Australian Good Meat Education resources are an initiative of

MEAT & LIVESTOCK AUSTRALIA

ANSWERS

Poster: Technology and Innovation

Answers will vary depending on student's choice of technology/innovation.

Sample answer: Feeding research and development to target climate challenges.

1. *Asparagopsis* is a genus of red seaweed. When included as a feed supplement for ruminant livestock, such as cattle, it significantly reduces methane emissions produced during digestion.
2. Producers incorporate *Asparagopsis* into cattle feed to mitigate methane emissions from enteric fermentation—a natural digestive process in ruminants that produces methane as a by-product. This practice is particularly valuable in feedlot operations, where cattle are provided with a controlled diet. By adding a small percentage of *Asparagopsis* to feed, producers aim to achieve substantial reductions in methane emissions, contributing to environmental sustainability and meeting industry methane reduction targets.
3. Answers for the provided example may include:
   Environmental: Studies show that supplementing cattle feed with *Asparagopsis* can reduce methane emissions by over 80%, significantly lowering the environmental footprint of red meat production. Access additional information from Research Study: *Asparagopsis* feedlot feeding trial
   Economic: Methane emissions represent an energy loss in ruminants. Reducing this loss can improve feed efficiency, leading to potential productivity gains and cost savings.
   Social: Incorporating *Asparagopsis* aligns with consumer demand for sustainable farming practices and supports the red meat industry's goal of achieving carbon neutrality by 2030 (CN30).