

## Press Release

### **Multi-way – a smart choice**

Multi-way plastic crates have once again proved to be the smart choice for the transport of fruit and vegetables in Europe. They show themselves to be ecologically beneficial and clearly superior to the one-way systems considered, both in terms of economic efficiency (lowest costs) and in terms of the rate of fatal accidents.

**Berlin, 5<sup>th</sup> February 2009.** The **Stiftung Initiative Mehrweg** (Foundation for Reusable Systems) today presented the results, updated for 2009, of the study which it commissioned “on the sustainability of packaging systems for the transport of fruit and vegetables in Europe”. Almost precisely two years after the publication of the original study, the Department of Life Cycle Engineering from the Fraunhofer Institute for Building Physics and the Chair for Building Physics at the University of Stuttgart presented the results of the “review”.

The plastic multi-way transport containers were compared with the one-way systems using wood and cardboard. Five ecological effect categories were taken into consideration, as well as selected aspects of sustainability, including life-cycle costs and social factors such as total working-hours, proportion of women involved, levels of qualification and the number of fatal and non-fatal accidents. The ecological impacts are assessed using a comparative life cycle assessment as per DIN EN ISO 14040, for which a critical review is carried out by external independent specialists to check the study’s conformity with DIN EN ISO 14040 and 14044.

A provisional review report is on hand; the complete report is expected at the end of February and will be published alongside the study.

As in 2007, the Europe-wide market for fruit and vegetables was again taken as a basis in 2009. The transport routes for fruit and vegetables were surveyed and assessed in the five most important producer countries (France, Spain, Italy, the Netherlands, Germany) and the four largest consumer markets (France, the Netherlands, Great Britain, Germany).

The environmental effects taken into consideration were again eutrophication (over-fertilisation), ozone depletion, formation of photo-oxidants (summer smog), greenhouse effect (climate protection) and acidification.

It became clear once again that the multi-way system is the best performer in the categories of “eutrophication”, “formation of photo-oxidants” and “acidification”, shares first place in the discipline of “greenhouse effect” with the one-way system using wooden crates, and takes second place, closely behind the wooden crates, in the category “depletion of the ozone layer” – in which all transport systems analysed showed a negligible impact on the environment when regarded from a Europe-wide perspective.

The cardboard boxes showed “the highest environmental impacts in all categories”, - so the conclusion of the study’s summary. According to the results of the study, this is due to the fact “that the costs taken into consideration consist exclusively of kraft liner and semi-chemical pulp... kraft liner and semi-chemical pulp are far more expensive to produce and have more impact on the environment than testliner and corrugating medium, which are used in other cardboards” – this is the reasoning of the study’s authors, who point out specifically that these other cardboards are not, however, suitable for the transport of fruit and vegetables.

The multi-way system proved to be the most cost-effective by far in the “economic efficiency” categories, and was the system with the lowest number of fatal accidents in the “accident safety” category.

The Director of the Foundation, retired State Secretary Clemens Stroetmann expressed his great satisfaction with the results. “Multi-way is a smart choice”, Stroetmann said. For the transport of fruit and vegetables, too, it was confirmed that reusable plastic transport packaging offers “a solution that preserves the environment, your budget and workers’ safety”.

The Director of the foundation called attention to the fact that the advantages of the multi-way system would be further improved by an increase in the crates’ lifespan. “Even though each of the systems considered has specific areas with potential for optimisation, which were kindly identified in the study, it must be expected for the foreseeable future that the multi-way crates are ahead of the field, both ecologically and economically”, said Stroetmann. Here, the idea that ‘the better is the enemy of the good’ applies just as much as the wisdom that it is a mistake to rely upon what will be better tomorrow and neglect what is good today. He draws his own conclusion today on this note: “more added value with multi-way”.

---

**Press contact:**

State Secretary (ret.) Clemens Stroetmann, Director, Stiftung Initiative Mehrweg,

Mobile: +49 170 58 17 435 - Fax: +49 33205 24038 - E-mail: [info@stiftung-mehrweg.de](mailto:info@stiftung-mehrweg.de)

---

The complete study can be ordered from C HOCH 4 GmbH, e-mail: [info@choch4.de](mailto:info@choch4.de). The price is € 500.00 per copy. The summary can be downloaded free of charge from the Foundation’s homepage.