## *Western Port Greenhouse Alliance Agricultural Emissions Project*

**Idea No:** 42 **Footprint Rating:**

# Apply trace elements to feed and water

**Description:** Cattle require a range of essential vitamins and nutrients to be available to them in order for all their bodily processes to function, and to maintain their health. Many essential vitamins and nutrients can be obtained from trace elements. These trace elements are found in the pasture/fodder that the cow grazes on. However, if the food is of poor quality, the cow may not obtain enough of these trace elements. By adding trace elements to the feed and water, it is ensured that the cow has access to these nutrients and vitamins, boosting the overall health of the animal. This boost in animal health will generally correspond to an increase in beef production. As an added benefit, the overall efficiency of the cows digestion system is increased, reducing methane emissions.

**Environmental Benefits as opposed to the current system**

| | |
|---|---|
| % reduction in GHG emissions: | 5.07% |
| % increase in water efficiency: | 2.01% |
| % reduction in waste to landfill: | 0.00% |
| % increase in production: | 5.00% |

**Benefits:** Improve productivity

**Costs:** < 1% of feed costs

**Savings:** Beef production increased by 4150kg
Reduce 11t CO2e per year

**Implementation/Monitoring/Reporting**

For more information see the following websites:

http://www.ranvet.com.au/ruminant_supplement.htm
http://www.publish.csiro.au/samples/SuppFeeding_sample.pdf

http://www.agriproducts.com.au/verve/_resources/Ridleys027_page.jpg
http://www.netl.doe.gov/technologies/pwmis/images/photos/AgUse_CowsWater.jpg