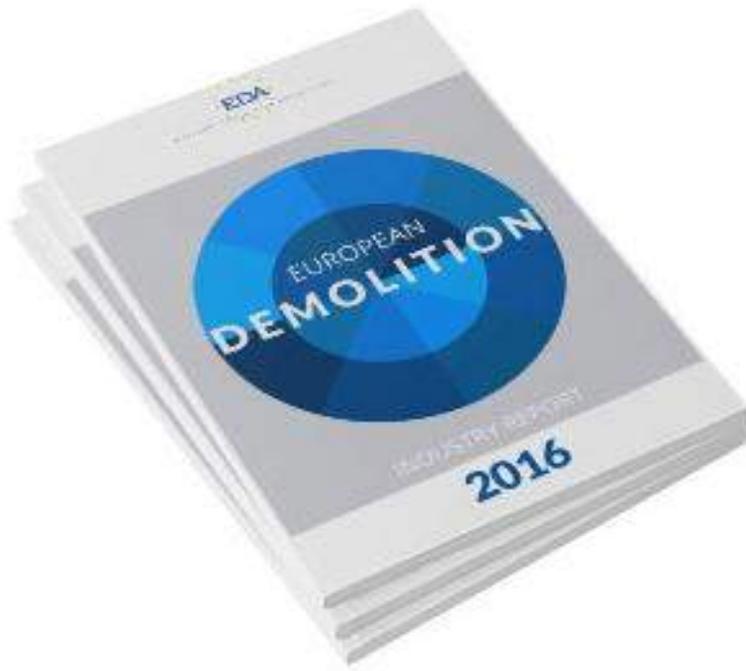
# European Demolition Industry Report 2016



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# European Demolition Industry Report 2016

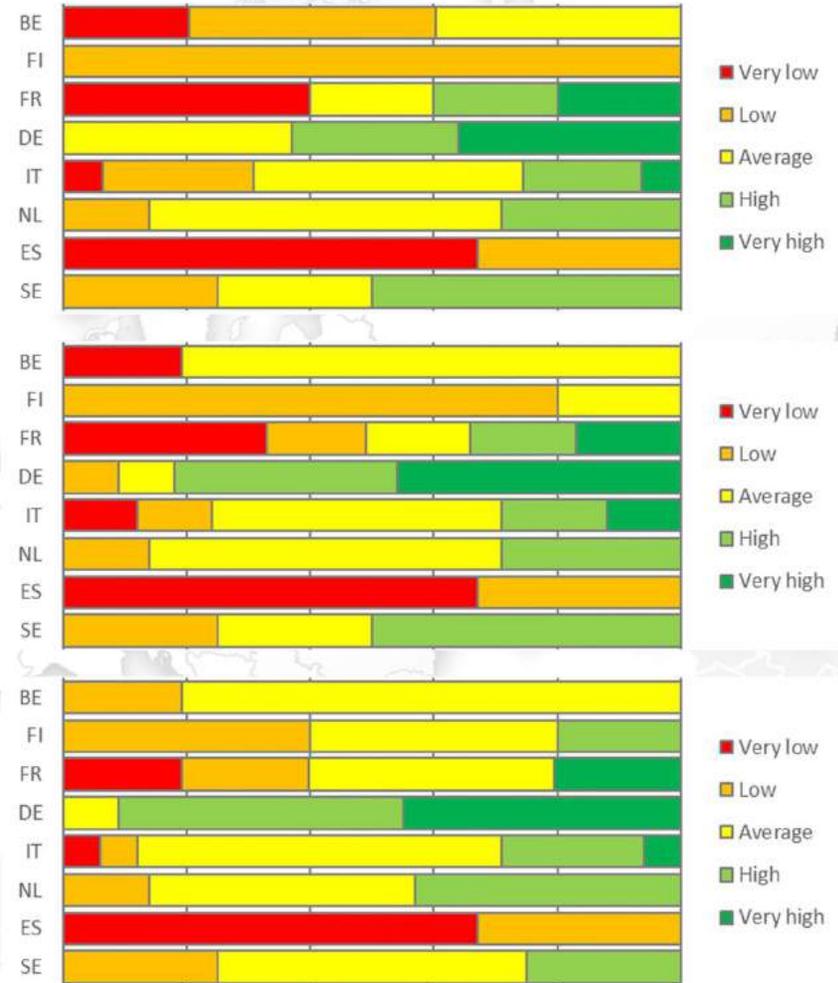


Waste management  
audit accuracy

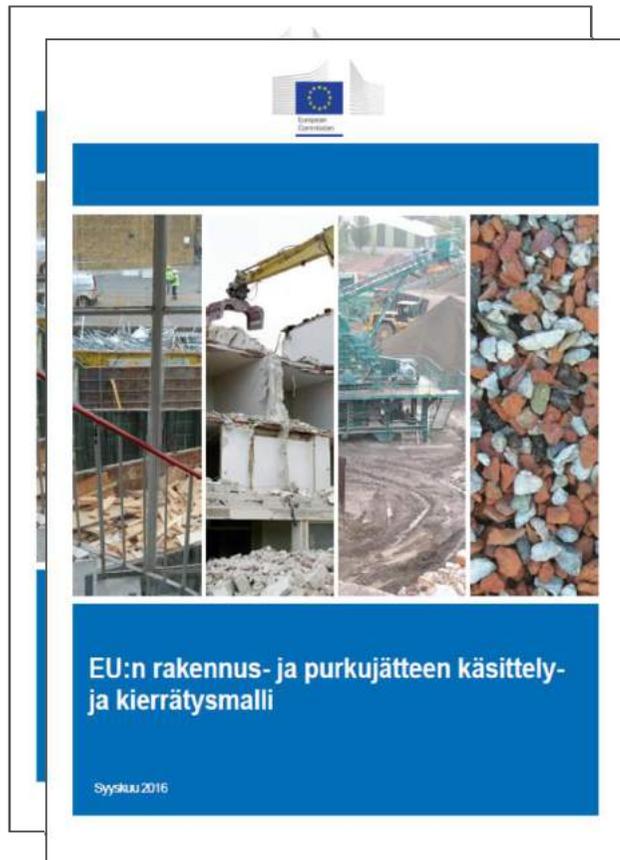
Amounts  
of waste  
listed

Location of  
the waste  
identified

Materials  
identified

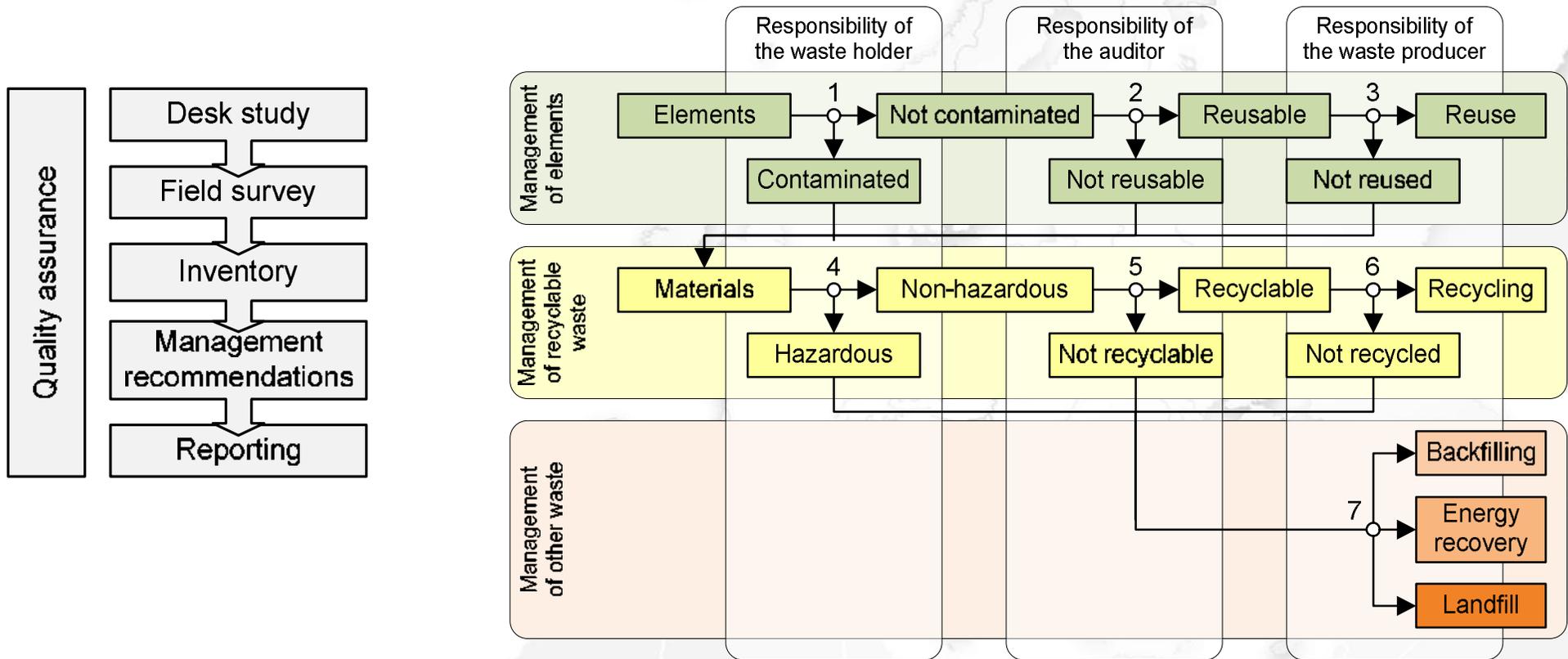


# EU Circular Economy Package



# EU Guidelines for the waste audits

Recommended process





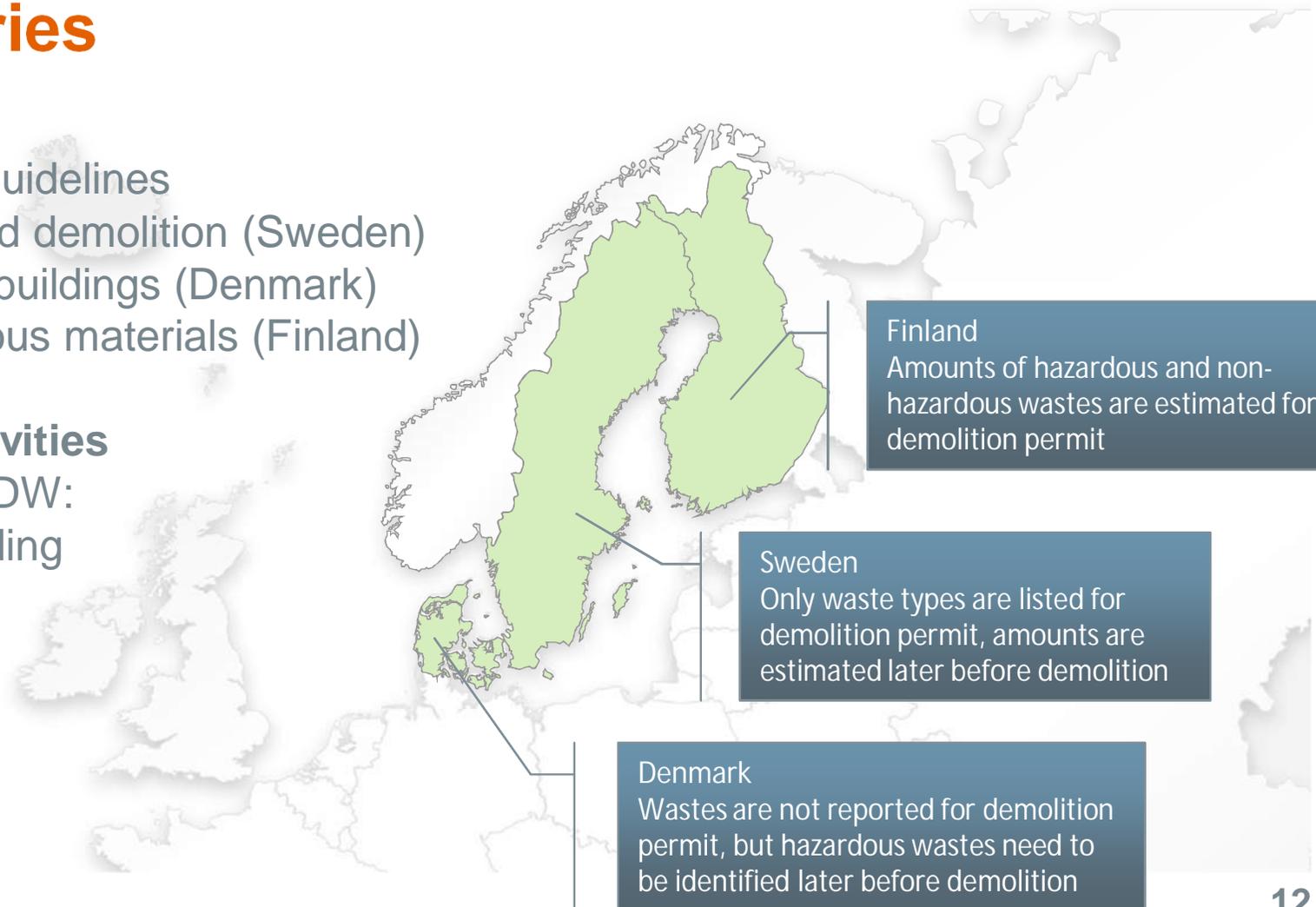
## Nordic countries

### Existing guidelines

Resource and waste guidelines during construction and demolition (Sweden)  
Resource mapping in buildings (Denmark)  
Inspections of hazardous materials (Finland)

### On-going Nordic activities

Improving quality of CDW:  
Requirements for building material inventory





# Finland

## Existing practices

Independent audit mostly done only on asbestos (buildings older than 1995)  
Reporting other materials is usually required by the municipality

## On-going development

Finnish pre-demolition audit guide (YM, TEM, INFRA and VTT)  
Electronic waste reporting system (<https://www.lupapiste.fi/>)  
New green public procurement rules

# Finland

## Certification for experts on asbestos and hazardous substances

The certificate training is conducted by Rateko (company approved by Eurofins Expert Services Oy). The certification requires

- **basic education** (3 years education in building or house engineering or 5 years of experience with asbestos and hazardous substance mapping),
- **work experience** (2 years of experience from inspection and/or repairing of old buildings and knowledge of construction materials, asbestos and hazardous substances),
- **participation in training courses** (written exam and a demonstration),
- **annual reporting** of reference work
- **additional training courses** every 3 years

# Pre-demolition audits in Finland

## Comparison of municipal requirements

	Helsinki	Espoo	Vantaa	Turku	Tampere
Creosote	x	x	x		x
PCB	x	x	x	x	x
Asbestos	x	x	x	x	x
Impregnated wood	x			x	
Oils	x	x		x	x
Paints, lacquers, adhesives				x	
PVC				x	
CFCs (e.g. refrigerators)				x	
Fluorescent tubes and lamps				x	

	Helsinki	Espoo	Vantaa	Turku	Tampere
Concrete or tiles	x	x		x	x
Asphalt				x	x
Wood	x	x	x	x	x
Metals	x	x	x	x	x
Glass				x	x
Gypsum boards				x	
Sawdust, chips				x	
Insulations				x	
Cardboard, paper				x	
Energy waste					x
Mixed waste	x	x	x		x

# Summary and recommendations

**“The purpose of the audit is to tell to the owner what is in there.”**

Jose Blanco, European Demolition Association

Most of the Member States have already established at least very basic mechanisms for pre-demolition audits. However, auditing practices in EU are different in each country and the specific rules are typically defined on the municipal level.

Inspection of hazardous materials should be obligatory and should not be limited only on asbestos.

Auditors should be experienced professionals. Certification scheme is highly recommended.

# Acknowledgements

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