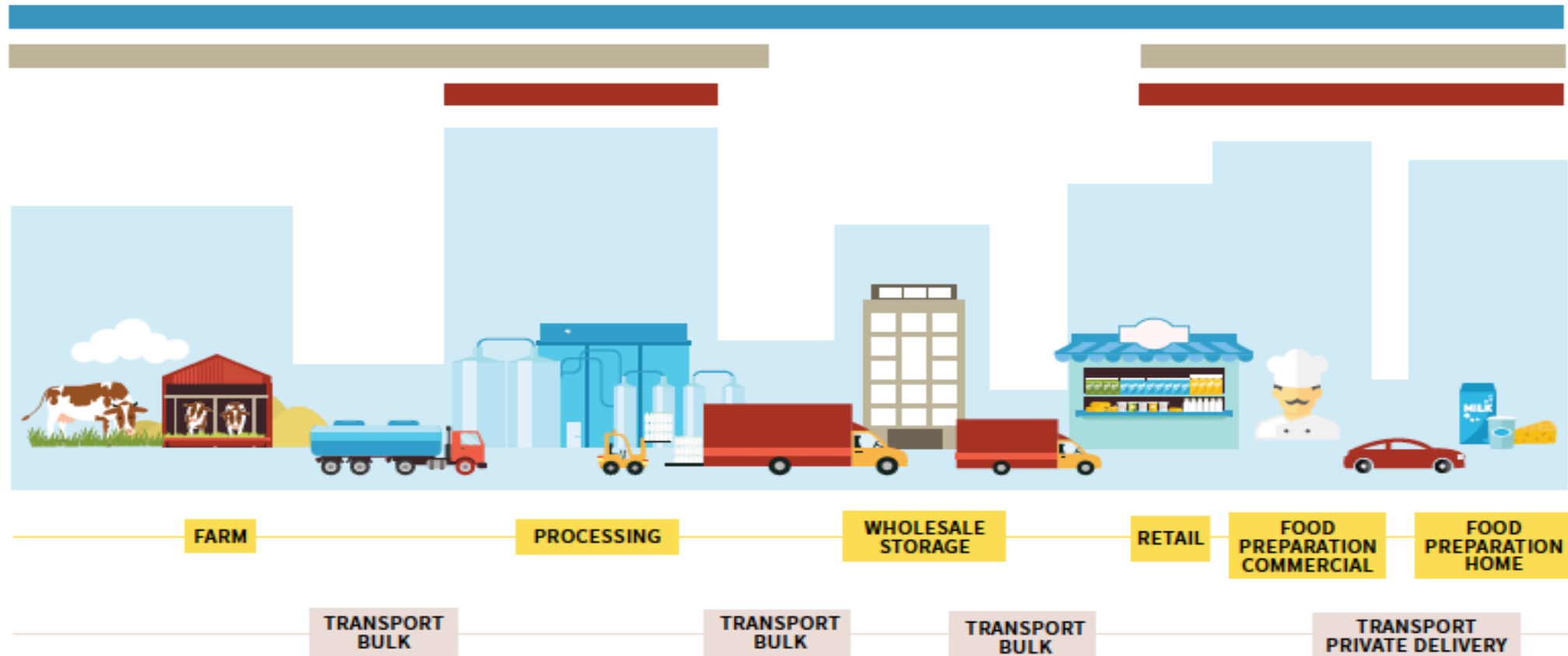


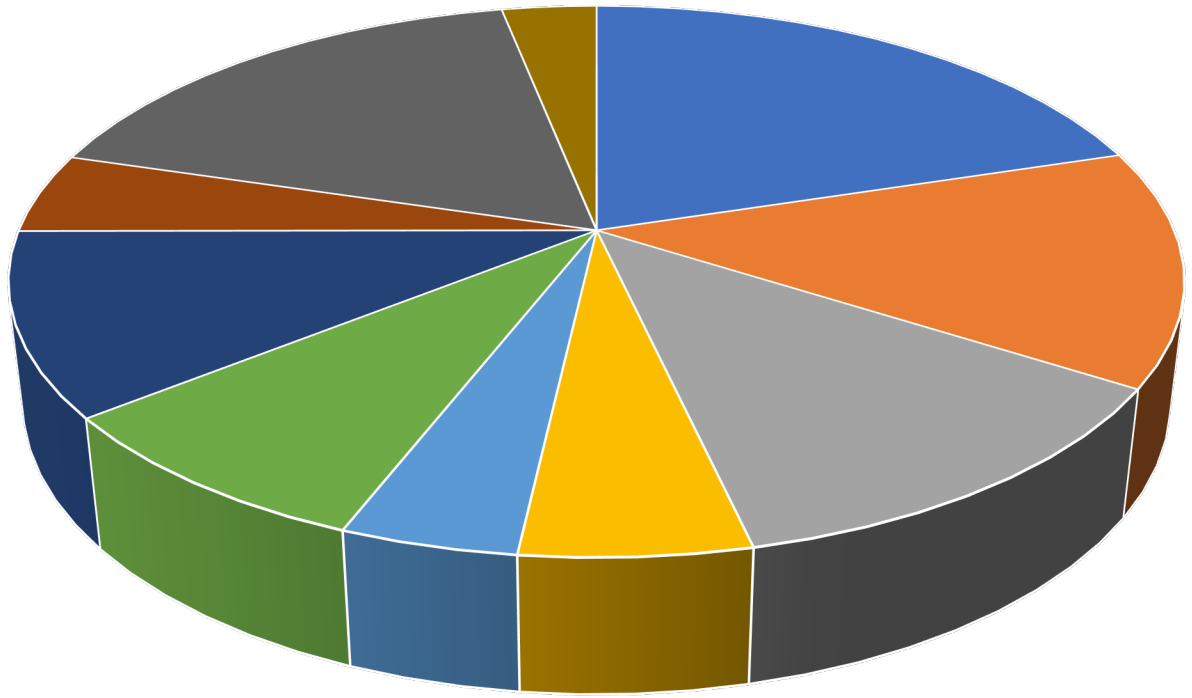
Food Value Chain



- Primary energy use
- Extension of shelf life by preservation/refrigeration
- Dewatering and Drying
- Process heat and cooking

Energy is a major cost in the food chain

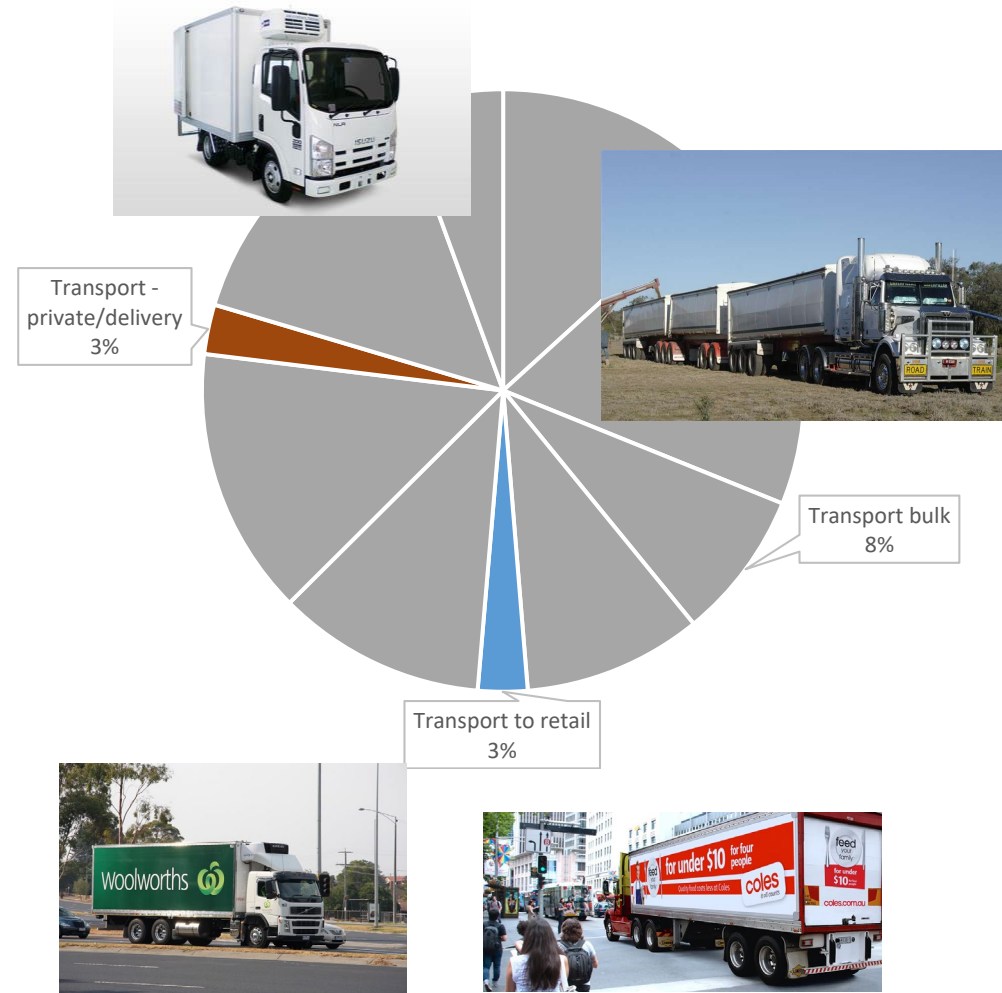
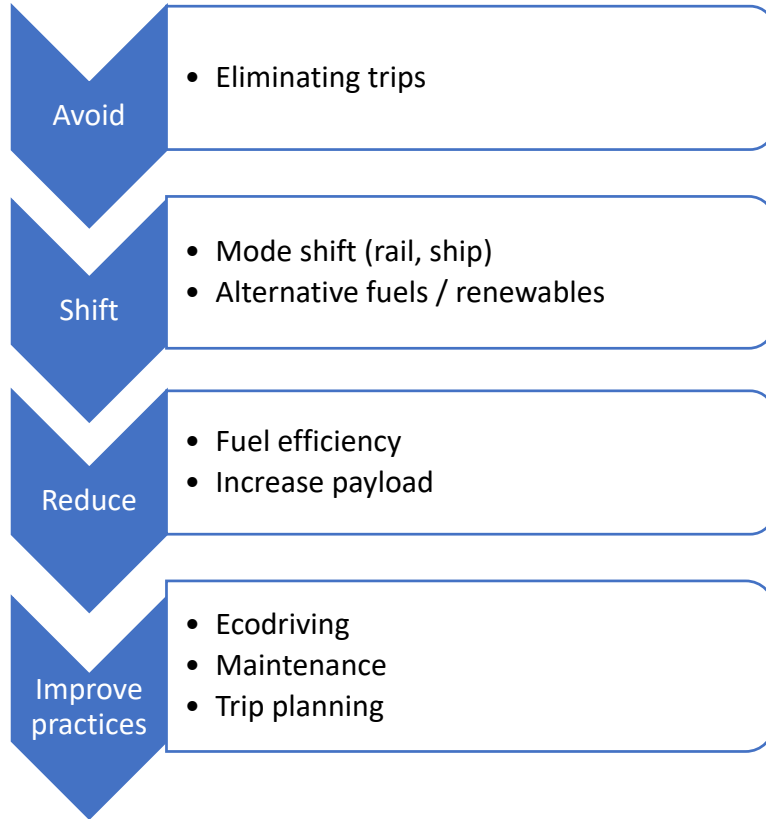
Energy used in food chain > \$15B/year total



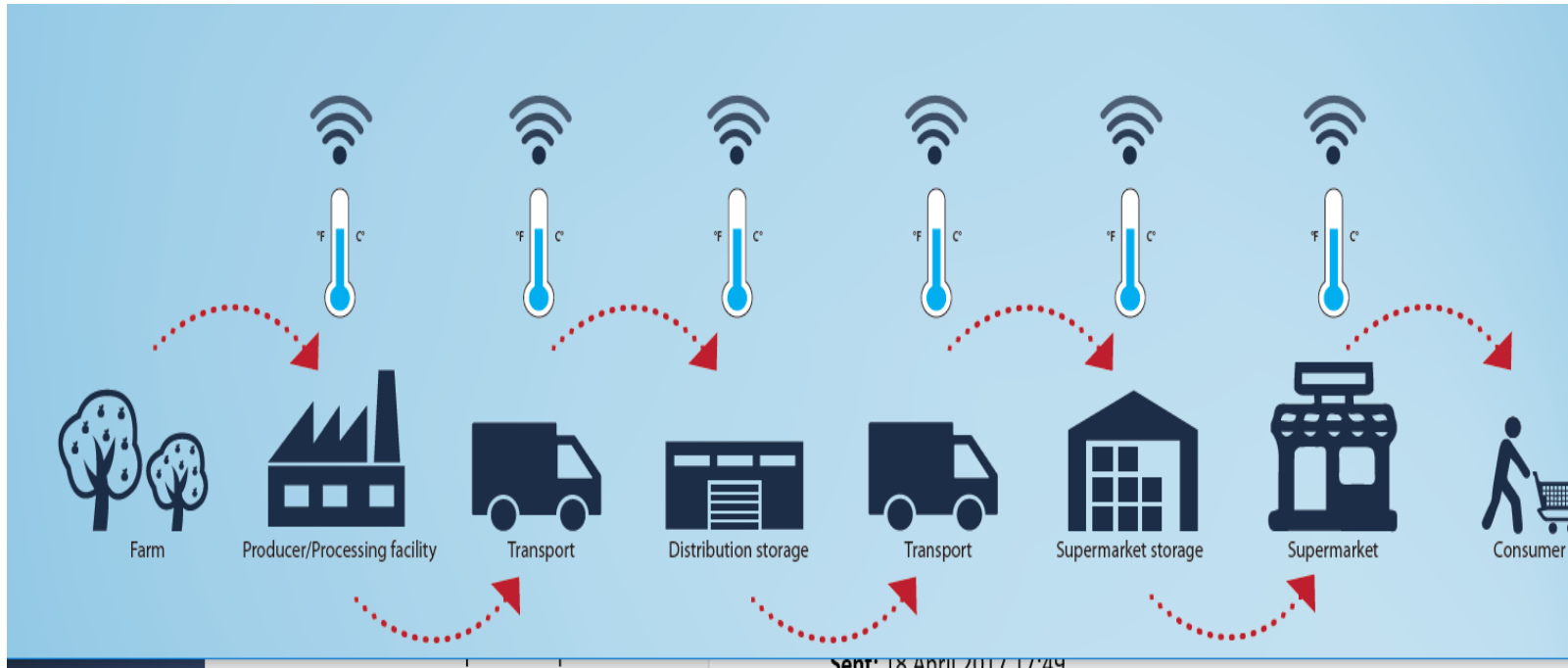
- Farm
- Processing
- Transport bulk
- Wholesale & Storage
- Transport to retail
- Retail
- Food prep'n - commercial
- Transport - private/delivery
- Food prep'n - home
- Waste management

Energy is essential to the operation of the food supply chain and the price of energy inputs is escalating rapidly

Freight



Optimising cold chain

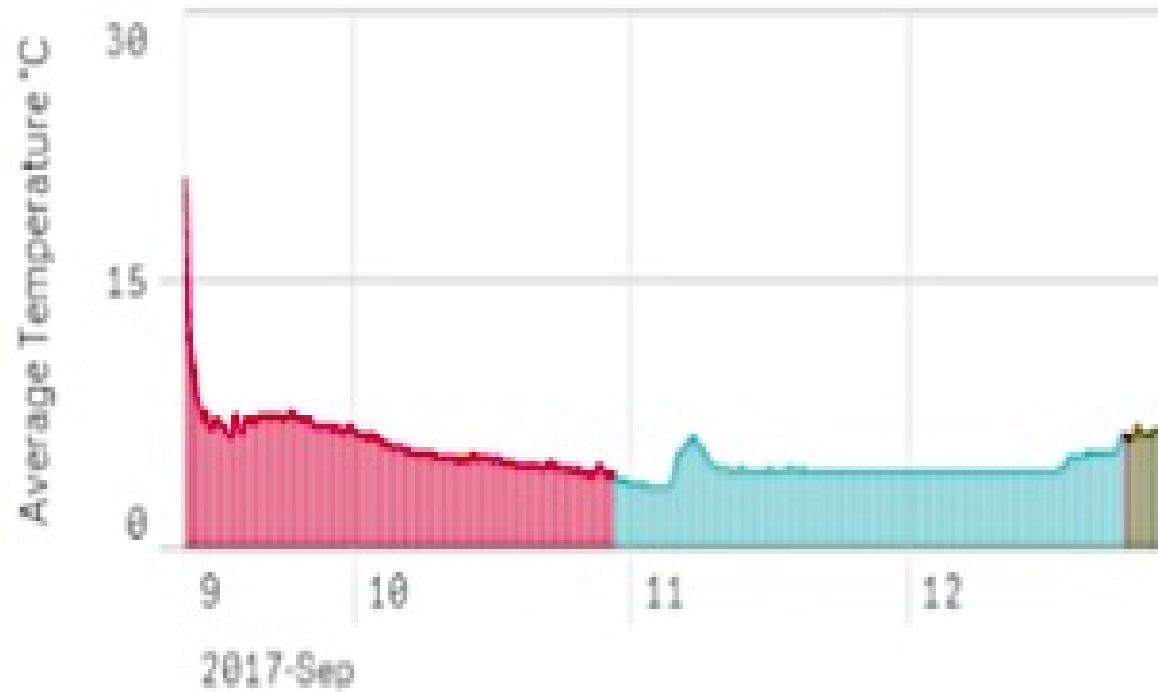


Refrigeration in cold chain:
\$2.4 billion electricity by stationary elements
\$150 million diesel for truck refrigeration.

Every **1%** reduction in **food waste** = \approx \$200 million annual savings to the Australian economy and \approx 240 kt GHG

Optimising cold chain

Temperature over time



Temperature over time

