Study reveals cost of wasted food in cold chain

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A new government and industry-sponsored study has revealed that food waste attributable to failures in the cold food chain costs the Australian economy nearly $4 billion at farm gate values and causes annual greenhouse gas emissions roughly equivalent to all of the cars in Queensland.

The study, Australia's first in-depth examination of the cost of food waste because of deficiencies in the cold food chain was carried out by the Melbourne-based Expert Group, for the Department of Agriculture, Water and the Environment, and Refrigerants Australia.

Cold chain advocacy group, Australian Food Cold Chain Council (AFCCC) has labelled the report a wake-up call, demanding an urgent response by governments and businesses.

AFCCC Chairman, Mark Mitchell, said the study highlighted the shocking abuse of temperature control and food handling processes in refrigerated transports, loading docks and cold rooms across the nation.

"It is almost criminal that one quarter of Australia's production of fruit and vegetables are never eaten," said Mitchell.

"This loss alone accounts for almost two million tonnes of otherwise edible food, worth $3.0 billion," he said. "Meat and seafood waste in the cold chain costs the country another $90 million and dairy losses total $70 million."

The Australian government has committed to reducing food waste by half by 2030 to alleviate hunger, reduce greenhouse emissions and water usage and increase the efficiency of the economy. Mitchell said this goal would never be reached unless there were substantial improvements in the way chilled food made its way from farm or production facility to the consumer.

Field studies by the AFCCC have highlighted critical shortcomings in the cold chain, and it has embarked on an educational campaign to try to improve standards, even down to the basics of temperature measurement with properly calibrated thermometers, and how to pack food pallets in a refrigerated space.

"We need to work cooperatively across industry and government to improve cold chain efficiency," said Mitchell. "Most of the cold food chain's problems are human-induced. Technologies and processes already exist that would dramatically cut food losses, but nothing can be achieved while food manufacturers and distribution channels operate in isolation and secrecy. They are responsible for a cold risk chain, rather than a cold food chain."

For the first time, the new study balances the bad news with a range of practices that would cost-effectively reduce perishable food waste. These include simple, but logical food handling processes, such as reducing the time food spends outside refrigerated environments during transfer, more accurate measurement of food temperatures, and far more transparent monitoring of food in transit, so that failures could be quickly identified and solved.

"An Australian Cold Food Code could be a game-changer for food producers and consumers," said Mitchell. "It is all very well to implore cold storage facilities, trucking companies and supermarkets to redouble their efforts to reduce food waste, but they need the support and guidance of an updated and practical code, combined with an education campaign for cold chain practitioners. The AFCCC is working on this, in cooperation with the many Australian food and transport groups who share our concerns."

(Image: AFCCC Chairman, Mark Mitchell.)