

DRIVING CIRCULARITY OF THE PET INDUSTRY IN EUROPE

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WHO WE
ARE ?

A LEADING
VOICE
OF MAKING
PLASTICS
CIRCULAR IN
EUROPE

IN BRIEF VOICE OF PLASTIC RECYCLERS IN EUROPE



+ 150 MEMBER COMPANIES
& ORGANIZATIONS



+25 YEARS OF EXPERIENCE



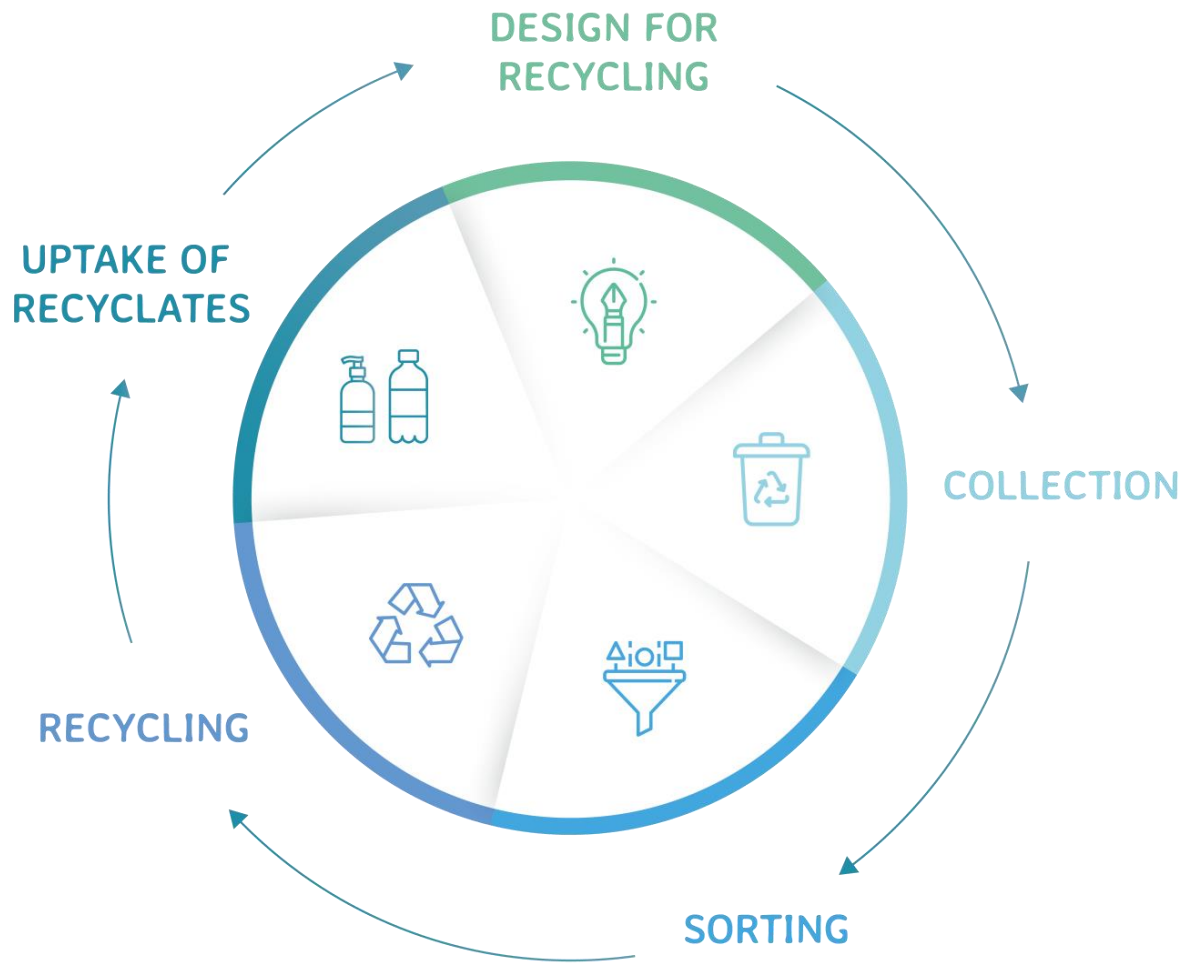
COVERING 80% OF THE EU
PLASTIC RECYCLING
MARKET



6 PLASTIC WASTE STREAMS
FOCUSED WORKING
GROUPS

OUR VISION

MAKING PLASTICS CIRCULAR



- Advancing circularity of plastics through increased quality plastics recycling & use of recycled materials in high-end products
- Improving recyclability of plastic products
- Harmonising of the recycling standards & practices across Europe
- Genuine transition towards circular economy

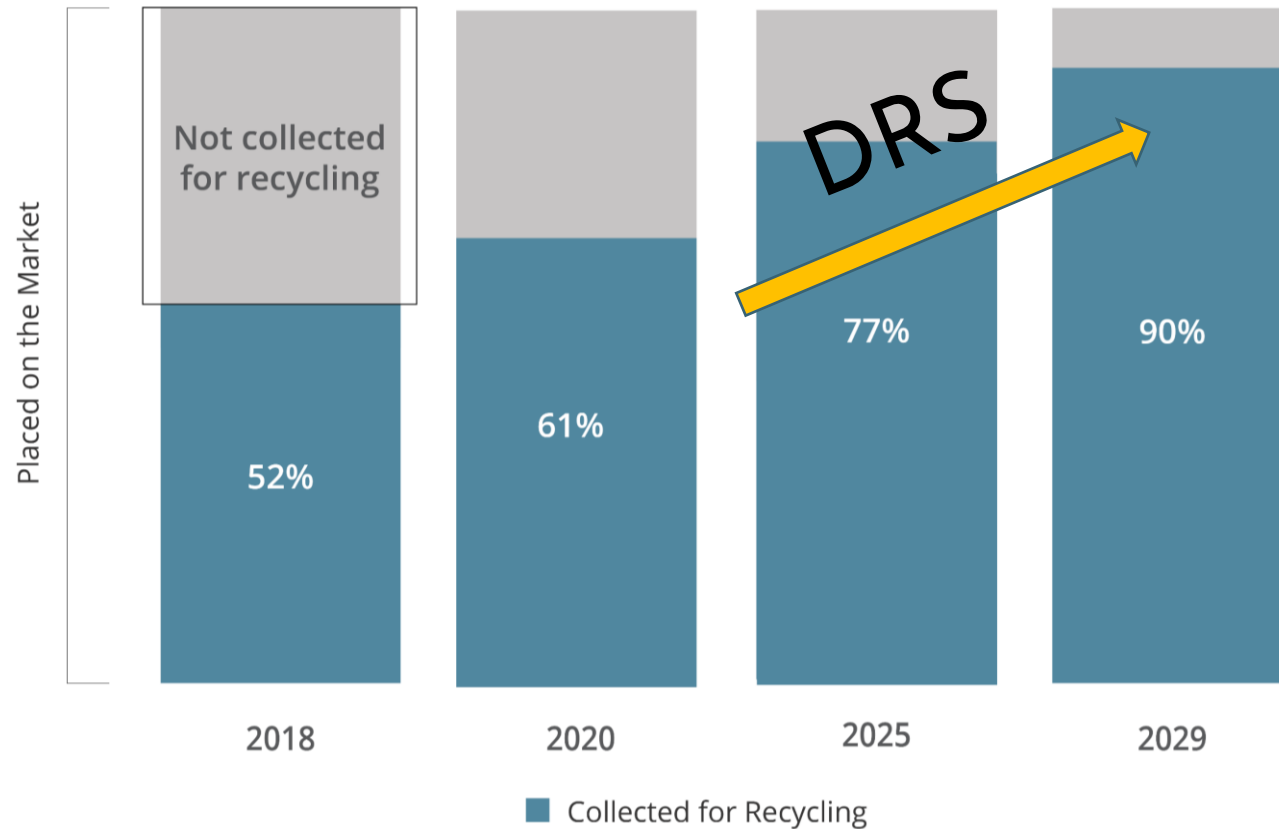
ZOOM ON PET RECYCLING

Collection, Recycling, End Markets

“ Just a few years back PET beverage bottles were recycled into fibres, for strapping or clothing. Today the biggest outlet is packaging – making circularity real even for food contact applications.

COLLECTION

PET Bottles Collection Evolution



State of the affairs

- ✓ 4.6mt of PET rigid packaging ended its product life and was available for collection in 2020
- ✓ 61% of PET bottles and 21% of trays were collected for recycling

Deposit Return Schemes (DRS)

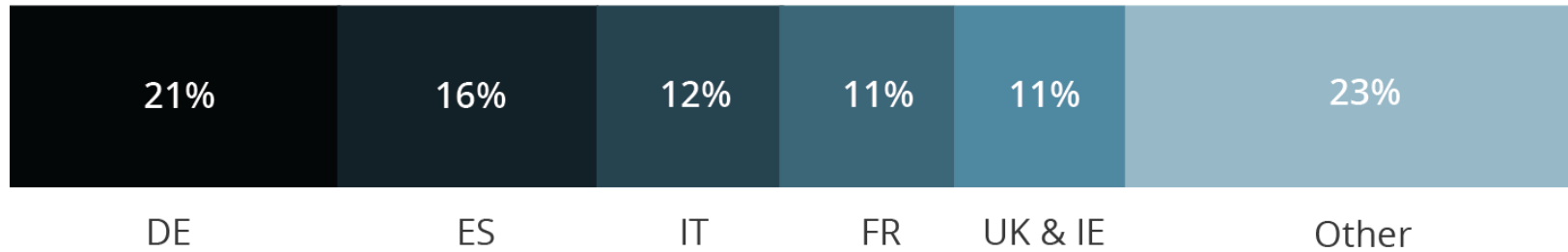
- ✓ 19 EU Member States to have DRS in place by 2025
- ✓ sorted for recycling rates of 7 EU Member States with established DRS are of 83% or higher.
- ✓ DRS countries should more than double by 2025.

RECYCLING

CAPACITY PER COUNTRY



PET Recycling Input Capacity (EU27+3), 2020



- 2.8Mt PET installed recycling capacity
- 6 countries account for 71% of the total share, with Germany leading the group

RECYCLING

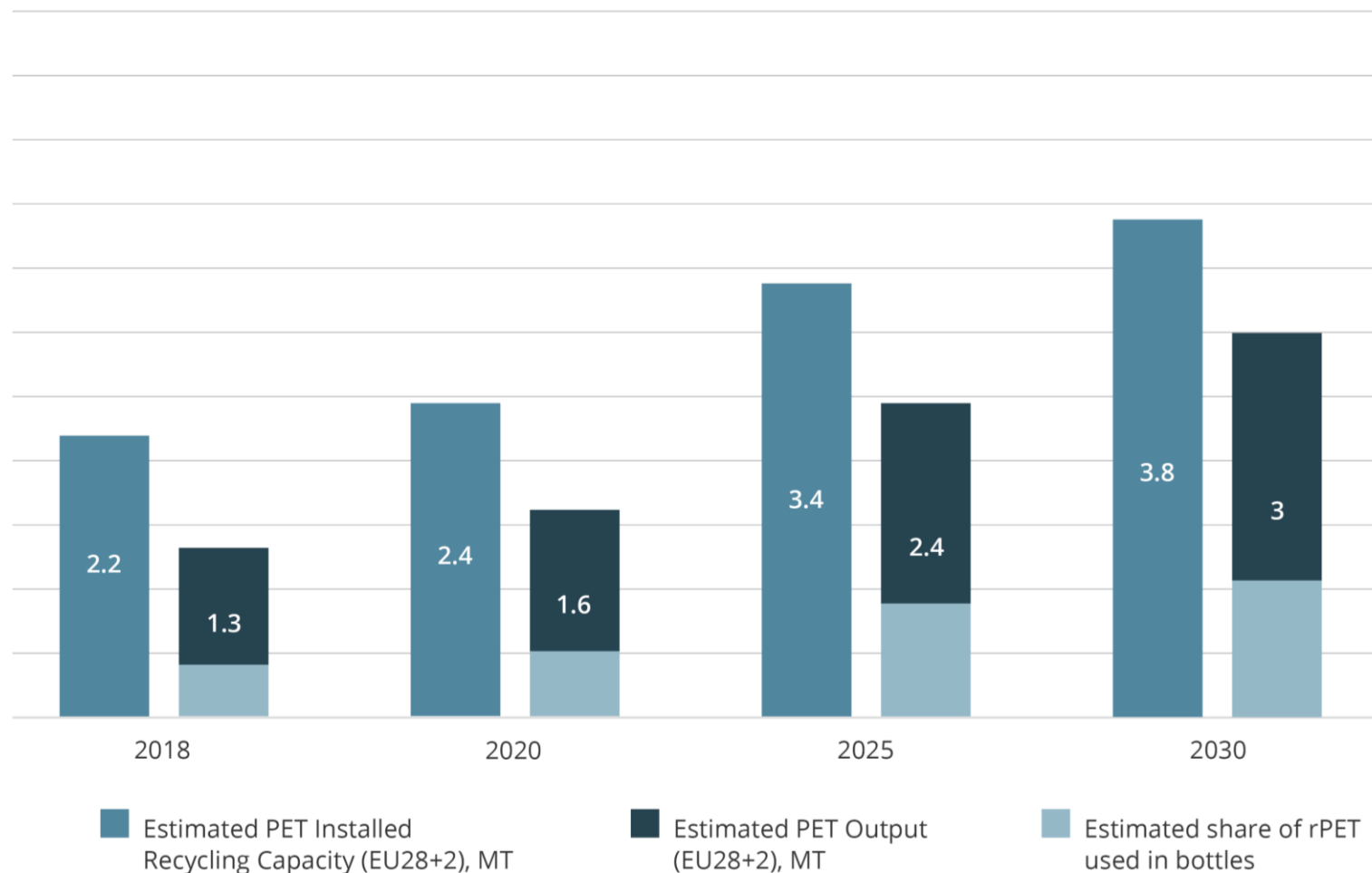
FAST-PACED GROWTH OF PLASTIC RECYCLING



PET recycling capacity increased roughly by 20% in 2020, reaching a total of 2.8mt

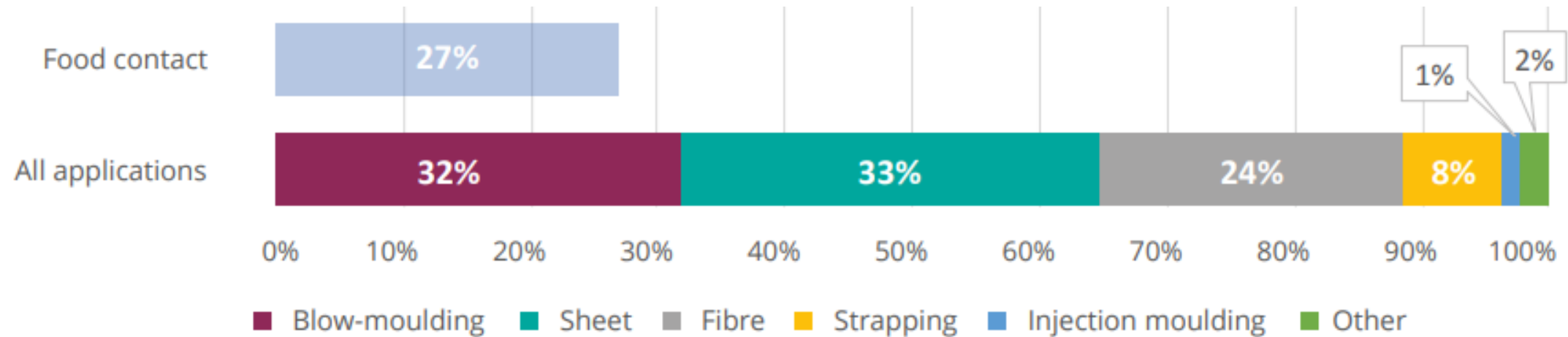
Trends:

- ✓ Bottle-to-bottle recycling to grow
- ✓ Less rPET of bottles going to sheets and more to bottles
- ✓ Adaption to new DRS introductions
- ✓ Tray-to-tray recycling to grow (apart from Netherlands, also in France and Belgium)



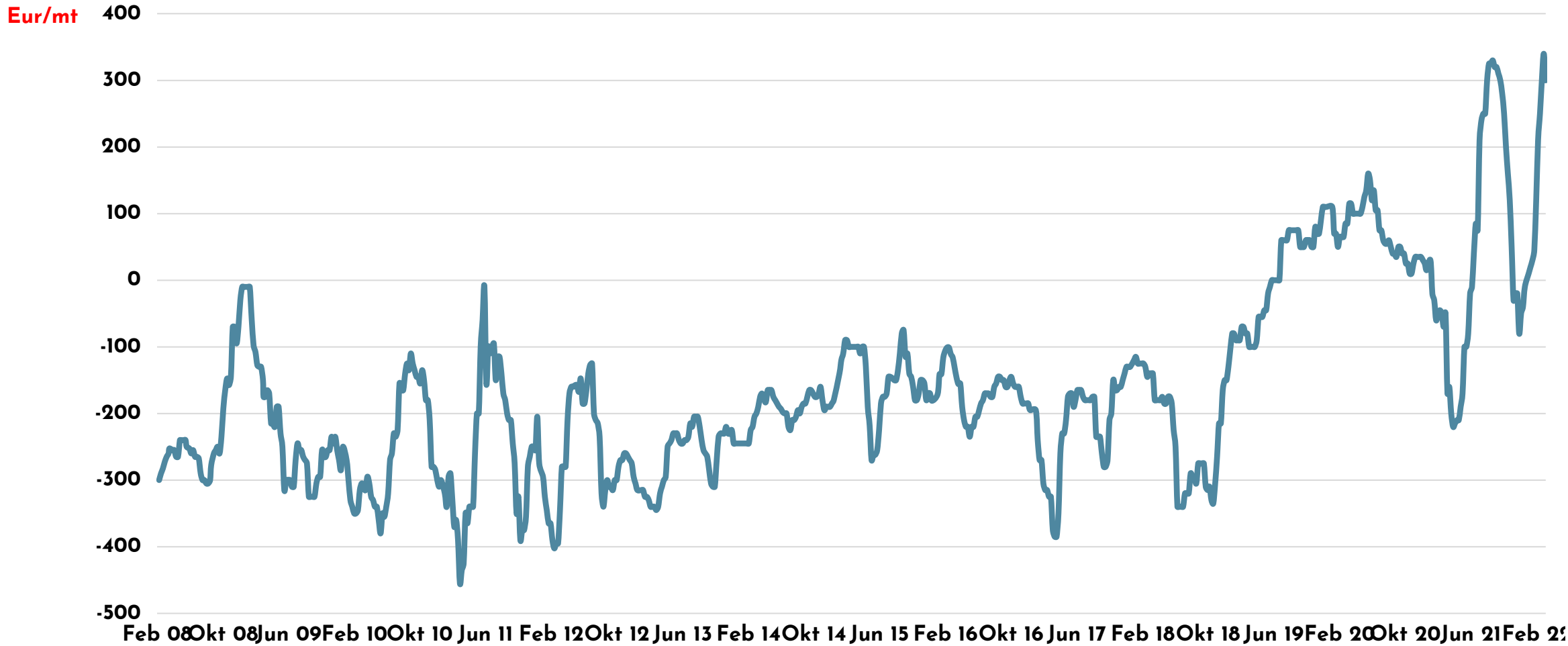
**compared to 2018 data*

rPET END MARKETS



- ✓ 1.7mt of flakes was estimated to be produced in 2020
- ✓ there is a steady growth within trays and sheets application, which with a 32% share remain the largest outlet for rPET in packaging,
- ✓ followed by food contact bottles with a 29% share
- ✓ rPET constitutes in bottles still is below the 25% of today's EU demand

rPET PRICES



— R-PET clear flake spread to Virgin PET FD NWE



BARRIERS

BARRIERS IN PET RECYCLING



1. **INSUFFICIENT, SEPARATE COLLECTION (low availability)**
2. **LACK OF INVESTMENTS IN IMPROVING QUALITY & CAPACITY OF SORTING**
3. **LACK OF CAPACITY & QUALITY OF RECYCLING**
4. **IMPLEMENTATION OF DESIGN FOR RECYCLING**
5. **UPTAKE OF RECYCLED MATERIAL**
 - Unsustainable 100% recycled content claims



LACK OF IMPLEMENTATION OF HARMONISATION & STANDARDS

KEY DRIVERS

KEY DRIVERS FOR INCREASING PET RECYCLING



LEGISLATIVE FRAMEWORK

CIRCULAR DESIGN

RecyClass



RECYCLABILITY

RecyClass works on advancing recyclability of plastic packaging while ensuring innovation.

It is based on scientifically elaborated Design for Recycling Guidelines where findings from laboratory testing of the behaviour of products and novel technologies are incorporated into a recycling process.



TRANSPARENCY & TRACEABILITY



RecyClass



RECYCLABILITY

✓ Recyclability Certifications & associated claims/logos



RECYCLED CONTENT

✓ Recycled Plastics Traceability Certification & associated claims/logos

LEGISLATIVE FRAMEWORK



Legislation
in place



PLASTIC STRATEGY

100%

OF PLASTIC PACKAGING TO BE RECYCLABLE BY 2030

55%

RECYCLING RATE TARGET FOR PLASTIC PACKAGING BY 2030

10
million

TONNES OF RECYCLATES TO BE TAKEN UP IN NEW PRODUCTS BY 2025

SINGLE USE PLASTIC DIRECTIVE

90%

COLLECTION RATE TARGET FOR BEVERAGE BOTTLES BY 2029

30%

RECYCLED CONTENT FOR BEVERAGE BOTTLES BY 2030

PET
SPECIFIC

OWN RESOURCE

€800/
tonne

NATIONAL CONTRIBUTION BASED ON THE AMOUNT OF NON-RECYCLED PLASTIC PACKAGING WASTE

LEGISLATIVE FRAMEWORK

Upcoming
Legislation



**RECYCLED PLASTIC IN FOOD
CONTACT ARTICLES REGULATION**
recast of Regulation No 282/2008
✓ NOVEL TECHNOLOGIES

PET
SPECIFIC



WASTE FRAMEWORK DIRECTIVE

WASTE SHIPMENT REGULATION

PACKAGING & PACKAGING WASTE DIRECTIVE

INCREASED COLLECTION & QUALITY SORTING

STATUS OF DRS DISCUSSION IN EUROPEAN COUNTRIES

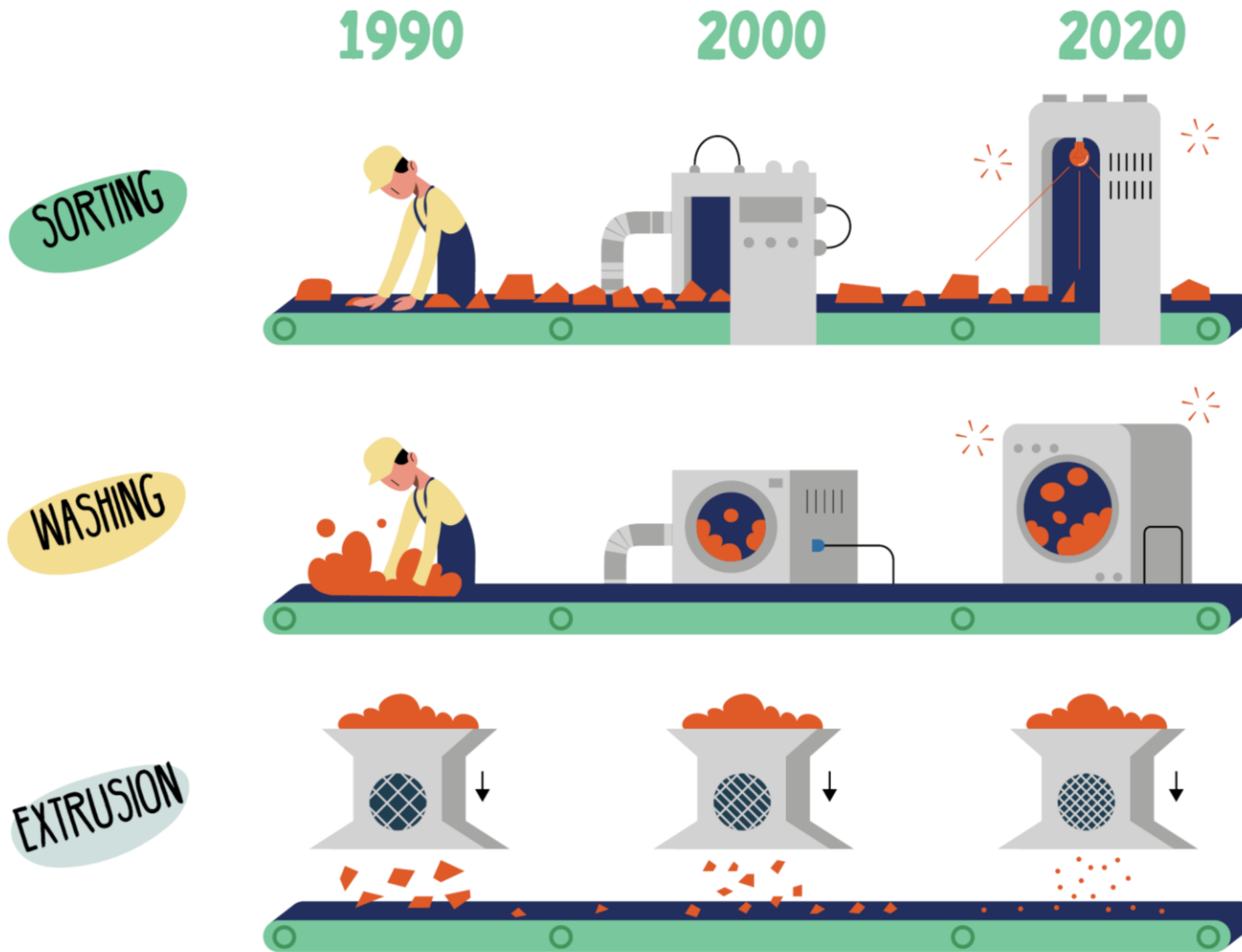


DRS ESTABLISHED ²⁶		POLITICAL DECISION TAKEN ²⁷		DRS IN DISCUSSION	CURRENTLY UNKNOWN
ICELAND	1989	IRELAND	2022	BELGIUM	ITALY
DENMARK	2002	SCOTLAND		FRANCE	LUXEMBOURG
SWEDEN	1984	LATVIA		SPAIN	
NORWAY	1999	ROMANIA		SLOVENIA	
FINLAND	2008	TURKEY		BULGARIA	
ESTONIA	2005	MALTA		CZECH REPUBLIC	
LITHUANIA	2016	HUNGARY	2023		
CROATIA	2006	GREECE			
GERMANY	2003	POLAND	2024		
NETHERLANDS ²⁸	2005	PORTUGAL			
SLOVAKIA	2022	ENGLAND, WALES, N. IRELAND			
		AUSTRIA	2025		
		CYPRUS			



*EUNOMIA I PET MARKET IN EUROPE: STATE OF PLAY
 Source: EPA Network²⁹, NMWE, TOMRA

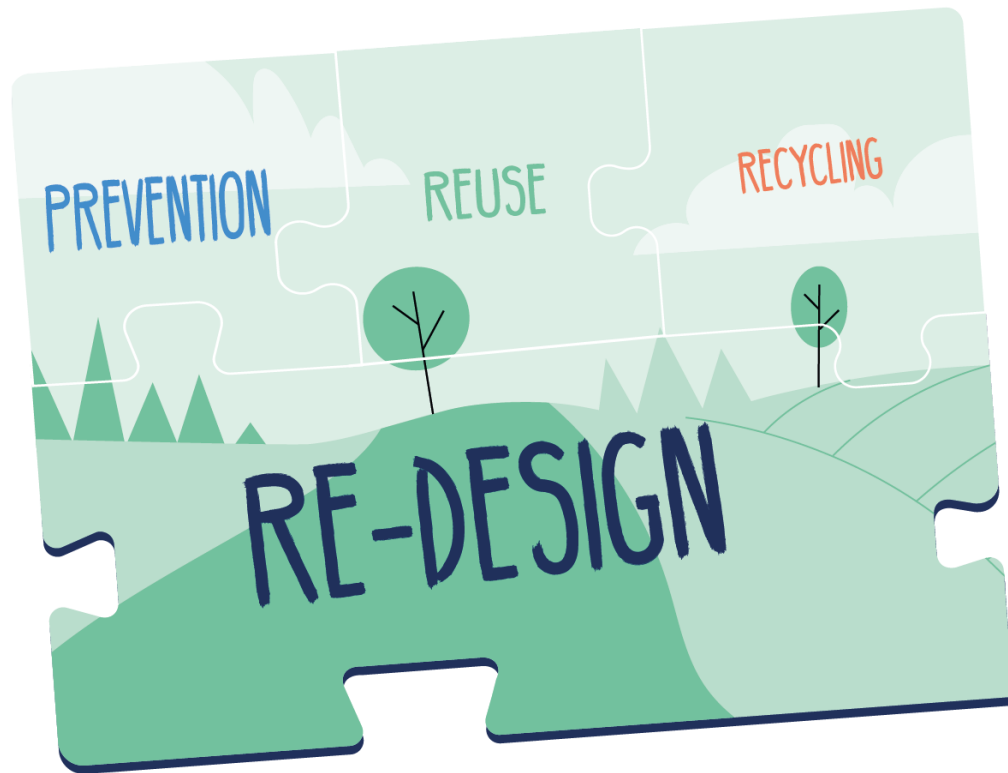
RECYCLING TECHNOLOGIES





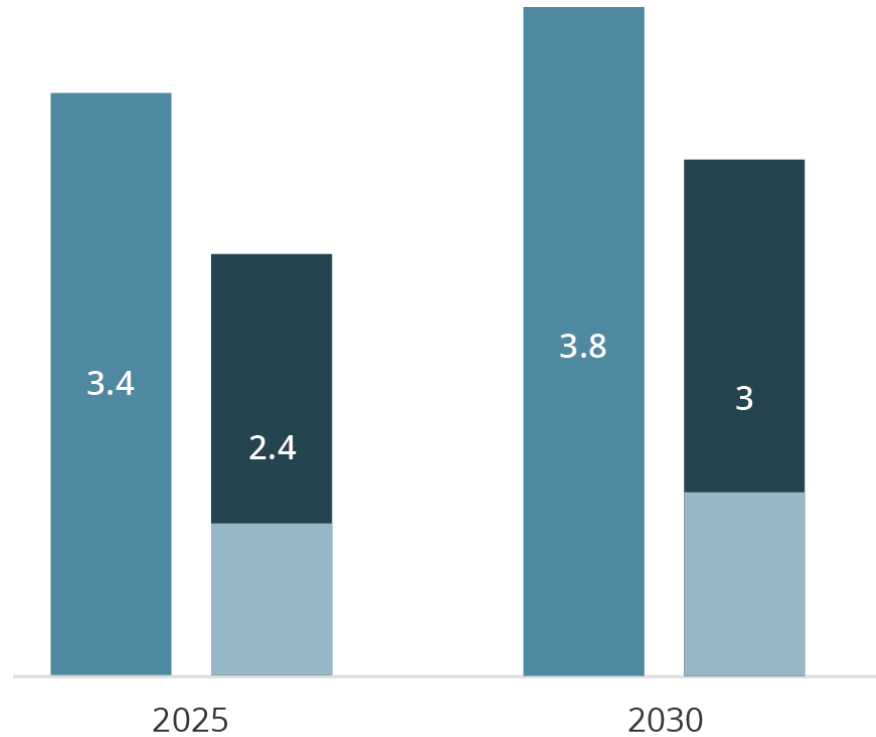
CIRCULAR FUTURE OF PET RECYCLING

PLASTIC RECYCLING IS PART OF THE PUZZLE



“As the EU is, on the global scale, the pioneer in terms of PET circularity thanks its extensive base of recycling companies, high-tech technologies and best practices it will have an impact on the countries across the globe by exporting its technologies and know-how.

CIRCULAR FUTURE OF PET RECYCLING



To meet the 90% collection rate and the mandatory recycled content targets, Europe will require an expansion in recycling (wash) capacity of at least one third by 2029.

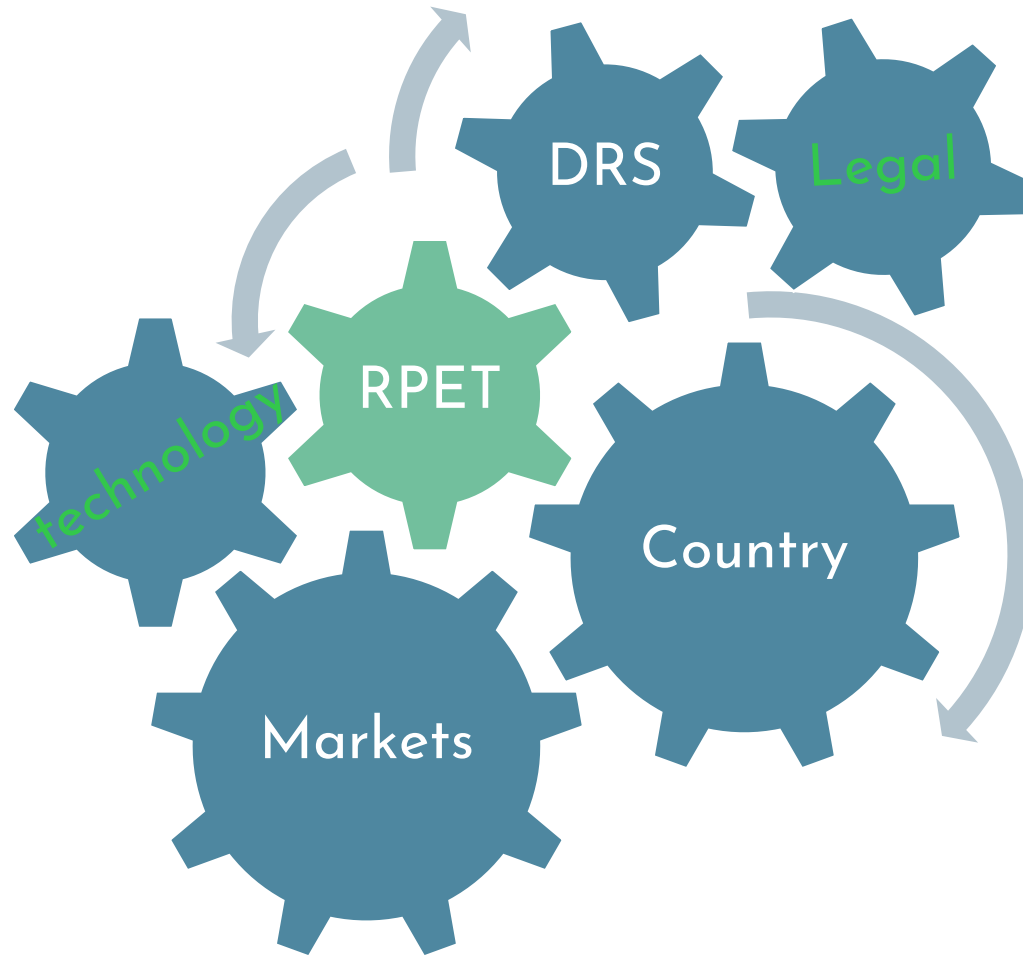
■ Estimated PET Installed Recycling Capacity (EU28+2), MT

■ Estimated PET Output (EU28+2), MT

■ Estimated share of rPET used in bottles

CHALLENGES FOR THE FUTURE

Balancing act



THANK YOU

25

YEARS OF MAKING PLASTICS CIRCULAR



Report Available on PRE web