

EUROCORD

(European Association of Rope, Twine and Netting manufacturers, their suppliers and their affiliate industries)

Circular Design of Plastics in Ropes and Nets

Philippe Verschueren November 2021; CI Annual Meeting, Greenbrier, White Sulphur Springs, WV



PLASTIC RECYCLING FACT SHEET

GLOBAL PLASTIC PRODUCTION 368 Mt

WORLD'S LARGEST GENERATOR OF PLASTIC WASTE United States

ESTIMATED QUANTITY OF PLASTIC IN NORTH PACIFIC OCEAN

2tn pieces

COUNTRY THAT GENERATES THE MOST PLASTIC WASTE United States

United Kingdom

LARGEST SINGLE-USE PLASTIC WASTE GENERATING COUNTRY

China

Source: European Parliament/Eurostat/European Environment Agency



GENERATION

Main source of plastic waste generation in Europe Packaging industry

Plastic packaging waste generation in the EU

17.2m mt

Largest plastic packaging waste producer in the EU Germany



Some comparison

EUROPE

TRADE

Plastic waste exported by the EU in 2020 2.37m mt

Main destination for EU plastic waste exports Turkey

Top exporter of plastic waste in the EU Germany

TRADE

Exports of scrap plastic from the U.S. in 2020 1.37bn lbs

USA

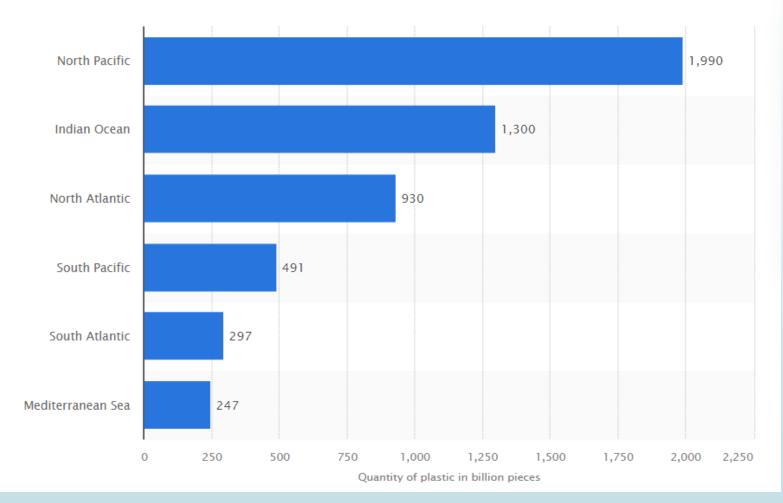
Top destination for U.S. scrap plastic exports Canada

Share of U.S. scrap plastic exported to Malaysia 19%

Source: European Parliament/Eurostat/European Environment Agency



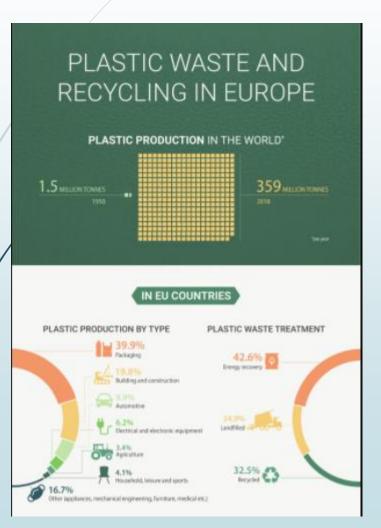
Estimated quantities of plastic in major marine areas (in billion pieces)

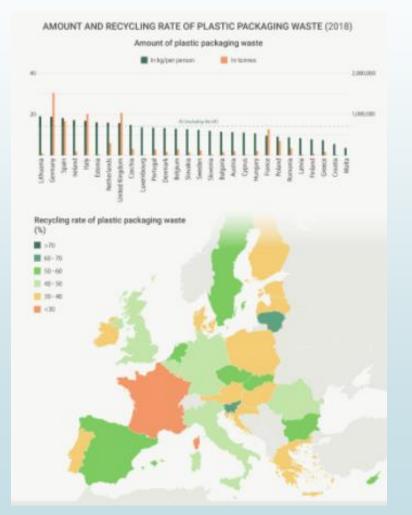


Source: European Parliament/Eurostat/European Environment Agency



European State of Play









For Eurocord, we have 2 distinct areas of action (within the EU 27):

Marine Ropes and Nets

Listed as a "stakeholder in the Directive
Gear litter is transboundary (== > international)
Size of market : +/- 45.000 T
Intensive use of high density materials
Scattered initiatives, not industry-organized
Legislation still vague
Eurocord only transnational body
Silent member of CPA*
No country has committed yet

* CPA = Circular Plastics Alliance

Agriculture Ropes, Nets and Twines

Not specifically mentioned Domestic use Size of market : 1.175.000 T Pretty much low-end materials Systems in place for decades Legislation precise (a.o. fees) APE / Eurocord together Active member of CPA* 11 countries are fully committed (80%)

(Sweden 2002, Ireland 2001, France 2002, Germany 2013, Spain 2014 UK 2019, Holland – Belgium – Finland 2021, Poland under way, Italy spokenout intention... <u>but difficult to get correct stats</u> !!)



European State of Play Agriculture

The European Commission launched the Circular Plastics Alliance in December 2018 to help plastic value chains boost the EU market for recycled plastics to **10 million tonnes** by 2025.

European market survey	Tons New	%	Tons Used	%
Films	547 000	76%	927 500	79%
Pipe	40 000	6%	48 000	4%
Net	54 500	8%	79 950	7%
Twines	80 000	11%	120 000	10%
LDPE	587 000	81%	975 500	83%
HDPE	54 500	8%	79 950	7%
PP	80 000	11%	120 000	10%
Gran total	721 500	100%	1 175 450	100%

European market for Agricultural Plastic



European State of Play Agriculture

European market Survey Results so far (based on 8 countries early 2020)

Small tunnels LDPE 56000 8% 2 112 000 10% 80% 89 600 44 800 44 800 44 Mukhing LDPE 83 000 12% 3 249 000 21% 80% 199 200 132 800 66 400 Bio Deg. 5000 1% - 0% - - 0% Oxo Deg. 8000 1% - 0% - - 0% Irrigation pipe <400µ LDPE 20000 3% 1,2 24 000 2% 50% 12 000 2 000 10000 5 Tube with driper LDPE 20000 3% 1,2 24 000 2% 50% 12 000 10000 4000 50% 50% 2475	European market survey	Polymer	Tons New	%	Soilage	Tons Used	%	Collecte	ed tons	Soil Content	Pastic waste	Recyded material available for integration
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Bio Deg. 5 000 1% - 0% - - 0% Oxo Deg. 8000 1% - 0% -	Small tunnels	LDPE	56000	8%	2	112 000	10%	80%	89 600	44 800	44800	42 560
Oxo Deg. 8000 1% - 0% - - 0% Irrigation pipe <400µ	Mulching	LDPE	83000	12%	3	249 000	21%	80%	199 200	132 800	66400	
Irrigation pipe <400µ LDPE 20000 3% 1,2 24 000 2% 50% 12 000 2 000 10000 5 Tube with driper LDPE 20000 3% 1,2 24 000 2% 50% 12 000 2 000 10000 5 Non woven PP 8 000 1% 2 16 000 1% 50% 8 000 4 000 4000 33 Protective net HDPE 4500 1% 1,1 4 950 0% 50% 2475 225 2250 2 Total 324 500 45% 1,79 579 950 49% 79% 458 275 212 825 245 450 170 Silages LD 121 000 17% 1,5 181 500 15% 50% 109 500 36 500 73 000 65 Bale net HDPE 50 000 7% 1,5 75 000 6% 50% 37 500 12 500 25 000 164 Twine	Bio	Deg.	5000	1%		-	0%			-		0
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	Twines		80 000	11%	1,50	120 000	10%	50%	60 000	20 000	40 000	38 000
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European State of Play Agriculture

European market Survey Results so far (based on 11 countries early 2021)

Financial contribution of players

- Sweden: SvepRetur
- Ireland : Irish Farm Film Producers Group
- France : A.D.I. Valor
- Germany : ERDE
- Spain : MAPLA
- JK : APE UK
- Holland
- o Belgium
- o Finland
- o Italy
- Poland

- € 74 / Tonne
 € 130 190 / Tonne
 € 80 270 / Tonne
 € 35 / Tonne
 start 2021
 € 20 / Tonne
- Good collection rates Already scattered collection centers available Under investigation

- 340 collection points
 200 collection points
 4.500 collection sites
 1.200 collection points
 All over the country
 6 Regional Collections
- Limited (small size)

Probably all farmers centers





Objective

There are 5,250 billion plastic particles floating on the surface on the world's seas and oceans, equivalent to 268,940 metric tons of waste. These fragments move with the currents before washing up on beaches, islands, coral atolls or one of the five great ocean gyres. Because MP cannot be removed form oceans, proactive action regarding research on plastic alternatives and strategies to prevent plastic entering the environment should be taken promptly. Despite the research increasing, there is still a lack of suitable and validated analytical methods for detection and quantification of small micro- and nano plastics (SMNP) evidencing a huge obstacle for large-scale monitoring. There is also a lack of hazard and fate data which would allow their risk assessment.





SUP Directive (2019/904 published June 2020) / PRF Directive (2000/59 reviewed 2019/883)

Member States shall :

- Establish "Extended Producer Responsibility" for fishing gear
- Set national minimum collection rate of fishing gear containing plastic
- Report 6-monthly to the Commission
- Ensure that producers of fishing gear cover the cost of separate collection
- Implement awareness raising measures
- Éncourage re-usable alternatives

Control Regulators shall inform the competent authorities of the flag Member State of:

- Identification of the fishing vessel
- Type of lost gear
- Time when the gear was lost
- Position where the gear was lost
- Measures undertaken to retrieve it
- Ensure a proper counting of in- and outgoing vessels and its equipment





Problems faced :

- ✓ Correct definition of ropes, nets, accessories, and of their main raw material
- \checkmark No reliable national data available on domestic production
- ✓ Questionable data on import/export data of ropes and nets (EUROSTAT)
- ✓ Huge communication effort : 1.200 commercial seaports in 23 coastal countries (120 ports located in the UK, biggest coastal fishing waters)

Is the following data available in your MS?	No. of MS stating they have some data	No. of MS stating they have data at national level
Data on fishing gear placed on the market?	3	3
Data on aquaculture gear placed on the market?	3	2
Data on passively fished waste ?	7	5
Data on EoL fishing gear?	4	3
Data on the disposal of fishing gear?	3	3
Data on the disposal of passively fished waste?	3	2
Data on recycling of fishing gear?	3	1
Data on recycling of other plastic waste landed in ports?	2	1

Table 2: Feedback from MS data collection on data available at national level (out of 23 coastal MS)

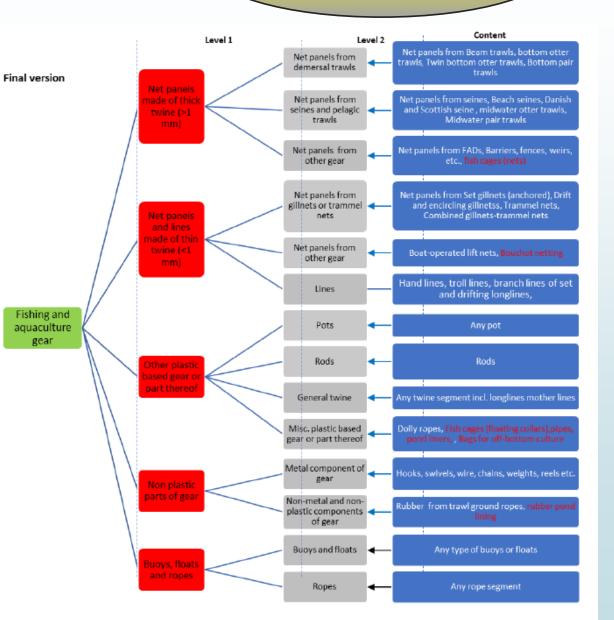


European State of Play Marine

Difficulty in classification...

+ Majority of EoL fishing gear goes into landfill

+ Diverse used material types Polypropylene Polyethylene Polystyrene HMPE Nylon Other





European State of Play Actions taken

Marine applications

- Set-up of TC Plastic Waste Management **
- Awareness raising of <u>worldwide</u> members
- Continue to liaise with all stakeholders (Manufacturers, distributors, fishermen, ports authorities, collection organizations, recycling facilities, ...)
- Promoting R&D on alternative materials (Gloukos, own members, etc...)
 - <u>Chairing</u> and keeping control of EU standardization initiatives through CEN TC 466

Agriculture applications

- Active participation in CPA
- Proactive collaboration with APE

 Participate in the development of a new EU standardization committee CEN TC 249, WG 7 "Agriculture", very much based on French existing standards (AFNOR)



** Technical Committee 3 - Plastic Waste Management (created 2018)

- ° Consolidate its role of stakeholder towards the EU
- ° Collect reliable data on plastics at sea from fishing
- Participate in the organization of collection schemes with other stakeholders (fishermen, cooperatives, ports, etc)
- [°] Bring on board recycling processors
- [°] Eurocord contribution on:
 - Segregate waste for a better recycling
 - Organize workshops to raise awareness / best practises
 - Find alternative applications for recycle materials





Plastic Build Up in Our Oceans The Great Pacific Garbage Patch

<text>



First Vice-President Frans **Timmermans**, responsible for sustainable development, said: "To get to a circular plastics economy, it is essential that more recycled plastics find their way into new products. While we are very grateful for the variety of contributions we received from different industry representatives, more needs to be done. We will now analyse which should be the next steps to further boost the uptake of recycled plastics and close the gap between supply and demand. This is not only necessary for safeguarding our natural environment but also good for our economy as Europe leads the way."