

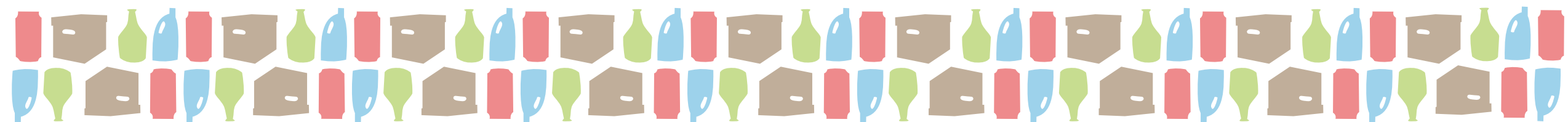


Netherlands Institute
for Sustainable Packaging

Circular packaging: the Dutch way

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Kennisinstituut Duurzaam Verpakken





As I see it

- Anyone can contribute to the world of tomorrow
→ And most people would like to contribute
- Make sustainability easily accessible
→ Which leads to a better appreciation for environment, products and materials
- Keep asking yourself questions like
→ Am I doing the correct thing? Do I want this to happen?
- Sustainable leadership
→ Inspire other people
- Be one and the same, both private and professional
→ propagate professionally what you teach your children



Circular economy will bring...

MOTIVATION FOR EMPLOYEES
BUSINESS OPPORTUNITIES
A BETTER COUNTRY
BETTER ENVIRONMENT
MORE RECYCLING
NEW POSSIBILITIES
MORE AUTONOMY
INNOVATION

The Circular Economy for packaging



Time for action

In the transition to a circular economy it is important that:

- **Companies** make every effort.
→ Customize: there's not 'a one way forward', different routes can and should be followed.
- **Governments** accommodate the transition to a circular economy
→ Stimulate: resolve (potential obstacles) & use carrots and sticks to reward good behavior and curb undesirable behavior.
- **Companies** and **knowledge centers** work on 'the infrastructure'
→ Improve: develop and optimize the necessary technology and technique.



Circular packaging

- Prevention
 - Prevent waste
 - Use as few resources as possible
- Re-use
 - Re-use the packaging as such
- Recycling
 - Recycle the materials used to protect the product



MuCell technology



Compressed deodorant



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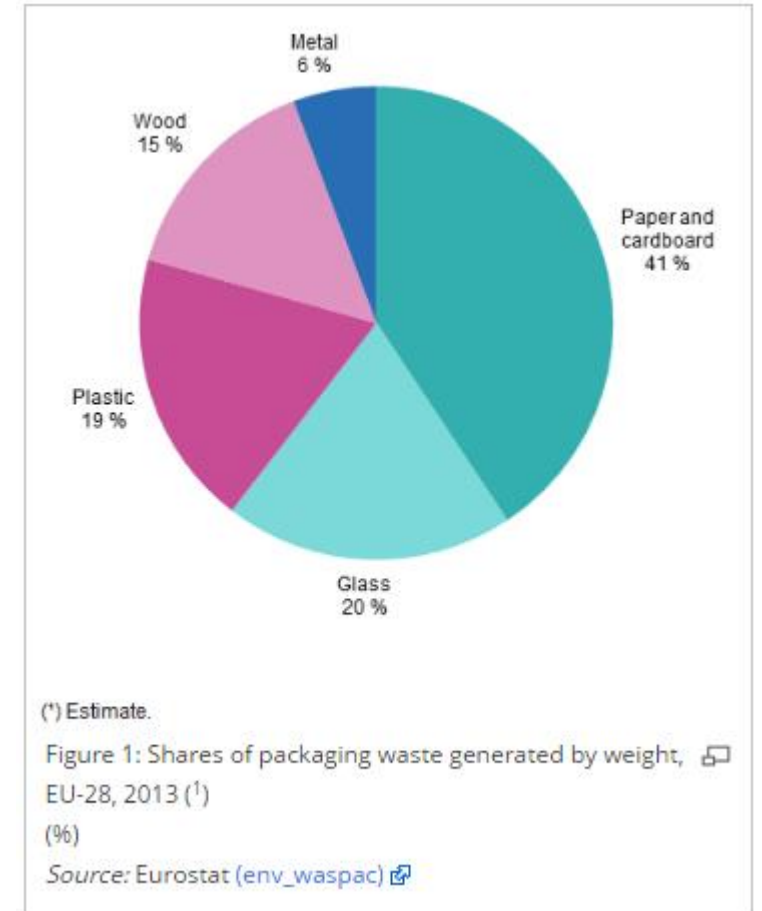
Statistics





Packaging waste generated

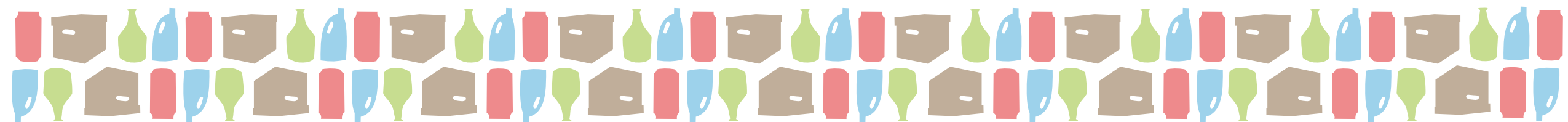
- A European citizen opens on average 7 pieces of packaging a day
- This adds up to 157 kilo packaging waste per person per year
- Which is almost 40% of the total household waste



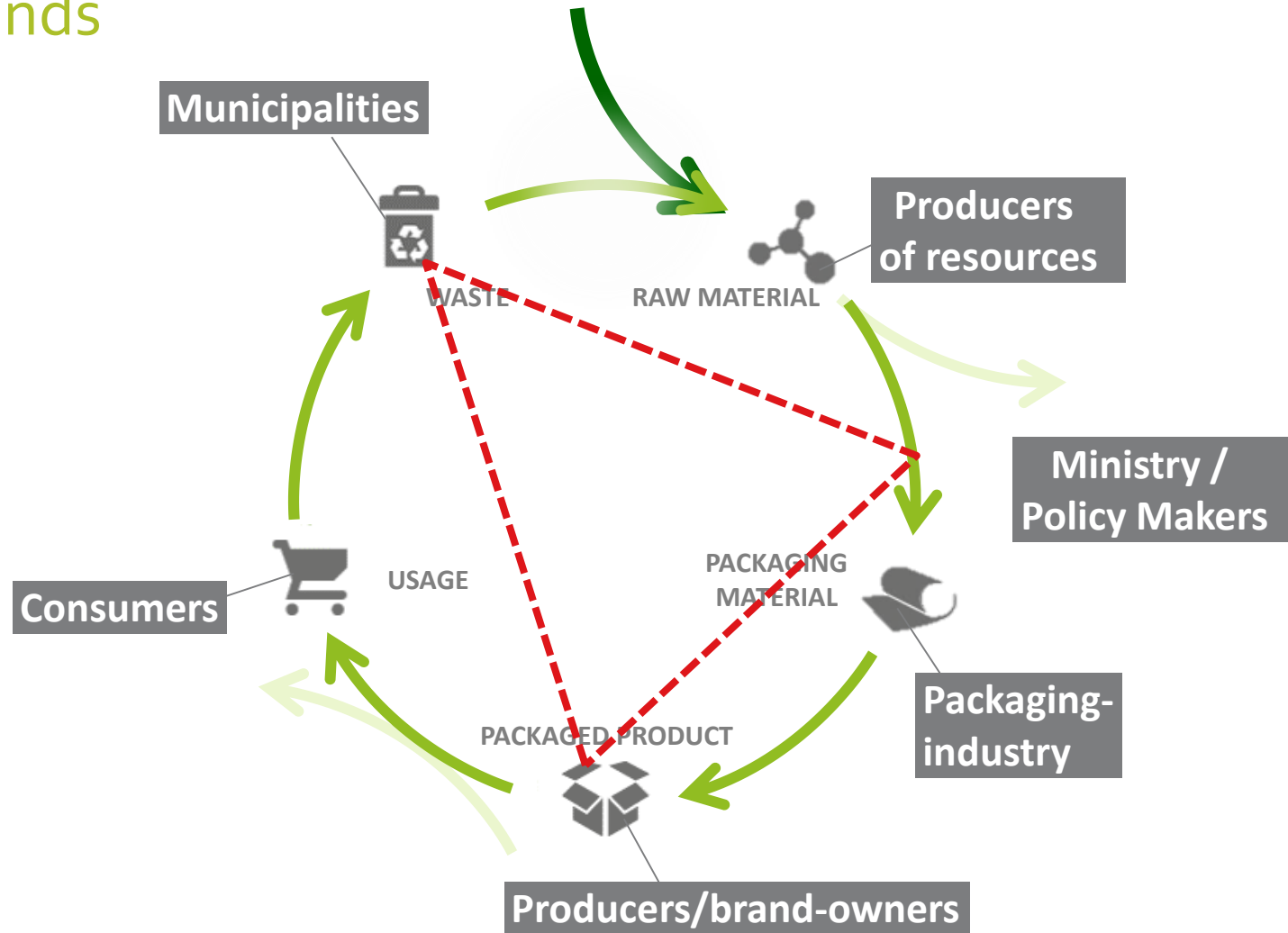


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The Netherlands in 2013



In the Netherlands



Netherlands institute for sustainable packaging

- Founded on January 1, 2013
- Founding fathers in the board
- Advisory board of other parts of the circle
- Generate objective knowledge on a circular economy for packaging



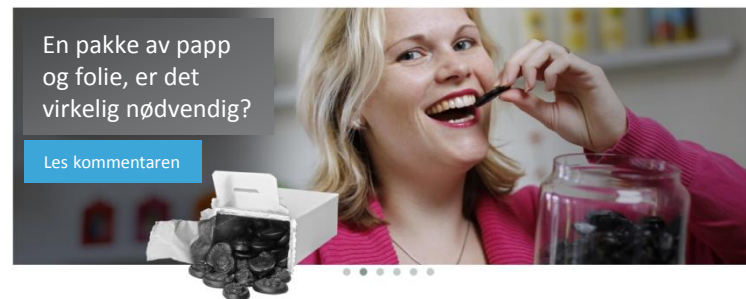
KIDV - activities



Knowledgebase: the place to be for knowledge on sustainable packaging



Research programs



Online Packaging forum for consumers



Sector innovation plans



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Sector innovation plans



Sector innovation plans for sustainable packaging

- Result of the three party agreement
- All companies, not only frontrunners
- More awareness of the circular economy
in all levels of companies
- Scientific assessment



A few examples of expected impacts in 2018



use of recycled material



10% weight reduction



5% weight reduction



37% recycled PET
(Europe 10%)

15% reduction
aluminum



80% - 100% certified/recycled fibre



20% recycled
PET





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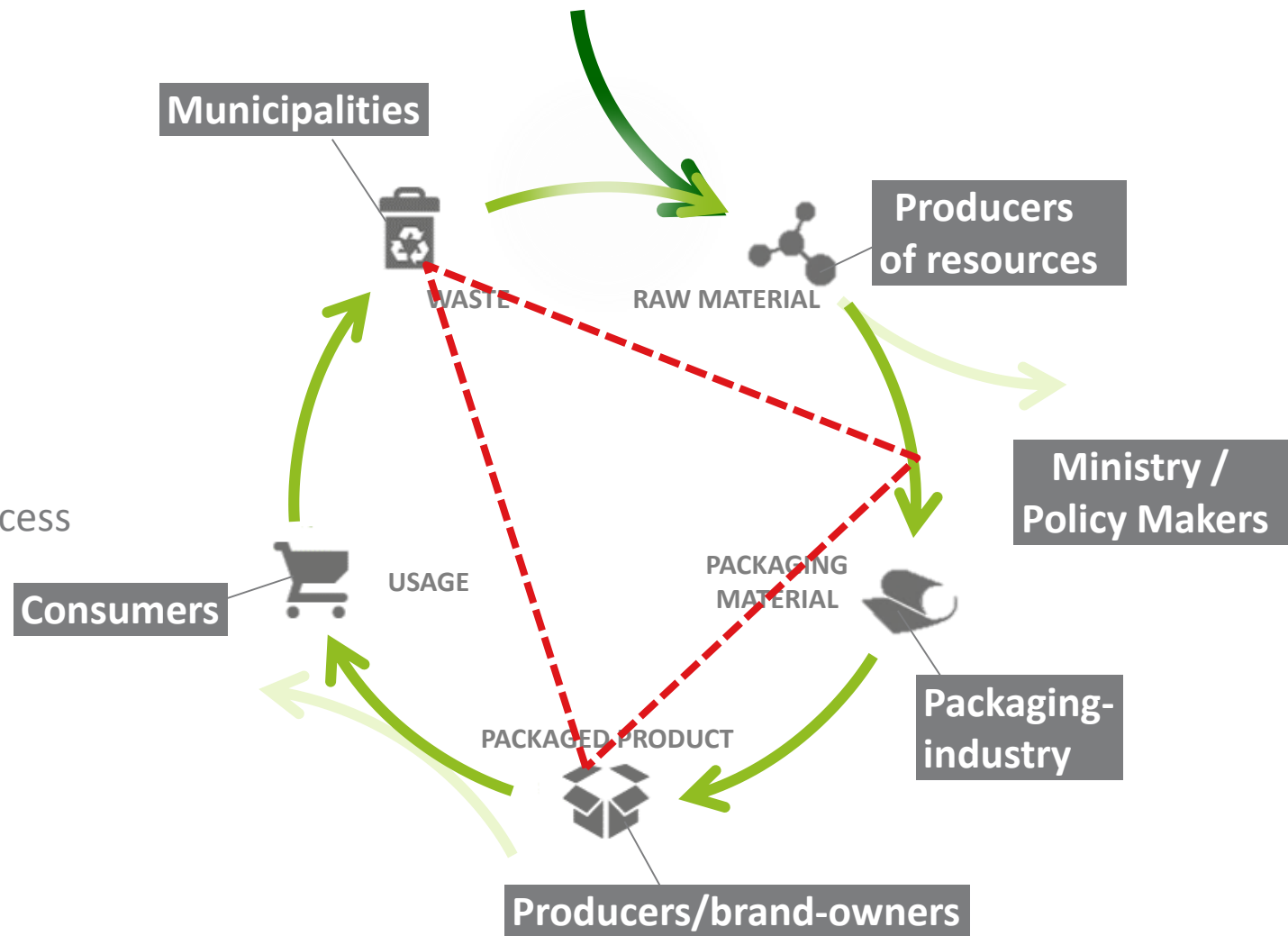
The need for knowledge



Scientific research program

Work packages:

- Environmental Impact Assessment.
 - Inclusion of product loss
- Design tools (packaging) materials.
 - Include sustainable packaging in the design process
- Collecting & Recycling Efficiency.
 - Behaviour of consumers and citizens
- Optimizing Plastic Packaging Loop.
 - Strategic redesign



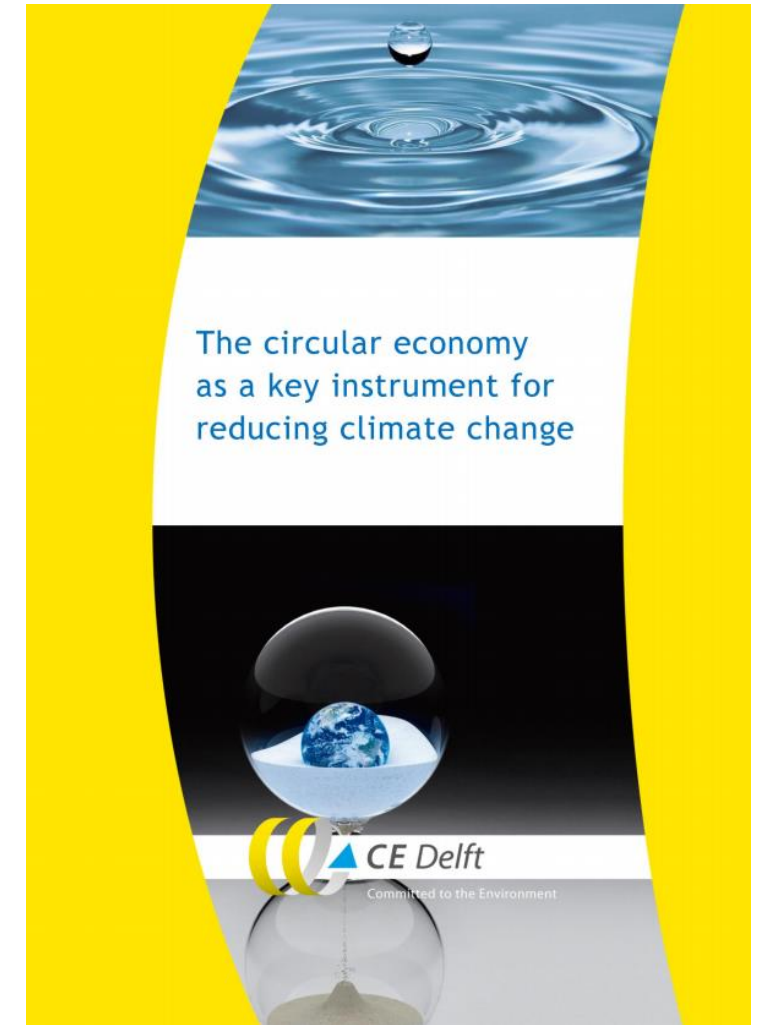
Closing the loop for plastics

- Collection and recycling of plastic packaging waste is on the increase
- In The Netherlands: 16 kton in 2009 and 129 kton in 2014
- To market recycled plastic is a growing challenge, financial and technical
- From a supply to demand economy
- It is time to meet the quality standards for new products



Reducing climate change

- Circular economy an instrument for reducing climate change.
- Increased recycling of 2/3 of municipal solid waste can:
 - reduce the annual global greenhouse gas emissions by 6%
 - Europe's greenhouse gas emissions could annually be reduced by 4%
- Municipal solid waste makes up 10% of all waste generated.
- The potential reduction of greenhouse gases could be much higher, if other waste fractions were also taken into account.





Reducing plastic bags

- 'Reducing the environmental impact of (plastic) carrier bags in the retail channel'
 - Pilot project: 'Can't we use fewer bags?'
 - Study of the environmental impact of carrier bags
- 1 January 2016: New legislation in the Netherlands

Separate collection of beverage cartons

- 85% of the Dutch municipalities





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Opportunities for your company



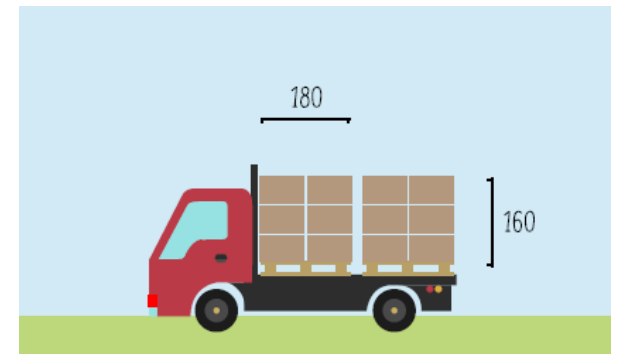
10 ways to improve the sustainability of packaging

1. Use less material and prefer small and lightweight packaging.
2. Use recycled content or renewable resources if possible.
3. Fill the packaging as full as possible.
4. Try to make recyclable packaging by using mono-materials. Consumers can separate their waste easily. Talk about it with waste management organizations.
5. Look for possibilities to concentrate the product and make smaller packaging with less material.





6. Communicate with the consumer about disposing the packaging in the right way.
7. Do not use harmful substances in packaging materials.
8. Think about logistics when design new packaging. For example the size of pallets.
9. Take care of good waste management in your own company.
10. Don't be afraid to start.





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Please, start tomorrow

www.kidv.nl

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