5 GOOD REASONS...

...why **end-of-life tyres** should be selected
as the **chosen waste stream**
for the development of new, EU-wide **end-of-waste criteria**

- High-value rubber products and steel from end-of-life tyres (ELT) are produced and sold in existing markets
- Considerable potential for climate change mitigation
- National criteria already exist in some member states
- Waste stream is well documented with very reliable data
- Support for EoW criteria in the entire ELT supply chain

HIGH-VALUE RUBBER & STEEL FROM ELT PRODUCED AND SOLD IN EXISTING MARKETS

- Markets for recycled rubber and steel from ELT have existed since the 1990s
- Prices from EUR 160/tonne and upwards – yet these high-value Raw Materials from Recycling (RMR) are classified as waste
- Current customer groups include the rubber industry, the sports turf industry, the road construction industry and the building industry – with many new applications in the pipeline

CONSIDERABLE POTENTIAL FOR CLIMATE CHANGE MITIGATION

- Comprehensive and peer-reviewed LCA studies document considerable environmental benefits from material recycling of end-of life tyres.
- In comparison with the second most common disposal route – co-incineration in cement kilns – the carbon footprint is 700 kg of CO_2 equivalents more beneficial per tonne of end-of-life tyres.
- Still more than 1 million tonnes of ELT are used for energy recovery in the EU.
  A switch to mechanical recycling would enhance climate change mitigation.

NATIONAL CRITERIA ALREADY EXIST IN SOME MEMBER STATES

- Italy, Portugal and Spain have already implemented national EoW criteria for end-of-life tyres
- Valuable experience can be obtained from these member states in order to develop EU-wide criteria

genan

WASTE STREAM WELL DOCUMENTED WITH RELIABLE DATA

ETRma
EUROPEAN TYRE & RUBBER manufacturers' association

Annex: End of Life Tyres Management – Europe – 2019

National figures (tonnes)	ELT Arising (A)	ELT recovery: Material: Civil engineering, public works & backfilling (B)	ELT recovery: Material: Recycling* (C)	ELT recovery: Material: Total Material recovery (D)=(B+C)	ELT recovery: Energy: Energy recovery (E)**	Unknown/Stocks (F)	ELT treated (H)=(G)/(A)
Austria	**74.000**		46.000	**46.000**	**28.000**		100%
Belgium	**81.325**		75.163	**75.163**	**2.153**	3.600	95%
Bulgaria	**40.800**		26.000	**26.000**	**1.500**	13.300	67%
Croatia	**26.307**		19.909	**19.909**	**1.374**		81%
Cyprus	**6.900**		2.500	**2.500**	**7.500**		145%
Czech Rep.	**93.037**		34.194	**34.194**	**32.849**	2.802	72%
Denmark	**49.900**		47.800	**47.800**	**0**		96%
Estonia	**13.107**	1.485	9.106	**10.591**	**3.216**		105%
Finland	**61.060**	56.802	10.733	**67.535**	**5.958**		120%
France (est.)	**320.018**	7.699	139.479	**147.178**	**167.053**	5.787	98%
Germany	**434.000**		295.000	**295.000**	**137.250**		100%
Greece	**45.200**		29.988	**29.988**	**13.851**	1.861	97%
Hungary (est.)	**44.000**		30.000	**30.000**	**9.500**	4.500	90%
Ireland	**32.601**		31.573	**31.573**	**1.028**		100%
Italy	**384.000**	842	170.000	**170.842**	170.000	32.000	89%
Latvia	**12.500**		8.000	**8.000**	**3.500**	1.000	92%
Lithuania	**21.533**		14.413	**14.413**	3.752	2.426	84%
Luxembourg	**0**	-	-	-	-		-
Malta	**2.300**		2.300	**2.300**			100%
Netherlands ***	**87.746**		79.933	**79.933**	**7.813**		100%
Poland (est.)	**268.500**		127.000	**127.000**	**84.000**	57.500	79%
Portugal	**72.421**	744	46.499	**47.243**	**30.915**		108%
Romania	**51.413**		544	**544**	**50.869**		100%
Slovak Rep. ELTMA only	**27.475**		22.675	**22.675**	**632**	363	85%
Slovenia	**24.310**		7.575	**7.575**	**14.267**	312	90%
Spain	**238.080**	202	158.125	**158.327**	**79.753**		100%
Sweden	**93.532**	3.013	24.623	**27.636**	**65.896**		100%
UK (estimated by UTWG)	**452.659**	11.065	148.643	**159.708**	**277.283**	15.669	97%
EU27	3.058.724	81.852	1.607.774	1.689.625	1.199.912	141.120	94%
Norway	**66.620**	447	19.763	**20.210**	**47.410**		102%
Serbia (est.)	**50.000**		39.000	**39.000**	**11.000**		100%
Switzerland	**47.200**		600	**600**	**46.600**		100%
Turkey	227.509		129.619	**129.619**	**69.009**	28.881	87%
Europe 28 EU27+NO+CH+RS+TR+UK	3.450.053	82.299	1.796.756	1.879.054	1.373.931	170.001	94%
2018	3.573.900	96.120	1.920.100	2.016.220	1.248.880	318.800	91%
2019 vs 2018	-3%	-14%	-6%	-7%	10%	-47%	3%

in 2019 23 countries with EPR legislation

* Recycling : includes ELTs sent to granulation (1.338.799t) and the incorporation of the inorganic content of ELTs in cement manufacturing (µ 25% by weight of ELTs sent to cement kilns i.e. 457.977t)

** Energy recovery : includes 75% by weight of ELTs sent to cement kilns (1.831.908tx75%) as the energy fraction of co-processing ELTs in cement kilns

***The Netherlands: full market, beyond EPR obligation (2019)

SUPPORT FOR END-OF-WASTE CRITERIA IN THE ENTIRE ELT SUPPLY CHAIN

- Support from tyre manufacturers (represented by ETRMA)
- Support from national ELT management and collection companies (represented by ETRMA)
- Support from the tyre recycling industry (represented by EuRIC)
- Alignment throughout the entire ELT supply chain gives a very high probability of EoW criteria becoming a success story