Sustainable Packaging in the Netherlands

IAPRI 2019

Chris Bruijnes
Scientific Board

Supervisory Board

Cees de Mol van Otterloo
Director Afvalfonds Verpakkingen (Voorzitter)

Marc Jansen
Director Centraal Bureau Levensmiddelenhandel (penningmeester)

Marian Geluk
Director Federatie Nederlands Levensmiddelenindustrie

Ronald van Welle
Director Nederlandse Cosmetica Vereniging

Eus Peters
Director Raad Nederlands Detailhandel
Introduction and position KIDV

- Netherlands Institute for Sustainable Packaging (KIDV)
- Founded in 2013
- Reduce the environmental impact of packaging in relation to the packed products
- A part of producer responsibility system
- Creating knowledge through research to close the loop for packaging materials and contribute to a circular economy

The packaging chain

Working along the product and packaging value chain

Primary target group:
- producers and importers of packaged goods and packaging materials

Core business of KIDV:
- Advising companies
- Doing research
The urgency of sustainable packaging is felt

Towards the circular economy

'A circular economy is one that is restorative and regenerative by design and aims to keep products, components and materials at their highest utility and value at all times'

(MacArthur, 2015)
Packaging in the Netherlands

PACKAGING ON THE DUTCH MARKET (2017)

<table>
<thead>
<tr>
<th>Material</th>
<th>On the market</th>
<th>Recycled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glass</td>
<td>500</td>
<td>431</td>
</tr>
<tr>
<td>Paper and board</td>
<td>1262</td>
<td>1099</td>
</tr>
<tr>
<td>Plastic</td>
<td>512</td>
<td>258</td>
</tr>
<tr>
<td>Metal</td>
<td>216</td>
<td>205</td>
</tr>
<tr>
<td>Wood</td>
<td>631</td>
<td>459</td>
</tr>
</tbody>
</table>

Based on: Monitoringrapportage (2017) Afvalfonds Verpakkingen


18-6-2019
Dutch Policies
- General Agreement Packaging; producers, government and municipalities (2019 - 2022)
- National Waste Managementplan (LAP3)
- Essential requirements (+ guideline)
- Transition Agenda on Circularity 2050

Plastic Pact
20 % reduction in 2025 (ref. 2017)
35 % recycled content
100% recyclable 2025
70% is recycled in 2025

Possible deposit scheme for small PET-bottles in 2020
Recycling goals and results

Based on: Monitoringsrapportage (2017) Afvalfonds Verpakkingen
Performances in Plastic Recycling in Europe

Fig. 3. Graphical representation of the flow of only plastic packages through the PPW recycling network in the Netherlands in 2014. The numbers shown are net weights. Left from the mechanical recycling step (in dashed lines) these net weights indeed only relate to only plastic packages. Right from the mechanical recycling step, the difference between packages, non-packaging objects and residual waste can no longer be made and the numbers refer to the sum of them all. Therefore, the sum of 'open loop' recycled plastics and the incinerated plastics is also slightly higher than the household potential.
Climbing the sustainability ladder

Reduce
Resource

Rethink & Refuse

Prevent wasteage
Prevent litter

Use

Repair
Recycle

Recover

Resource

 Bron: KIDV.nl
Geïnspireerd op J. Cramer
Scientific research programme

- KIDV and Top Institute Food & Nutrition
- Universities of Twente, Wageningen and Groningen and TNO
- Design for circularity
- Research in the packaging chain
- Scientific excellence and business relevance
Scientific programs 2/2

2017 – 2020 Center for research in sustainable packaging (CRISP)

1. Laminate packaging
2. Reusable packaging
3. Management decisions in sustainable packaging

Cooperation on sector level
Sustainable packaging plans on sector level

- 17 Sustainability plans for packaging
- 22 branch organisations
- Quantified goals for 2022
- KIDV reviewed the plans

Examples of goals

CBL (supermarkets)
- 10% less packaging materials in 2022 and 20% less packaging materials in 2025.

Thuiswinkel.org (e-commerce)
- 10% of the eligible products will be send in reusable packaging (if the pilot is successfull).

Groenten Fruit Huis (vegetables and fruits)
- 90% of the packaging is recyclable in 2022 (and 100% in 2025), by the present-day collection and recycling processes.

FNLI (foodstuffs)
- Towards 2025 increase the use of secondary materials in selected formats, for example in PET-trays (50% in 2025).
Sustainable packaging examples

Resource: biobased milkcan

Reuse: reusable e-commerce packaging

Rethink: new shampoo packaging

Shifting from plastic to laminated paper or cardboard or renewable resources
Cooperation with companies
Challenge for start ups & Innovation platform

- Winners challenge:
  - Twenty Products: (almost) no packaging
  - Fit Things: reduce cardboard packaging
- Runners up:
  - Gr3n recycling: chemical recycling
  - RePack: reusable packaging
  - Pluumo: thermal packaging with feathers
  - Ozarka: reuse food packaging

Recyclable alternatives for laminates

- Searches for more recyclable alternatives for the 10 most used laminates in packaging
- Checked on functionality
- Combined with the information from CEFLEX and input for the working group design for recycling guidelines for flexibles
- Also input for the Recyclecheck flexible packaging
How to judge sustainable packaging?

Recyclecheck

- Decision tree
- Is my packaging recyclable or not?
- Based on the current situation of collection, sorting and recycling systems
- Now available for rigid plastic packaging
- Afvalfonds Verpakkingen is using the Recyclecheck for ecomodulation fee (differentiated waste management fee).
- Coming soon: recyclechecks for flexible plastics and paper/board
Innovations in recycling techniques: chemical recycling
Conclusion

Thank you for your attention!

c.bruijines@kidv.nl