Paulig Journey Towards 100 % Renewable Laminates 2025

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Paulig in brief

Net sales
9,229 MILLION EUROS

Operating profit
6.7%

Revenue from 2007 to 2017

Net sales per division

Coffee 38%
Paulig Foods 36%
Snack Food 26%

Net sales per market

Nordic countries 58%
Continental Europe 23%
UK 6%
Baltics 6%
Russia 6%
Others 1%
Sustainability

Fostering social responsibility

Supporting consumers’ health and wellbeing

Caring for the environment

We reduce our environmental impact — in the whole value chain when possible

Renewable energy used in Finland and Sweden
- Paulig roasts its coffees in the Vuosaari roastery by biogas and uses wind-generated power
- Paulig Foods division uses renewable electricity in Sweden

We offer sustainable alternatives to the consumers
- The share of organic products increasing
- More inspiring vegetable food recipes
- We work for reducing food waste both in our own production and in at the consumers’ tables
Sustainable packaging development
**Sustainable package / Consumer point of view**

For consumers "environmental friendly pack" *
- paper/cardboard
- recyclable/biodegradable/burned

For consumers "environmental friendly food"**
- has minimal amount of packaging material

<table>
<thead>
<tr>
<th>Feature</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum amount packaging material</td>
<td>75</td>
</tr>
<tr>
<td>Small carbon footprint</td>
<td>65</td>
</tr>
<tr>
<td>Local food</td>
<td>55</td>
</tr>
<tr>
<td>Domestic</td>
<td>50</td>
</tr>
<tr>
<td>Organic</td>
<td>45</td>
</tr>
<tr>
<td>Eco-label</td>
<td>40</td>
</tr>
<tr>
<td>Wellbeing of farm animals</td>
<td>35</td>
</tr>
<tr>
<td>Ethically produced</td>
<td>30</td>
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<tr>
<td>Unprocessed</td>
<td>25</td>
</tr>
<tr>
<td>Efficient use of resources</td>
<td>20</td>
</tr>
<tr>
<td>Purity</td>
<td>15</td>
</tr>
<tr>
<td>Naturalness</td>
<td>10</td>
</tr>
<tr>
<td>Few/none e-codes/additives</td>
<td>5</td>
</tr>
<tr>
<td>Rights of the producers / fearness</td>
<td>5</td>
</tr>
<tr>
<td>Healthiness</td>
<td>2</td>
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<tr>
<td>Large package size</td>
<td>2</td>
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<tr>
<td>Low-calorie</td>
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</tbody>
</table>

* Lohaspack IdeaBlog ORC 2012, n = 137 (Web survey from Norstat panel)

** Hartikainen et al. 2013, n = 1010 (Web survey by LUKE & Taloustutkimus)
What is sustainable package?

Sustainable sourcing and manufacturing → Sustainable package → Low environmental effect of product+pack
What is sustainable package?

- Low environmental effect of product+pack
- Sustainable sourcing and manufacturing
- Sustainable package

Kati Randell 2018.6.26
What is sustainable package?

- Prevents food waste
- Optimal amount of material
- Sustainable sourcing and manufacturing
- Sustainable end-of-life
  Reusable / recyclable (/recovery)
- Low environmental effect

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Low environmental effect

GHG emission = CO2 footprint

Other environmental effects
GHG emission = CO2 footprint

Renewable = biobased materials
Carbon footprint of Paulig coffee chain
Carbon footprint of Costa Rican coffee supply chain

Killian et al., Journal of Agricultural Science and Technology 2012

Costa Rica = 1.93 kg CO2e / kg green coffee
Europe = 3.05 kg CO2e / kg green coffee

Total = 4.98 kg CO2e / kg green coffee
Timetable of renewable packaging material development
Our objective is that by year 2025 all our packages will be made out of renewable raw materials.
Mundo in vacuum pack made of 45% renewable laminate with renewable energy

kgCO2-eq/kg coffee

Current

Renewable PE

- 10%
Quality of renewable coffee laminates
Quality – consumer perception

- Functionality
  - Opening
  - Re-closing
- Food safety
- Recycling
Coffee laminate structure

- Printing layer + puncture resistance
- Barrier layer
- Sealing layer
Quality – retail & consumer perception

- Shelf-life
- Durability
Quality in Paulig production

- Machine runnability
- Durability
For the bright future of coffee.