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ASSOCIATION
OF CITIES
AND REGIONS
FOR RECYCLING
AND SUSTAINABLE
RESOURCE
MANAGEMENT

BIO-WASTE PREVENTION

EASY

COST EFFECTIVE

ECOLOGICAL

15-02-2010

Jean-Jacques Dohogne

CONTENT

Policy & legislation

Bio-waste quantitative data

Bio-waste prevention mngt

4'E' for BW prevention planning

Conclusions



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ACR+ PRESENTED

A network of public actors aiming for an optimized management of municipal and sustainable use of resources

98 membres

22 countries

1100 local & regional authorities

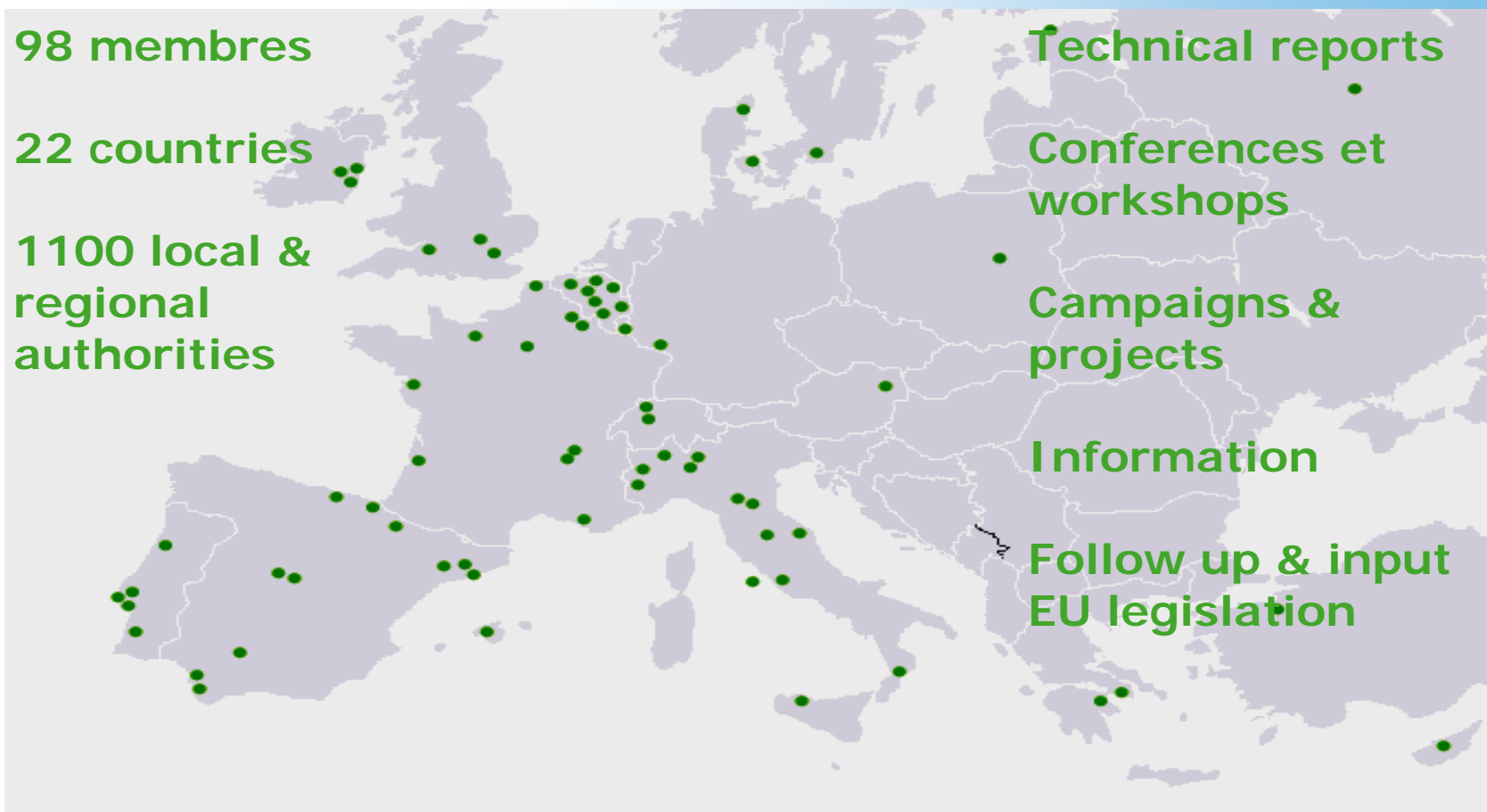
Technical reports

Conferences et workshops

Campaigns & projects

Information

Follow up & input EU legislation



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LEGAL EU TARGETS



		Min recovery	Min recycling	Collection
Packaging	2008	60%	55%	
Cars	2015	95%	85%	100%
Electronics	2006	70%	50%	min 4 kg per inhabitant per year
Batteries	2011		50% to 75%	
	2012			25%
	2016			45%
Tyres	2006	0% landfilling of tyres		
Bio-waste diverted from landfill	2006	reduction to 75% as compared to 1995 level		
	2009	reduction to 50% as compared to 1995 level		
	2016	reduction to 35% as compared to 1995 level		
New targets	2015	Separate collection: at least paper/ metal/ plastic/ glass		
New WFD	2020	50% household waste		
	2020	70% construction & demolition waste		

LEGAL EU TARGETS

Waste prevention targets

Packaging	2008
Cars	2015
Electronics	2006
Batteries	2011
	2012
	2016
Tyres	2006
Bio-waste diverted from landfill	2006
	2009
	2016
New targets	2015
New WFD	2020
	2020

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EU & BIO-WASTE PREVENTION

Green paper

... one paragraph... on 'fight against food waste'

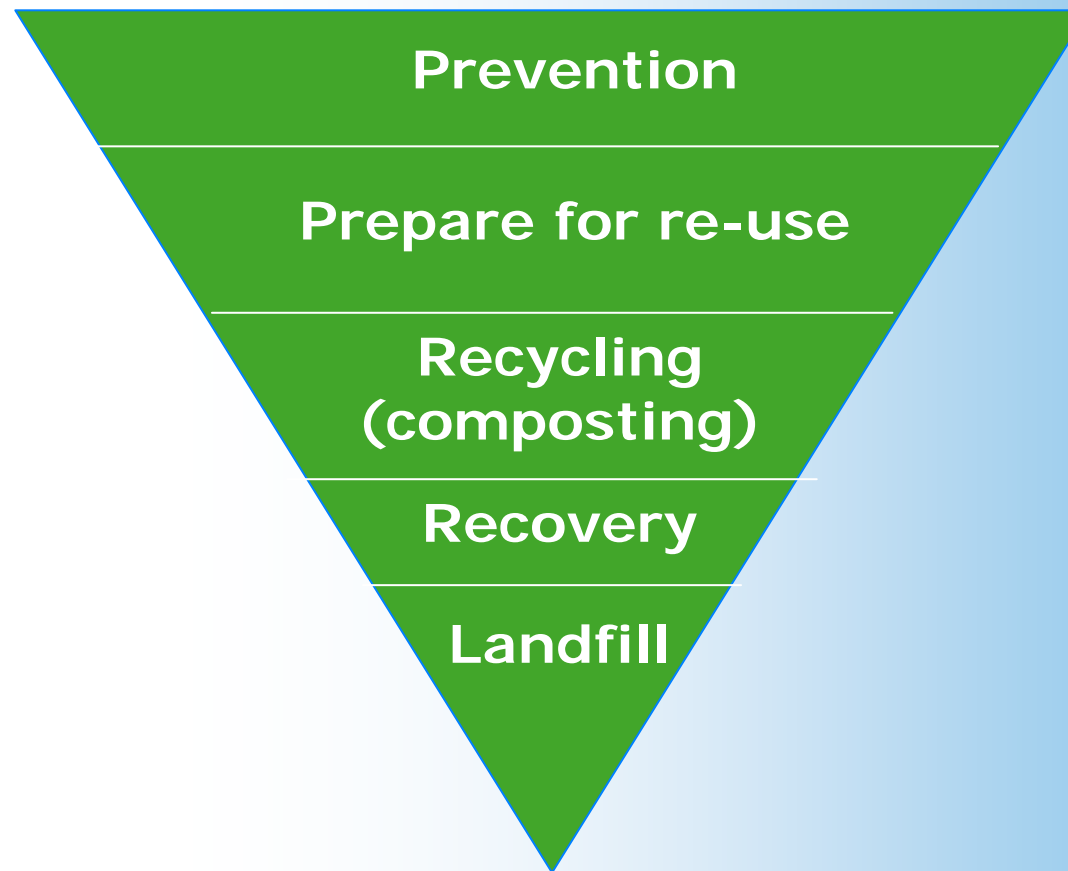
Impact assessment bio-waste

... bio-waste prevention ...

- ▶ 3% by 2017
- ▶ 7.5% by 2020

How...? Green waste...? Food waste...?

EU WASTE HIERARCHY



New WFD & PREVENTION

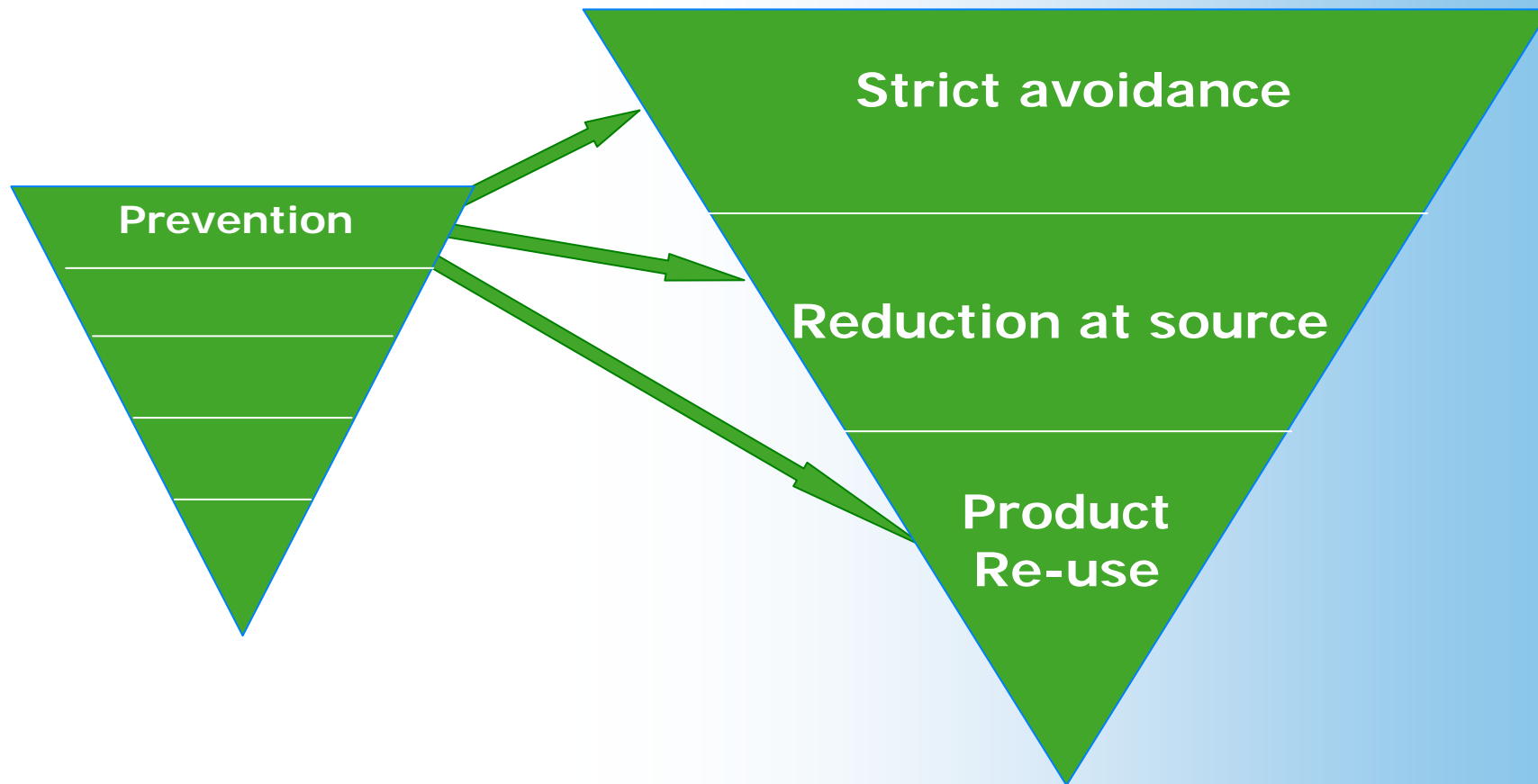
Article 29 §1

Member States shall establish...waste prevention programmes not later than 12 December 2013

- shall set out waste prevention objectives
- shall describe the existing prevention measures & evaluate the usefulness of others
- shall determine appropriate specific qualitative or quantitative benchmarks

EU WASTE HIERARCHY

PREVENTION DETAILED



Policy & legislation

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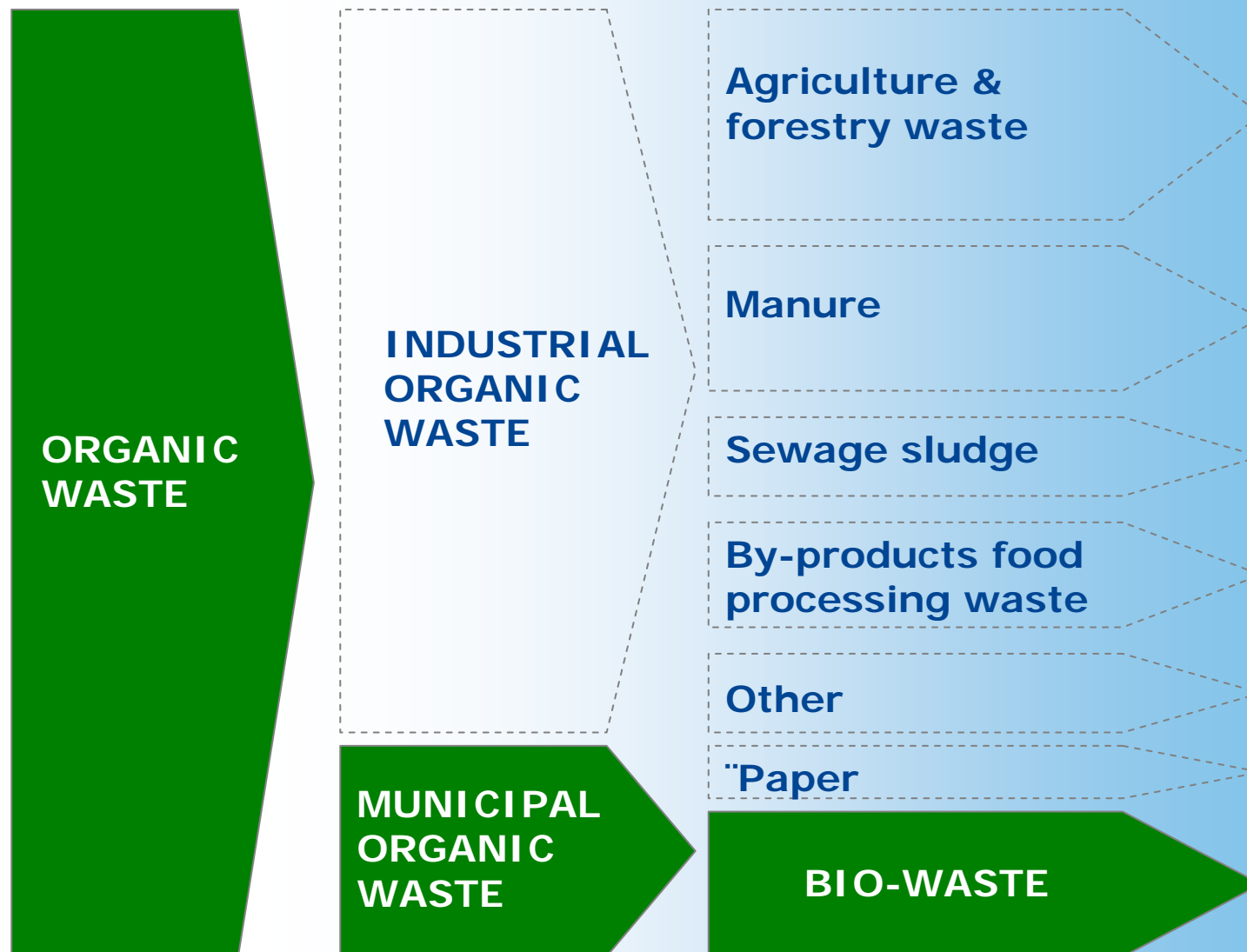
4'E' for BW prevention planning

Conclusions



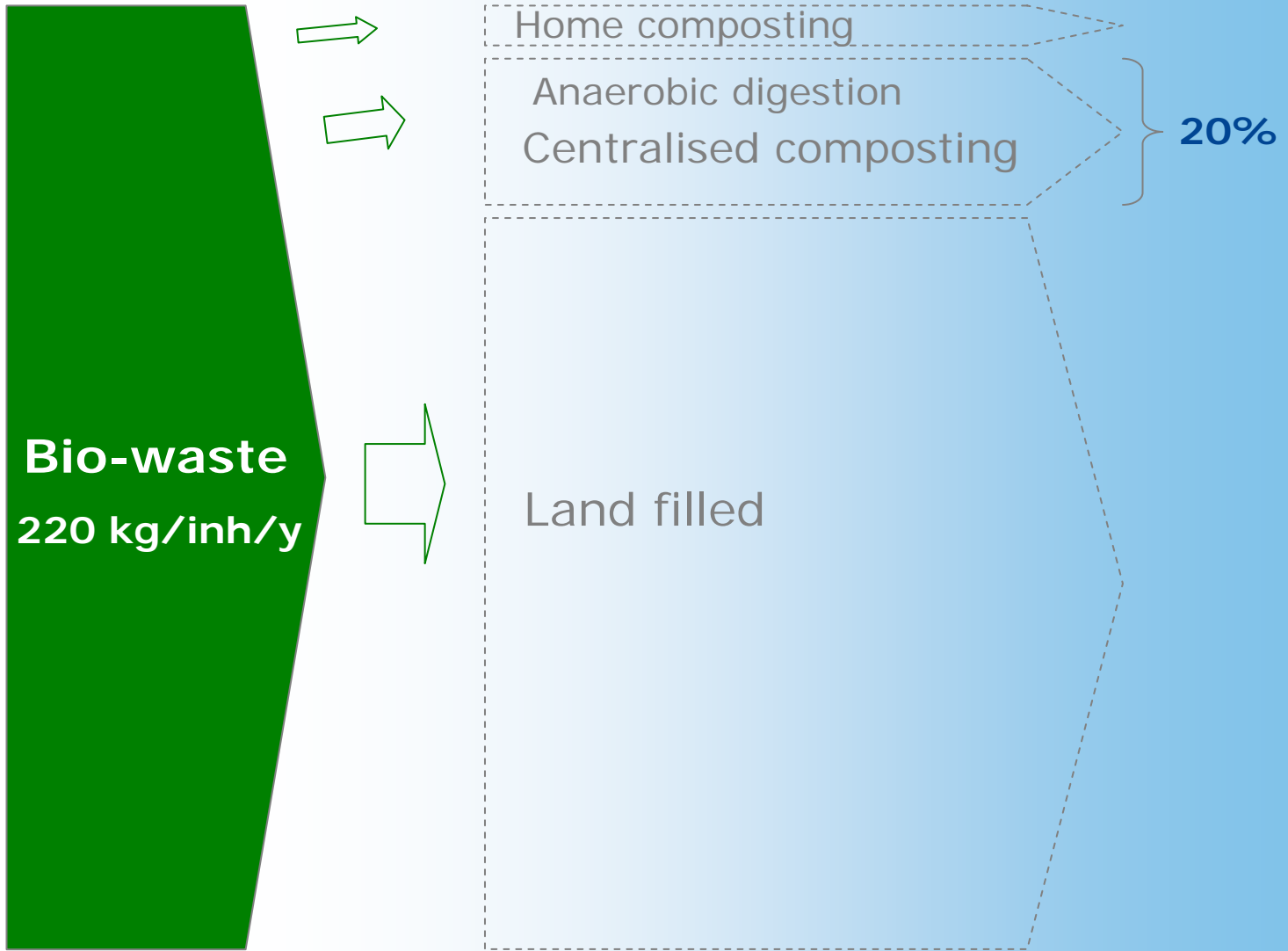
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BIO-WASTE IN CONTEXT



BIO-WASTE MANAGEMENT

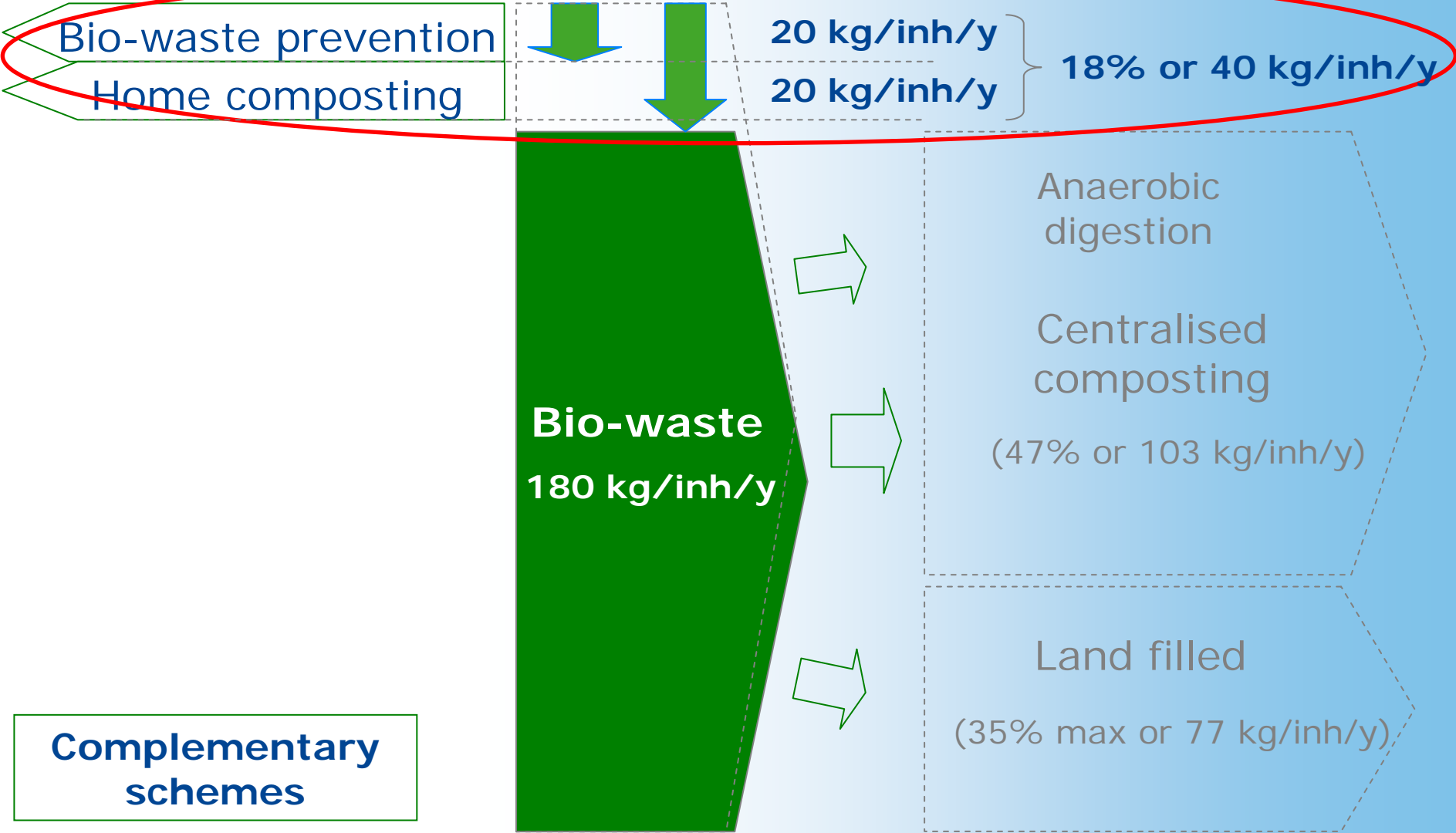
2010



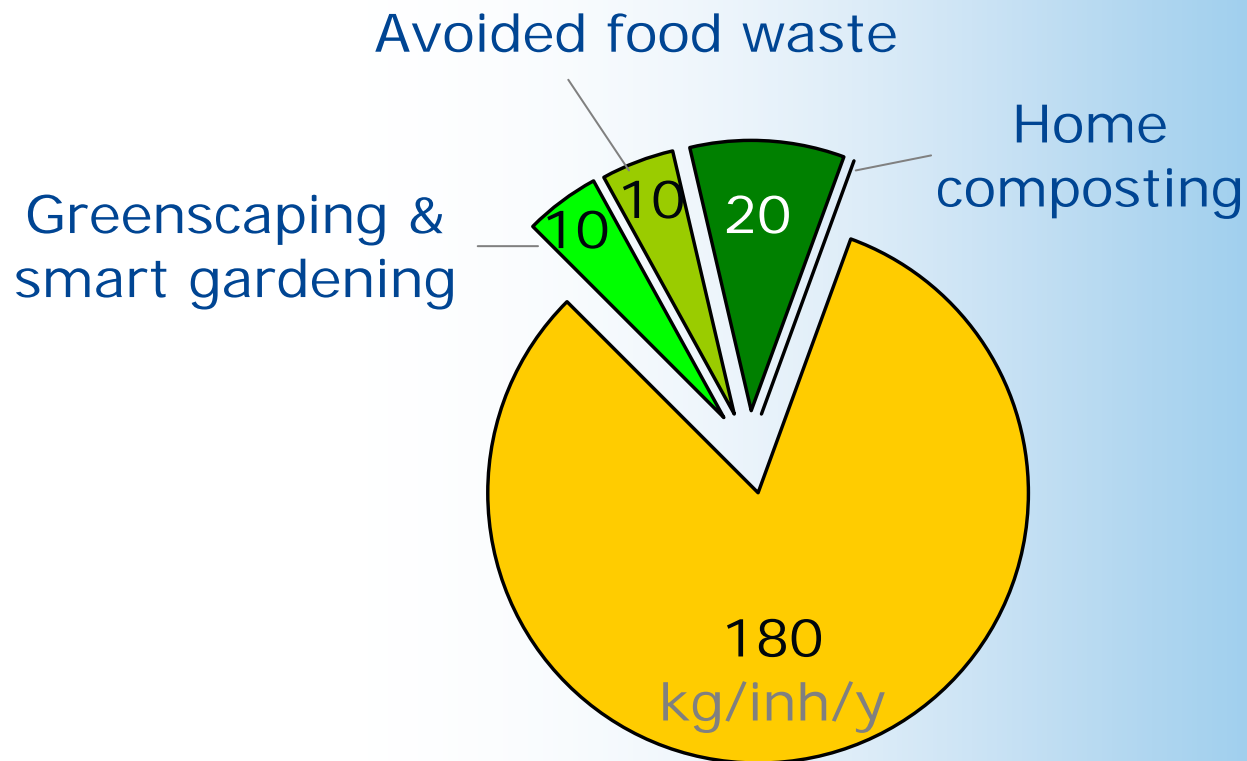


BIO-WASTE MANAGEMENT

2020

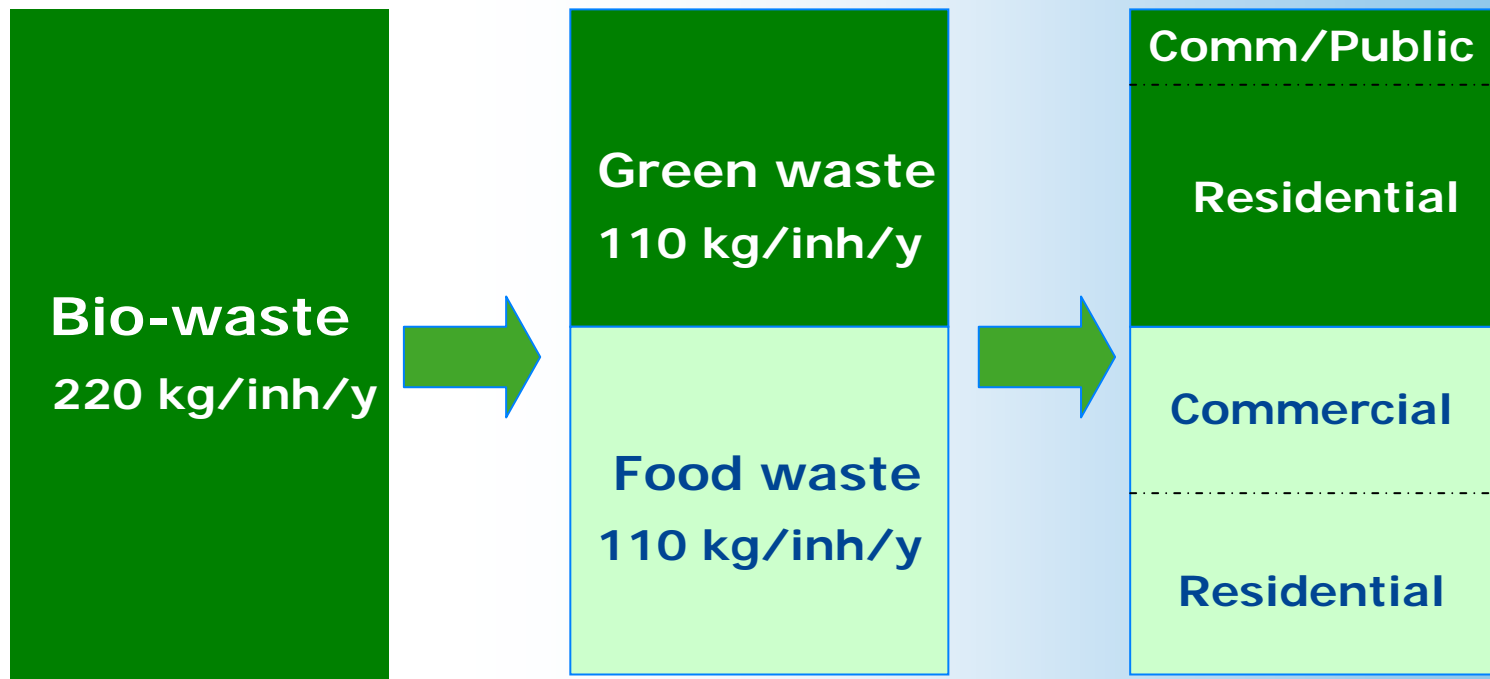


BENCHMARKS BIO-WASTE 2020



Our benchmark for waste prevention = 40 kg/hab/an

BIO-WASTE SUBDIVIDED



Seasonal variations, geographic realities,
cultural habits,...

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GREEN WASTE PREVENTION





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AVOID GREEN WASTE GENERATION

Garden design

- Variation = grass, paths, bushes, trees & water
- Grass choices = slow growing grasses
- Bushes & trees = native with special care for (right) place
- Strive for spontaneous developments
- Flower meadows or prairie fields or other ground cover in stead of grass





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REDUCE GREEN WASTE

SMART GARDENING

- remove grass only when necessary
- reuse branches (branch walls, insect walls,...)
- grasscycling
- use mulching material between bushes, trees
- use less chemicals
- compost





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AVOID FOOD WASTE





AVOID FOOD WASTE

Research UK (WRAP)

Of the food waste generated:

- *'not avoidable'* = 19% of total
- *'avoidable'* assessed at 61% of the total, with 8% of the avoidable waste *'in date'* (vb. date still OK) when discarded;
- *'possibly avoidable'* = 20% of the total;

Source: Exodus Market Research (2008) *The Food We Waste*, Report for WRAP, April 2008.



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AVOID FOOD WASTE

What to do (as a consumer)?

- Make a shopping list
- Store the food optimally
- Pay attention to 'eat by' & 'do not exceed' dates
- Prepare just enough
- Re-use left overs
- ...



AVOID FOOD WASTE

Agricultural practices

Processing

Distribution

Purchasing

Storage/
preparing



Food waste



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FOOD WASTE PREVENTION

Gains – agricultural soils become available

Less erosion



Biodiversity



Agroforestry



Energy crops



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4'E' for BW prevention planning

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PLANNING ACCORDING TO 4 'E's

Smart gardening

- Subsidise grasscyclers, shredders, ...
- PAYT rewards smart gardeners
- Cooperate with garden enterprises

Encourage
(Give the right signals)

- Municipality gives example
- Demonstration center
- Educate own personnel

Enable
(Make it happen)

- Campaigning
- Information material
- Leavemands in autumn
- Telephone 'hotline'

Engage
(Get them involved)

- Train smart gardener masters
- Promote volunteering
- Practical workshops
- School programs
- Use adapted language

Exemplify
(Give the good exemple)



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COST EFFECTIVENESS

Costs

- Personnel
- Information & educational materials
- Subsidising materials
- Demonstration centers
- Pilot projects
- Training programs (train the trainers)
- Website development & updating
- ...

Benefits

- Less waste produced
- Less collection
- Less treatment infrastructure required
- People awareness
- Social cohesion
- Voluntary work
- CO2 gains
- More biodiversity
- ...

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CONCLUSIONS

The bio-waste directive should consider the prescriptions and spirit of the new WFD, namely, waste prevention first.

Benchmarks, targets and/or indicators are key for this



BENCHMARKING BIO-WASTE

Want to know more?

160 pages
Fact sheets
Great examples
Benchmarks
Quantified data

