

VinçotteChronicle

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✓ **Safety**
Automotive

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Commissioning



Special File

OK compost
Home

Green light for OK compost Home

First OK compost Home certification for
total packaging issued to Carrefour Belgium

If this introduction appears to be a simple, logical matter, let us admit to you right away that things proceed less logically in real life. 'Laws and practical difficulties stand between the dream and the deed' – the oft-quoted line by Willem Elsschot is seldom as appropriate as it is in this case. So there is plenty of material for an ecological round table discussion with Philippe Dewolfs and Serge Van Gestel of Vinçotte, Guido Brosius and Griet Leynaert of Carrefour Belgium and Jan van Heule of Innovia.

Carrefour

ENTRÉE BUREAUX - INGANG





"Of course it's not purely and simply a question of packaging; in my view it's more a question of packaging the message. More precisely, the sorting message."

Guido Brosius, Sr Packaging Manager, Carrefour Belgium

The background:

10 years of pioneering

Exactly 10 years ago, Vinçotte launched the innovative concept of OK compost – a conformity mark guaranteeing that the certified products meet the harmonised European standard EN 13432 2000 (the current version), and can therefore be composted in an industrial composting plant. The mark was initially intended for kitchen and garden waste collection bags, but its use gradually found its way into the packaging market. In Belgium, the retailer Carrefour Belgium is way out in front of the field in this respect. In 2003, after two years of research, the distribution chain launched a fully compostable packaging with the OK compost mark for organic fruit and vegetables. A further step in the right direction is being taken

in 2005. Based on the principle that the best packaging is packaging that doesn't have to go into the household waste collection, OK compost Home is being introduced – the first packaging to be 100% compostable at home in consumers' own gardens. A world first for Vinçotte and an exclusive for Carrefour Belgium, which will have organic fruit and vegetables in OK compost Home packaging on the shelves of all its Carrefour hypermarkets and GB supermarkets from mid-April. Basically this means that you'll now throw the packaging onto your compost heap along with the peel and other fruit and vegetable waste.



“A good buy in the supermarket, and an even better buy now that you can home compost.”

The trend

More and more producers are launching new, environmentally friendly packaging, from compostable deep-freeze trays to biodegradable flowerpots and compostable magazine wrappers. The movement towards such products is particularly positive for instance as an alternative to packaging materials that can only be disposed of as non-recyclable waste, and therefore by incineration. The bioplastics are derived from organic material such as wood pulp, corn or wheat – all natural, renewable resources that are also very interesting for cutting back on CO₂ emissions.

Jan van Heule: “As the manufacturer of the NatureFlex™ packing films, Innovia is very familiar with the market for organic

products. Today's worldwide market is estimated at well above \$20 billion. We're talking about over €130 million for our European fruit and vegetable market alone. As well as catching the imagination, the farumzse figures clearly show that both governments and industry feel the need to bring in renewable sources. Supermarkets in particular are trying to gain advantage from this major market opportunity.”

Griet Leynaert: “That's part of it, but I'd also like to add that this opportunity is also being driven by our customers. The aware consumer feels better about buying biodegradable packaging than non-recyclable packaging. And consumers today are more ecologically aware in their shopping. They look for the 'green' labels that are shown on the products.”

Guido Brosius: “As a supermarket, we're constantly watching the quality of the products we offer, but we watch the quality of our packaging too. Product packaging has always been a difficult issue for distribution sector businesses to deal with. Every consumer is faced with packaging waste at home, so it's logical for us to look for solutions to reduce the amount of post-consumption waste. And there's an additional argument: we can remove products that have passed their sell-by date in a



single operation. So we no longer have to unpack them to process the waste separately. Just count up what that saves in time and labour."

The potential

Just ten years ago, consumers were still very suspicious of this kind of packaging. Either the bioplastics didn't break down properly, or they were of a technically inferior quality. In addition, there was no legal framework and the terms degradability and compostability were too vague. We have now progressed beyond that stage, after many years of product research, to create more clarity, a better price level and ever-increasing availability. But one thing is still quite clear: the success of bioplastics for consumer products will depend primarily on the waste collection options, on collection practice and on the management of any obstacles to the composting process.

Philippe Dewolfs: "It's certainly the case that launching products of this kind is not a straightforward matter. There are perhaps still too many issues. Let me just mention the higher cost of the basic material –compostable packaging can cost up to five times as much– the higher FOST Plus contribution that still applies, difficulties in the pre-sorted

collection and processing, and confusion for consumers due to the absence of the right sorting method and too many different logos."

"Environmentally aware consumers feel better about buying a product with degradable packaging than one with non-recyclable packaging. Clear information with labels and pictogrammes is essential."

Griet Leynaert, Quality Service & Environment Program Coordinator, Carrefour Belgium

Guido Brosius: "The FOST Plus tariff settings will certainly have to change for the better in due course. According to FOST Plus, biodegradable material still belongs in the 'Other' category at the moment, and that also is the most expensive category. Putting compostable materials in the paper and cardboard tariff category would be a first step in the right direction. Look at the German example, where these materials are initially exempted from contribution, with an appraisal to follow."

Griet Leynaert: "To some extent, Vinçotte's development of OK compost Home has been created as another disposal solution, because that's just where the bottleneck is – with the collection facilities. On the one hand, OVAM is asking the industry to make efforts to be ecological – as we have been able to do with OK compost, thanks to Vinçotte – but on the other hand, when we then launch the product it turns out that the existing processing plants still have to be modified. With the result that bioplastics can't be included with the kitchen and garden waste collection, but have to be placed with the other waste."

Jan van Heule: "But the fact that you're not allowed to put bioplastics in the bags or bins for kitchen and garden waste need not be a problem for ecologically aware consumers. Compostable and degradable packaging is more environmentally friendly than ordinary packaging. At the moment, a solution still has to be found for the best processing method, but packaging with the OK compost Home mark can already be composted at home without any problem." >

Serge Van Gestel: "It's true that our Flemish plants are not yet suitable. Most plants provide a sieving process as pre-treatment for the waste, with the result that both 'compostable' and 'ordinary' packaging is sieved off and can't be composted. There is the fear that the residual percentage sent for incineration will increase substantially, and that could raise costs for the kitchen and garden waste processor. Don't forget that we've been arguing for a clean inflow of kitchen and garden waste in Flanders for years now. Flanders is the biggest composter in Europe, and in fact Flemish kitchen and garden waste is the cleanest in the EU, with a pollution rate of only 1.5% by weight at most."



"What pleases me too is the excellent synergy between all the companies involved – a real multi-sector cooperation in which ten partners focused only on their own interests but also on the interests of the environment."

Jan van Heule, Sales Manager Benelux & France, Innovia

Griet Leynaert: "Of course, there's also the 'contamination factor' – the risk that non-compostable packaging or material will sometimes end up in the kitchen and garden waste as well as the compostable packaging. In other words, VLACO and OVAM assume that consumers won't distinguish between ordinary plastic and bioplastic, they'll just dump everything in the same kitchen and garden waste bin."

Philippe Dewolfs: "If I can put the other side of the argument just as strongly, I would say that people who don't distinguish are deliberately refusing to. We've done everything to make the packaging as clear as possible with our OK compost and OK compost Home marks. The film has a striking green grid pattern, and our AV marks are printed a number of times on each piece of packaging."

Guido Brosius: "Of course it's not purely and simply a question of packaging; in my view it's more a question of packaging the message. More precisely, the sorting message. And that message has to be very clear where renewable resources are concerned. Admittedly, this is not becoming any easier, although FOST Plus is now making efforts to communicate properly. They're aware

that if consumers aren't properly informed, due to a lack of knowledge, they won't distinguish between compostable and non-compostable materials."

Philippe Dewolfs: "The message is really very simple: home composting is cheaper as far as waste processing is concerned, and it can be done in the open air as well as in a composter. That's another strong argument."

Jan van Heule: "The number of different logos is another communications issue. The German seedling logo is used in the various European member states, usually based on the Dincerto standard, or sometimes also on the EN 13432:2000 standard. In Belgium it's mainly the OK compost logo that is used, based on the EN 13423:2000 standard. I know from a reliable source that they're working on a uniform logo at the European level at the moment."

Serge Van Gestel: "The EN 13432:2000 standard is important for uniformity and for the guarantee that the packaging can in fact be composted in an industrial plant. But that standard isn't binding at present. There's still no standard for home compostable packaging, but with a bit of logical thought we, together with OVAM, VLACO and OWS, have managed to set up a programme for these products, based mainly on EN 13432. A requirement for this European standard/programme to be used could be built in when product standards for compostable packaging are drawn up. Product standards are a federal matter, and therefore continued cooperation between the three regions is extremely important. This will also create more clarity for all the companies that are launching packaging of this kind."

The reference

OK compost and OK compost Home are well on the way to becoming the reference for compostable packaging in the coming years. Bioplastic provides the same advantages as ordinary plastic, but is not harmful to the environment. The use of renewable resources creates a perfect cycle: these raw materials can be returned to nature by composting without causing pollution. And the whole combination of 'film-label glue-ink' used by Carrefour Belgium has come through all the tests required for this standard with flying colours – each component has also been given its own conformity mark.



"Flemish kitchen and garden waste is the cleanest in Europe, with a pollution rate of only 1.5% by weight."

Serge Van Gestel, Contract Manager Regulations & Product Certification, Vinçotte

Guido Brosius: "The good news for Carrefour Belgium –and of course for our whole group– is that our concept of compostable packaging has been taken over almost unchanged by Carrefour France. I see that not just as a 'pat on the back' for all the efforts we have put in, but also as an acknowledgement of our future-oriented way of doing business. Of course there is grumbling from time to time that living ecologically and doing business in an environmentally aware way is not rewarded –and of course that's sometimes true– but believe me, anyone who is not going that way today will have a very expensive gap to bridge in a few years' time. We have already built up a lead. Or to put it more strongly, deliberate environmental innovation today means no problems competing tomorrow."

Griet Leynaert: "Belgium leads Europe as far as composting initiatives are concerned. Compost collection and processing is first rate in Flanders in particular, but the Walloon Region and Brussels are doing more and more too. In one way or another, around 60% of the Belgians come into contact with a form of compost collection or processing, through kitchen and garden waste, container parks or home composting."

I've just heard that Flanders is lagging well behind as regards innovation (the SERV report). But we're already taking another step in the right direction with the new packaging with the OK compost Home label. What's more, investment in products of this kind is evidence of innovation and future-oriented value creation in sustainable business for Carrefour."

Jan van Heule: "What pleases me too is the outstanding synergy between all the companies involved –a real multi-sector cooperation in which ten partners focused not only on their own interests– because after all we're all in business, but also on the interests of the environment. You might say that we've given the green light for consumer friendly and environmentally friendly packaging."

The epilogue

Griet Leynaert: "The next time they visit a Carrefour or GB supermarket, *Vinçotte Chronicle* readers should look for the organic fruit and vegetables packaging with the OK compost Home conformity mark (in our shops from mid-April)."

Guido Brosius: "Then they can check for themselves – home composting works, guaranteed within 16 weeks! So this is also an invitation to the compost masters for the coming season!"



Technical file

100% home compostable packaging

The home compostable film project is a successful cooperation between various partners from different areas of activity:

- **Carrefour Belgium**: market leader in large-scale distribution in Belgium
- **Vinçotte**: responsible for awarding approval under the OK compost Home programme
- **Innovia**: manufacturer of the NatureFlex™ packaging film (formerly UCB)
- **Michon**: sole distributor of NatureFlex™ for Belgium
- **Brava**: supplier and packager of organic fruit and vegetables for Carrefour Belgium
- **Reynders**: the printers who also conducted the research into suitable paper, glue and inks
- **OWS**: Organic Waste System as the test laboratory
- Government institutions and public bodies: **VLACO, OVAM, InterLeuven, IVCIE**

OK compost Home

Film

NatureFlex™ NE 30 µm

- NatureFlex™ complies with European standard EN13432:2000 and has Dincerto (Germany) and OK compost (Belgium) certification. OK compost Home is a supplementary programme to OK compost.
- 100% home compostable.
- Made of transparent cellulose film. This basic ingredient is a Renewable Raw Material. The cellulose is from a type of Eucalyptus from GM-free forests under sustainable forest management. All wood pulp suppliers comply with the ISO 14000 environmental standard.
- Pre-printed in 1 colour, with the OK compost Home label and with a green grid pattern printed in vegetable ink.
- The film has excellent transparency and machine handling qualities, has a pleasant sound under the fingers and is perfectly sealable and GMO-free.
- The film, the printing on it, the glue and the label are all broken down completely after 12 weeks.

Label

Vellum NP 51

- With line pattern and water based ink.
- The glue is applied in lines to attach the label. This has two advantages: very little glue is needed, and the pattern of lines promotes air circulation, an additional advantage during the composting process.

Tray

cardboard pulp

- 100% compostable – but can preferably be recycled by selective collection of paper and cardboard.

A consumer survey by the Industrial Association of Biodegradable Polymers and Bioplastics shows that consumers feel very positive about the replacement of traditional plastic by Renewable Raw Materials – the collective name for all biodegradable and compostable packaging materials derived from renewable resources. The advantages for the environment:

- Saving in fossil resources (petroleum)
- Saving of energy (50%) in manufacture
- Saving of glue (50%) by localised gluing of the label
- Less dependent on crude oil
- Less non-recyclable waste thanks to the home composting solution
- Less CO₂ emission, generally confirmed in all Life Cycle Analysis studies



To provide maximum assistance to consumers, Vinçotte has developed the OK compost, OK compost Home and OK biodegradable logos.



A compostable material with the **OK compost** label can be composted in a professional composting plant without affecting the quality of the compost. In some cases, a high temperature is needed for it to break down (above 55° in a processing plant).



A product with the **OK biodegradable** label is biodegradable in a particular natural environment (soil, air, salt water, fresh water etc.). It breaks down into carbon dioxide, mineral salts and biomass.



A compostable material with the **OK compost Home** label is suitable for composting in a compost bin, compost heap or compost trough. If the composting process runs correctly the material will break down within 16 weeks.



Carrefour 

The Carrefour group, which has a footfall of two billion customers worldwide per year, is the major distributor in Europe and is ranked number two in the world. In 2004 Carrefour Belgium grew by 2.83% to reach an annual turnover of €5,261 million. As well as the commercial dynamic, the dynamic of new shop openings will prove a major strength in 2005: the 500 stores level will be passed this year.

Our Commitment to the Planet:

- The Carrefour group attaches great importance to sustainable development and environmentally friendly products.
- The Carrefour group accepts its responsibility worldwide to develop solutions to part of the waste issue.
- The Carrefour group aims to make maximum use of renewable sources and high functionality.
- Carrefour Belgium launched packaging with the OK compost label in 2003. This initiative was first started in the smaller organic niche market. Consumers in that niche market are also particularly sensitive to environmental issues.
- Carrefour Belgium wishes to seize the unique opportunity to go on playing a pioneering role within the group, with positive consequences at European and global level.

Innovia – the new name for UCB – has existed since September 2004, following UCB's takeover by a consortium led by Dennis Matthewman (formerly Managing Director of Hays Chemical Distribution) in cooperation with Candover Partners Ltd. With 5 production companies on 3 continents, an annual turnover of €362 million and 1,600 employees worldwide, Innovia is the front runner in *Biaxially Oriented Polypropylene (BOPP)* and cellulose films for packaging and labelling. Interesting fact: Innovia is the world's only manufacturer of polymer banknotes, through a joint venture with the Reserve Bank of Australia. These notes last for much longer and are practically impossible to forge.



AVI-CERTEST Products tests and certifies biomaterials at various levels:

- Tests in accordance with a specific programme
- Tests to check whether the materials comply with the standards, using the standards documents as reference
- Type studies

AVI-CERTEST Products awards the three certification marks. These guarantee that the materials in question comply with the prevailing regulations and standards. They also guarantee follow-up of their manufacture.

AVI-CERTEST Products works as an independent third party. That added value is the best guarantee of visibility, credibility and objectivity.