

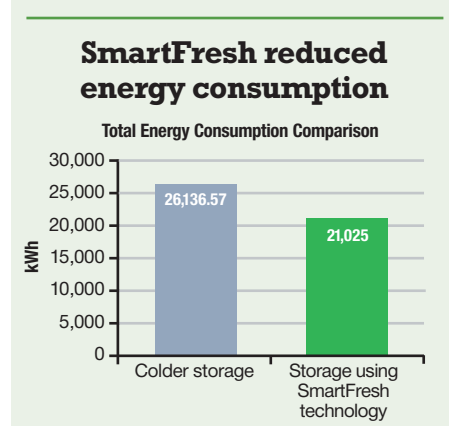
Saving energy and carbon footprint with SmartFresh quality English Gala

Realizing the growing pressure Europe's fresh-produce industry is facing to reduce its costs as well as carbon footprint and increase environmental efficiency, AgroFresh, the marketer of the SmartFreshSM Quality System, has significantly extended the number of trials on energy savings in Europe this year. The trials will help customers better understand how SmartFresh technology could contribute to saving energy while providing the same quality benefits to their apples. For Mark Tully and Colin Carter from Landseer, a firm specializing in researching and supplying solutions for the horticulture sector, continuing these energy-saving trials on English apples is a natural part of the commitment every member of the supply chain wants to make toward better sustainability: **"We want to help our customers deliver best quality, whilst addressing environmental criteria demanded by today's consumers,"** says Carter. The extremely positive results in Germany on Gala apples have prompted Landseer to carry out similar studies on English Gala. **"We know SmartFresh technology, by reducing respiration, decreases the time taken to establish storage conditions; the impact this might have on revising storage temperature and reduction of energy inputs needed to be quantified,"** explains Carter. **"The difficulty in carrying out measurable comparative studies in the UK does not lie so much in increasing the temperature, but in finding suitable stores that are individually metered to make a quantifiable comparison."** Finally the Hononton site, in Kent, managed by Adrian Scripps, was identified as a location to implement for the first time energy-efficiency trials on English apples. **"We were very grateful that Adrian Scripps gave us the opportunity to carry out this study. Together with Dr. David Pennell, who supervised the fruit-quality sampling, and the consultancy of Auditel, who calculated energy efficiency and CO₂ reduction, we**

formed a multi-functional team to understand fully the positive impact a SmartFresh Quality System application could have on the environment and the energy bill."

The findings were very satisfying and confirmed the German results: The SmartFresh storage room used 28% less energy compared to the Control room during the 6-month storage period (Oct 7th - March 25th). The energy savings with SmartFresh technology also represent a 20% reduction in CO₂ emissions.

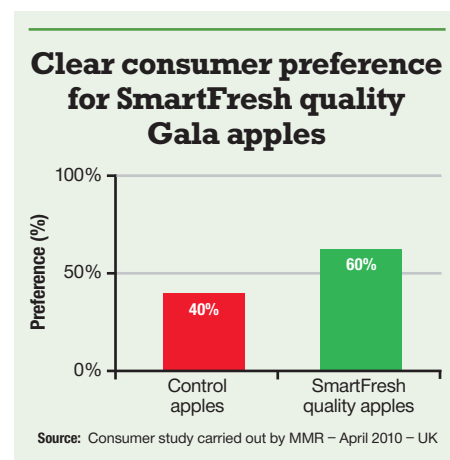
The trial involved two identical rooms with a capacity of 100 tons each. The room where the SmartFresh Quality System had been used was kept at a temperature of 3.5°C, whereas the Control room was kept at the standard 0.5°C. Final storage temperature was reached within 8 days.



"As expected with the SmartFresh Quality System, ethylene production was fully inhibited during the whole storage time," says Dr. Pennell. **"We took samples several times during storage, as well as at room opening and after shelf life to assess the quality of the Galas."** According to Dr. Pennell, the SmartFresh quality was noticeably better, with a firmness difference of 0.8 - 1.3 kg/cm², compared to the Control apples. **"This UK trial proves that even at higher storage temperatures, SmartFresh technology provides the same benefits in terms of improved quality, firmness,**

shelf life and flexibility in the time taken to unload stores," confirms Tully.

That storage at a higher temperature does not affect the fruit's taste and texture has been confirmed by a consumer taste test organized earlier this year among 102 randomly selected Gala purchasers. The result of their comparison of the SmartFresh quality and Control Galas speaks for itself, and is completely in line with the general consumer preference for SmartFresh quality fruit measured over past years in various European countries.



Asked about any downsides or limits, Tully responds that these trials confirm very well the two years of Gala trials in Germany. Nevertheless, it is still important to follow the SmartFresh Quality System Use Recommendations, and to avoid orchards with potentially high levels of rots, especially nectria.

According to Landseer, there is great potential for the future of Gala production in the UK, as it gives producers more flexibility for storage and marketing strategies. This could also be food for thought for Cox and Bramley storage: **"SmartFresh technology has shown that it can reduce the incidence of certain disorders like low-temperature breakdown when growers need to increase store temperatures in high-risk years like 2008,"** says Tully. **"The impact goes beyond cost savings and CO₂ reduction."**