

# FAIRPLAY

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Minimising decay of fresh produce during shipment would bring cash benefits for both shippers and carriers. Ozone injection into reefer containers is currently being trialled

# Hartmann's world

A shipowner turns logistics provider

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# technology

## Fresh approach to shipping perishables

How reefer trades may benefit from a new system to prevent decay

Injecting ozone into a reefer container can immunise products from decay and lead to healthier carrier and shipper balance sheets. That's the promise of Purfresh Transport, using technology developed by Purfresh Inc, which reefer manufacturer Carrier Transicold plans to roll out to carriers in the first quarter of 2010.

"The benefits for the carrier and shipper sort of go hand in hand," James Taeckens, senior product manager for Carrier Transicold's

Container Products Group, told *Fairplay*. "If the shipper is able to get a better yield out of the cargo and a better premium at retail, he can make more money and the shipping line can charge a higher freight rate."

A panel unit – rented by the carrier on a one-way, per trip basis – is clamped to the side of a standard marine reefer box. The unit uses oxygen ( $O_2$ ) in the air to create ozone ( $O_3$ ), a gas that destroys decay-causing organisms. The ozone is then reverted back to oxygen, which maintains the products' natural taste, texture and smell. Mitigating bacteria and decay improves product shelf life.

Decay is responsible for an average of up to 20% of post-harvest loss, most of it occurring during transport. With the retail value of a container of stone fruit averaging \$30,000-90,000 for a container of blueberries, significant cost savings can be realised on a single shipment, Taeckens said. A 35-day trial resulted in a savings of \$3,700/container.

"Carriers can promise shippers cargo will arrive in better condition than can be offered by their competition, and can go a longer distance into markets the carrier didn't serve before," Taeckens said. In addition, with decay drastically reduced, ocean carriers

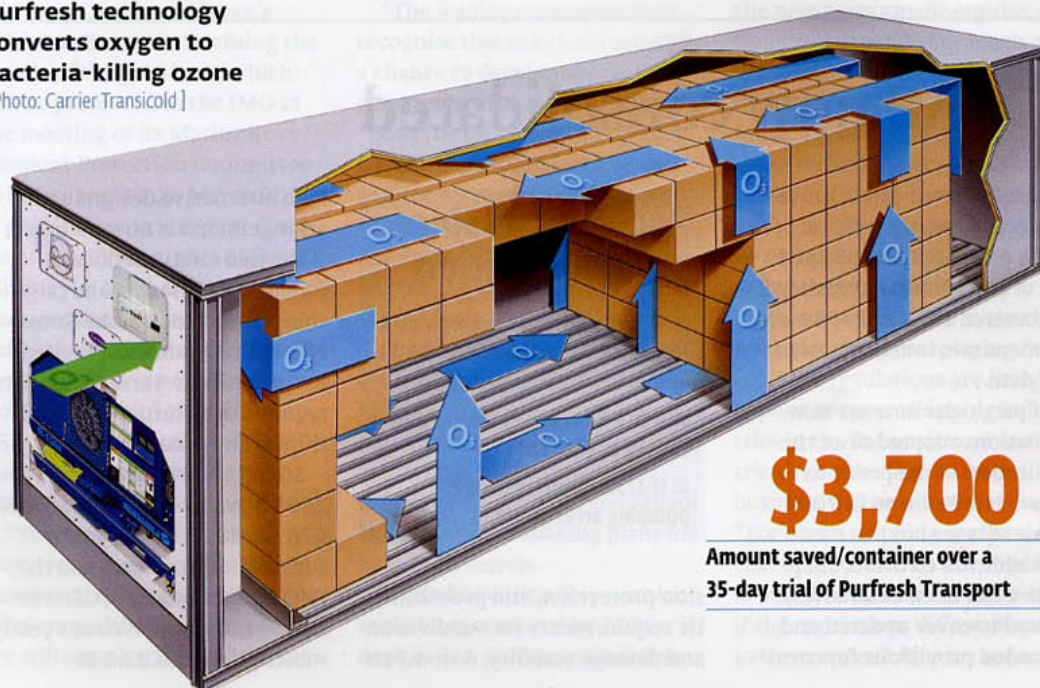
will be able to take market share away from air transport, which shippers rely on to get products onto shelves quickly before mould has a chance to set in.

Carrier Transicold plans to start marketing Purfresh Transport with shipping lines originating in Chile and serving ports on the US West Coast, rolling it out globally throughout 2010. With an estimated 4M loaded reefer containers shipped annually, there's massive market potential for Purfresh. But the proof is in the produce, and it remains to be seen if shippers will respond, said Ken Gilliland, director of transportation and international trade for the California-based Western Growers Association. "It would have to be determined what commodities would benefit from such services and what commodities, if any, could possibly be damaged from the ozone treatment," Gilliland told *Fairplay*.

One major California produce company asserts the demand is there. "We're always looking to cut down on decay and get better arrivals," Kevin Andrew, chief operating officer at Sun World, told *Fairplay*. Sun World, which farms, packs and markets fresh produce, also invests in research to improve flavour and quality. "A product that's acceptable to our customers has to be our number one goal. If we have decay on our arrivals, then we are in much worse shape," said Andrew. ■

### Purfresh technology converts oxygen to bacteria-killing ozone

[Photo: Carrier Transicold]



**\$3,700**

Amount saved/container over a 35-day trial of Purfresh Transport