

Food waste reduction targets – summary of state-of-play

- Expected delivery, as a part of revision of WFD – 2Q 2023
- Focused **only** on reduction targets – all other measures already introduced in 2018 (*general objectives, measurement and reporting, obligatory prevention plans*) or subject to separate legislation (*date marking*).
- Objective: make food waste prevention a **real** political priority. MS declared commitment to SDG 12.3 but actions so far are limited
- Baseline data published on 25.X.2022



Baseline – comparison to previous estimate (FUSIONS)

	ESTAT (2022, data of 2020)		FUSIONS (2016, data of 2012)	
Total food waste	Ca 58.5 million tonnes		Ca 88 million tonnes (87.6 ± 13.7)	
Kg/inhabitant	127		173	
	share FSC [%]	mIn tonnes	share FSC [%]	mIn tonnes
Primary production *	11%	6.1	11%	9.1
Processing/manufacturing	18%	11.8	19%	16.9
Retail/other distribution	7%	4.1	5%	4.6
Restaurants/food services	9%	5.3	12%	10.5
Households**	55%	31.3	53%	46.5



Baseline considerations

Potential reason for differences between FUSIONS and ESTAT

- UK data and its role in calculation of EU averages
- Food waste sent to sewer (which is excluded from the EU's quantification of food waste levels). This represented 8 million tonnes or approximately 10% of FUSIONS total.
- Primary production: scope of FUSIONS estimation (food ready-to-harvest which was lost or wasted) was wider than that of ESTAT (food discarded as waste).

Consideration for setting the policy options

Set a target for food waste reduction with declination in **Scope, Expression and how the targets are set:**

S1 - target covering whole food supply chain, from farm gate to final consumer

S2 - target covering only selected stages of the food supply chain (for example SDG target 12.3 sets targets at retail and consumer' levels)

E1 - target expressed as % of food waste reduction from the baseline (2020) to target year (2030)

E2 - targets expressed as absolute amounts, i.e. in kilograms per capita per year to be achieved by 2030

T1 - the same target level for all Member States

T2 – target level differentiated by Member States

T3 – collective target on EU level – based on MS contributions

Consideration for setting the policy options - continued

Formulation of targets for food waste reduction with declination in **Scope, Expression and how the targets are set**

- **Scope:** target covering whole food supply chain, from farm gate to final consumer.
- **Expression:** target expressed as % of food waste reduction from the baseline (2020) to target year (2030)
- **Set-up:** the same target level for all Member States

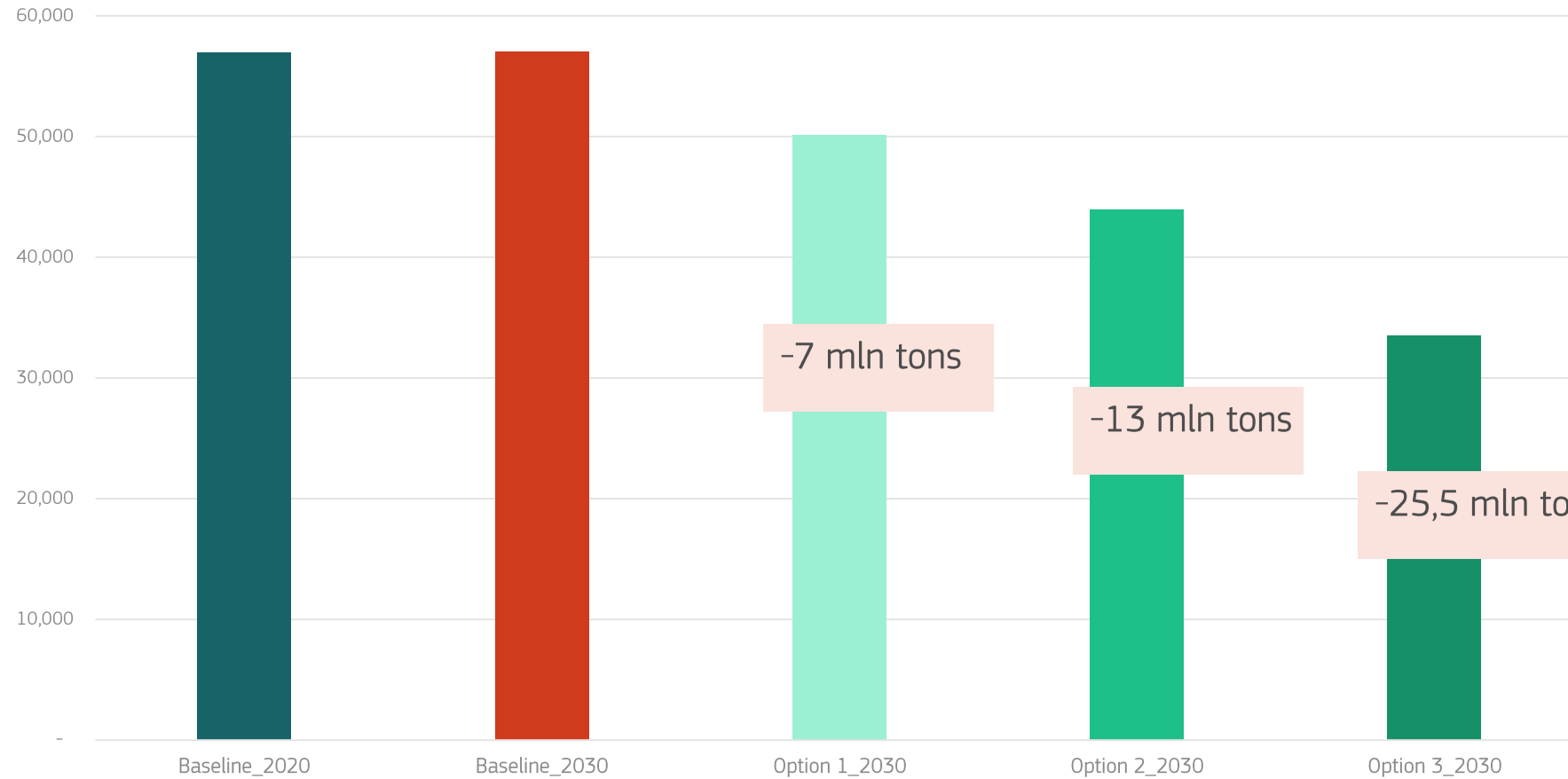
Target(s) levels

- Option 1 : to reduce food waste in the EU by 15-25%
- Option 2 : to reduce food waste in the EU by 25-35%
- Option 3 : to reduce food waste in the EU by 40-50%

Modelling of different target levels

- **Option 1**
 - Target for primary production – 0%,
 - Target for processing and manufacturing – 10%,
 - Target for retail and consumption stages – 15%
- **Option 2**
 - Target for primary production – 0%,
 - Target for processing and manufacturing – 10%,
 - Target for retail and consumption stages – 30%
- **Option 3**
 - Target for primary production – 10%,
 - Target for processing and manufacturing – 25%,
 - Target for retail and consumption stages – 50%

Food waste amounts: baseline and expected reductions



Economic modelling approach



Modular Applied GeNeral Equilibrium Tool

- Global coverage (140 countries, 90+ sectors)
- Advanced version of the Global Trade Analysis Project (GTAP) model & database
- Scientific excellence & Policy support (EC, FAO, OECD etc.)
- International collaboration with Wageningen Economic Research
- Waste streams, entire cycle; food waste generation along the full supply chain
- Elaborated baseline to 2030
- Broad range of economic, social and environmental indicators.
- A model is only a simplified representation of reality.

Modelling Inventory and Knowledge Management System of the European Commission (MIDAS)



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Food waste reduction targets assessment with MAGNET – main elements analysed

Market impacts

Production & Demand

Prices

Import & Export

Environmental impacts

GHG emissions

Land use

Marine eutrophication

Water scarcity

Food Consumption Footprints

Socioeconomic impacts

Costs

Employment

Income & Food affordability

Modelling of different target levels

Description of the options	Option 1	Option 2	Option 3
Target for primary production	0%	0%	10%
Target for processing and manufacturing	10%	10%	25%
Target for retail and consumption stages	15%	30%	50%