



CREATING A SUSTAINABLE RECYCLING SOCIETY

How to develop EU PET recycling Prepare for a revolution

*Casper van den Dungen
Vice President*

PRS ,Rai Amsterdam 29 march 2017

PRE mission



- ✓ **promotion** of plastics recycling
- ✓ **creation** of conditions which enable profitable and sustainable business
- ✓ **development** by initiating recycling projects
- ✓ **promote** the use of recycled plastics
- ✓ **offering** service platform



PRE's projects / cooperations

- EPBP : European Pet Bottle Platform
 - Assessment system for innovative PET bottle designs
 - facilitate more BtB applications.
- EuCertPlast 
 - Create harmonisation in the certification of Recycled
 - Improve traceability of PCW Recycled materials
- StateSuite: statistical data collection
 - Create benchmark data in a neutral closed entity
- RecyClass
 - What needs to be done to improve product designs
- Polymark: EU project  **Video on PRE stand**
 - Create improved sorting to gain more value of the sources
- PETCORE Europe
 - Facilitate cooperation within the PET value chain
- Plastics Recycling Show
 - Exhibition and conference dedicated to plastics recycling

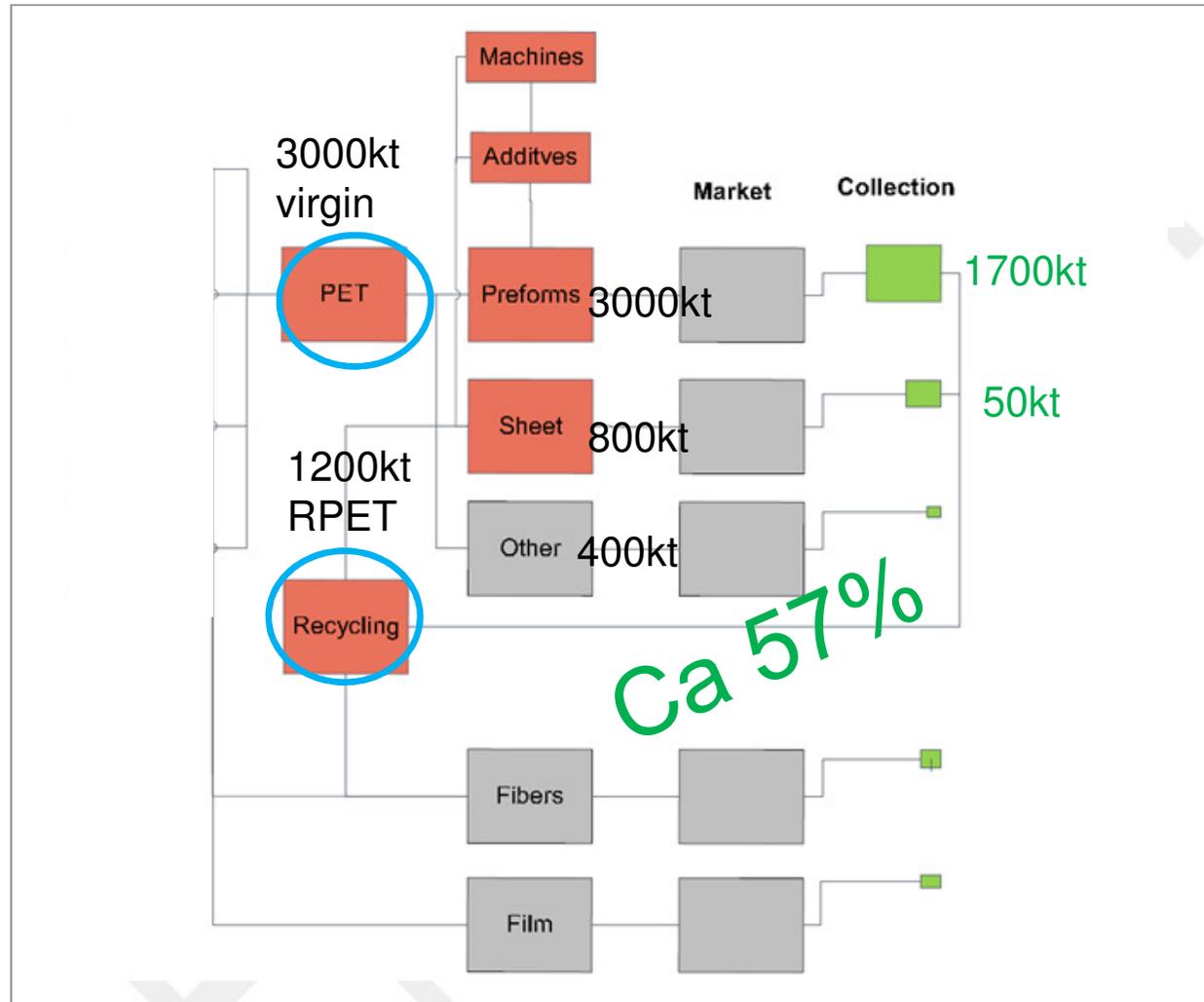


Agenda for today



- What is current RPET status?
 - Feedstock, Process, Markets
- What are key market developments?
 - Legal, Finance, Quality, technology
- What changes can be expected?
 - EPR, Circular Econ., Food vs Non Foodgrades, capacity development
- Conclusions for development

What is RPET status?



Feedstock status



- **Bottle Collection** has close to saturation status based on current infrastructure
 - **ca20% Deposit** , quality partly mixed with Alu, focus on mixed colours market
 - **80% Other** , quality down, waste up, multi material impact
- **Sheet/trays Collection** is in start phase and needs infrastructure adaption
 - No deposit
 - Other; kerbside collection, bring systems

Process status



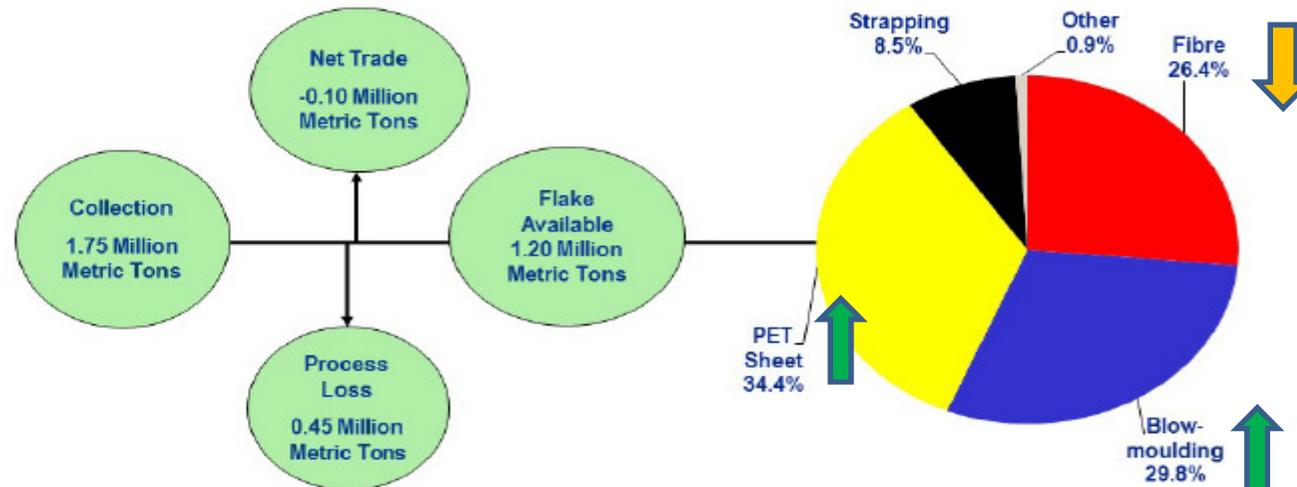
- **Bottle recycling capacity**
 - Captive wash lines ca 30%; capacity average of 20-25kt input
 - bottles
 - sheet
 - Fibers
 - others
 - Non-captive lines, capacity average of 15-20kt input
- **Sheet/trays recycling capacity**
 - Start up 1 or 2 lines
 - Some mix in bottle washing lines(presentation to follow)

Market status



Mass Balance 2014

West Europe RPET Balance 2014



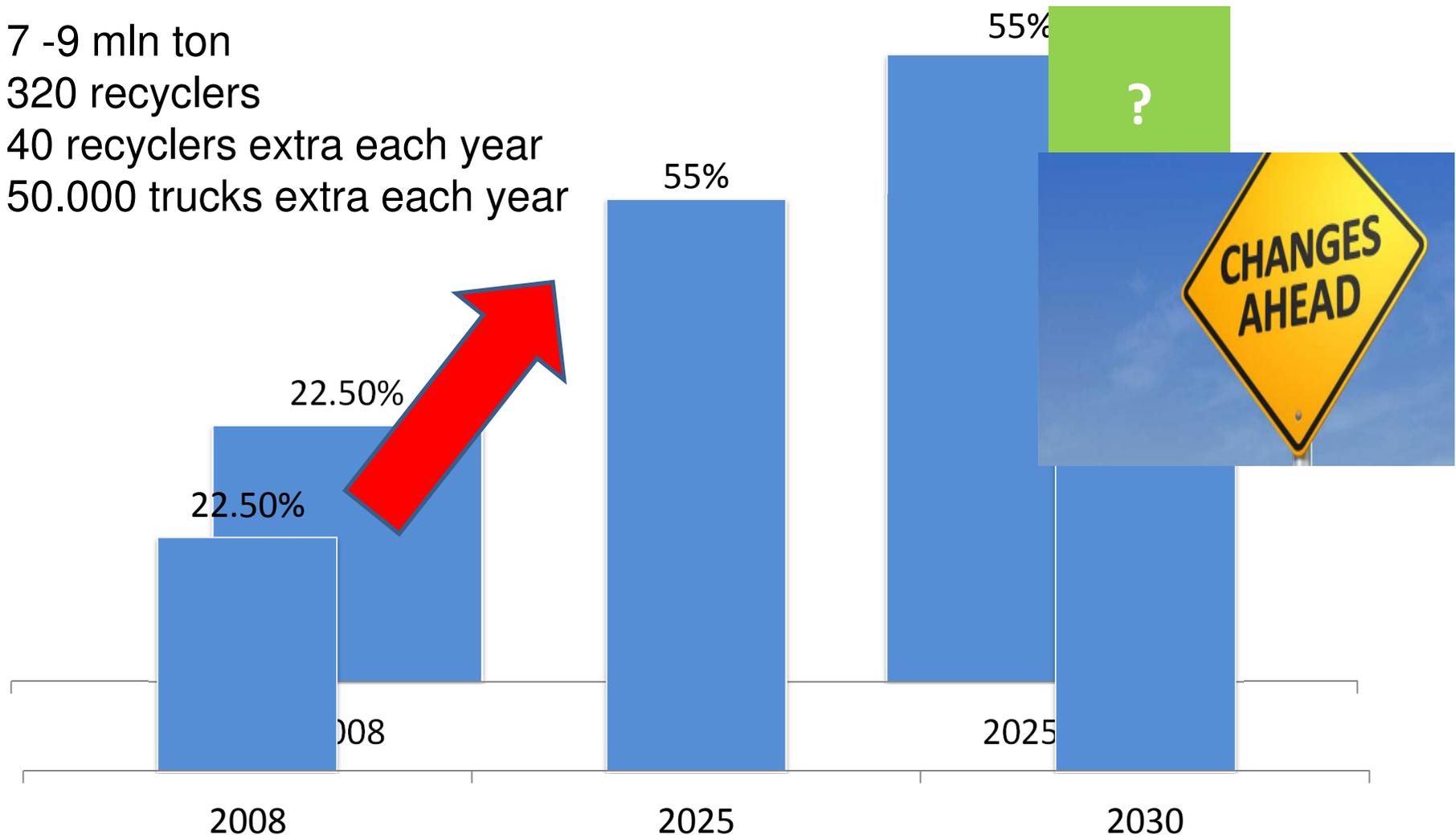
Legal, collection volumes

Commission's proposed targets

All plastics!



- 7 -9 mln ton
- 320 recyclers
- 40 recyclers extra each year
- 50.000 trucks extra each year

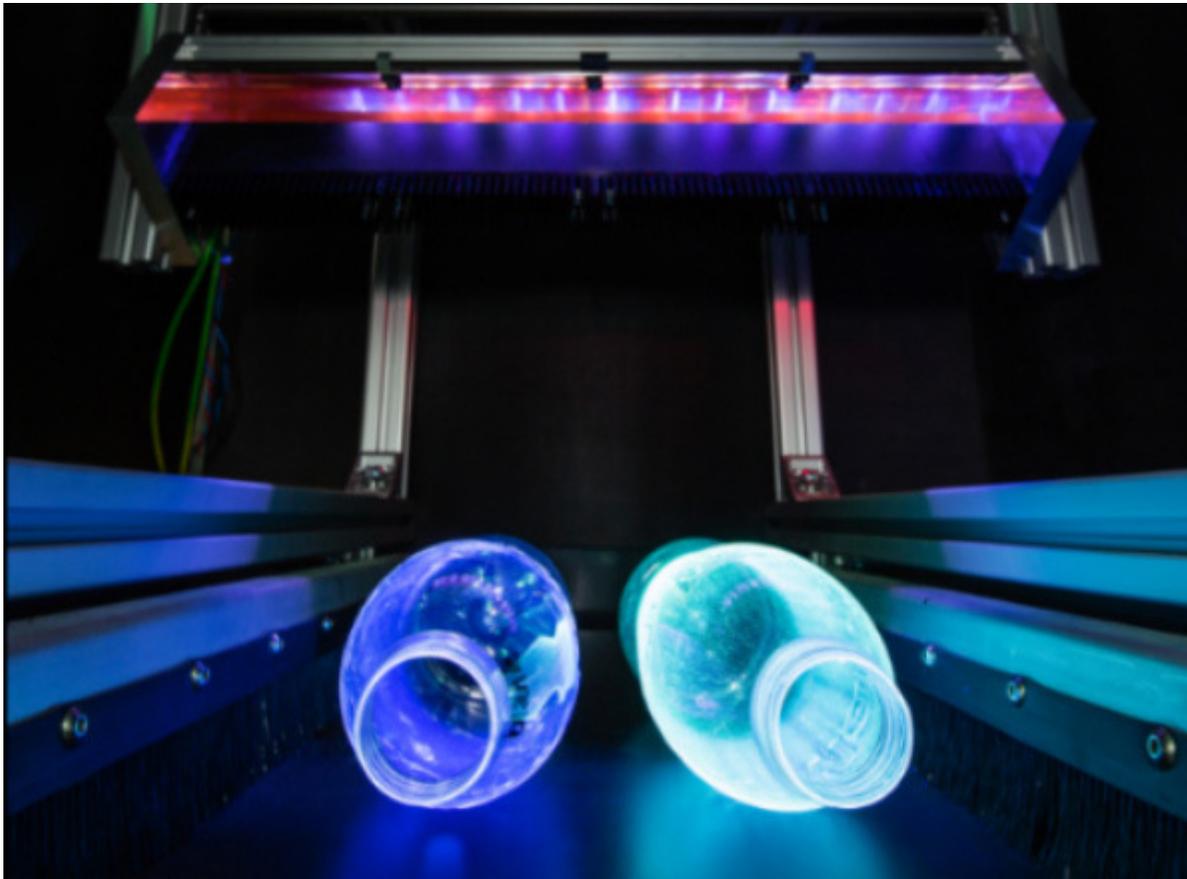


Food vs non-Food packaging



Polymork

Regulation 202/2008



- Others tracers;
- REFLEX
 - PRISM
 - Watermarks

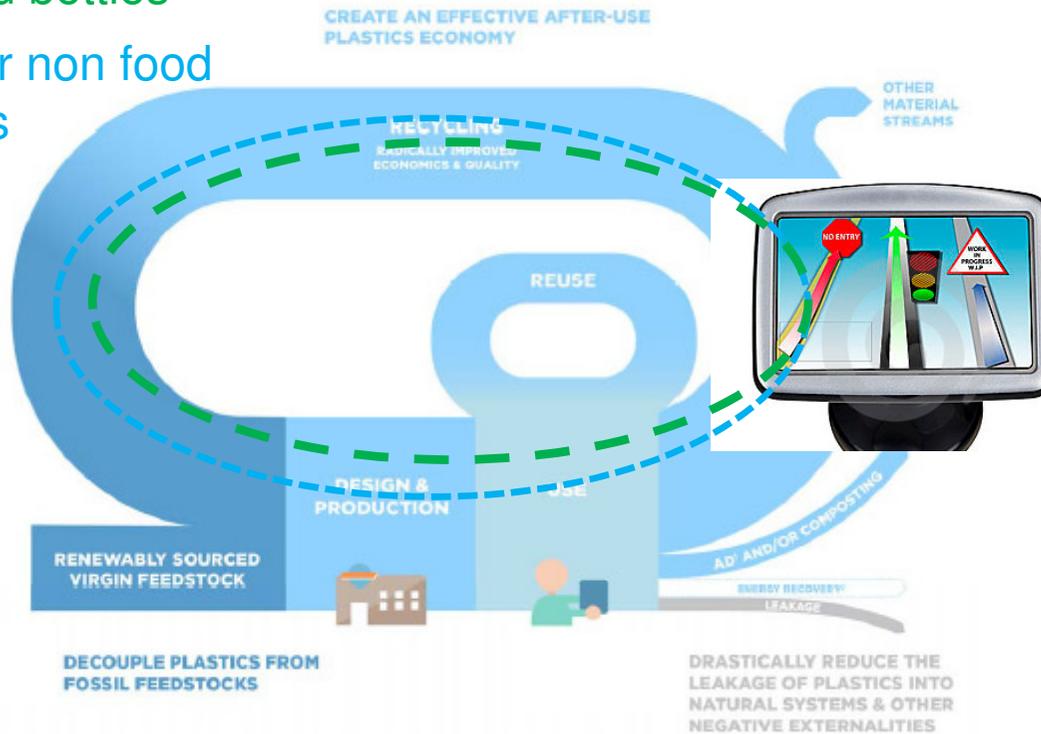
Circular economy



For PET

Toll road for food bottles

National road for non food bottles and trays



Program a change is ; 70% mind setting



- Revolution is a fundamental and **sustainable structural change** but it is the mind which need most work.
- In PET recycling we need this revolution;
 - Volume Growth was there, is there and will be there
 - Profitable Growth was there, is very limited and will be more limited in the future if no change.
 - Harmonising the financing structure in relation to quality of collection needs to be reorganised
- Radical increase in deposit collections will capture this fast and consistently.

Deposit collection can be our new Toll road

How to prepare for this revolution?



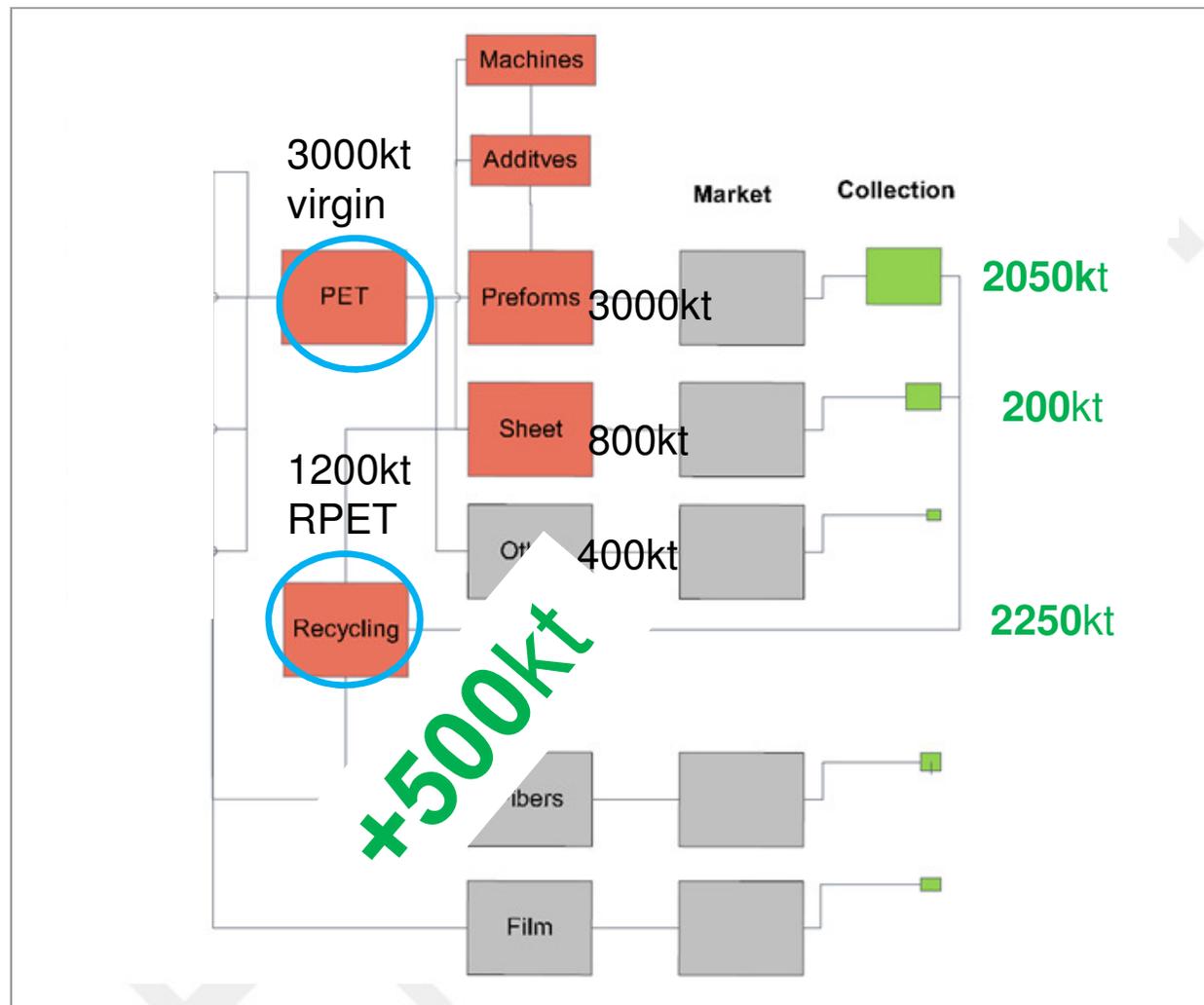
- Deposit collections for food bottles will be easy as many systems are worldwide in operation
- Collection of trays and non food packaging is relative new and therefor is a challenge, marker/tracers can be found to program its road to value.
- Both are required to foster the high targets of plastics collections
- Potential increase of more than 500 kt in years to come(> 25% growth)

Major changes



- Adaption of infrastructure to increase collection
- Use maximum value of collected PET to program new business models to finance the higher targets
- New recycling capacities needs to adapted to future collection qualities
- Knowing the history of a product can program future value

What is potential volume?



Conclusions



- Successful past of rPET is preparing for transition to the next level.
- Leading recycling rate of 52% will move up if higher targets for plastics are required
- New Deposit bottle and new tray & non food packaging collections are new infrastructure developments which can be expected in the level of more than 500kt
- Higher collections targets result in higher cost and absorbing these cost in the value chains.
- The challenge of this evolutionary increase needs new business models to secure the investments as well as the absorption of this new volumes in the market
- There is a positive Value in PET, this helps in financing to create these new collection infrastructures.

• Thank you for your attention



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- www.polyrecycling.com
- www.plasticsrecyclers.eu
- www.petbottleplatform.eu
- www.eucertplast.eu
- www.polymark.org
- www.petcore.org
- cvd@eupr.org
- cvd@polyrecycling.com

Other presentations



What is the status of PET thermoforming recycling in Europe?

Paolo Glerean, Board Member, **Plastics Recyclers Europe**

What is the status of Opaque PET in France?

Olivier Vilcot, Vice President, **SRP**



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Tel: +32 2 742 96 82

Fax: +32 2 732 63 12

Email : info@plasticsrecyclers.eu

PRE represent National Associations and Individual Member Companies covering 80% of the European market.

We focus on the promotion of plastics recycling and the creation of conditions which enable profitable and sustainable business.