Greenhouse Gas Emissions Estimate – Data Collection

Production Year: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Property Name:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Region:** |  |  |  |  |  |  |  |  |
| ACT | NSW | TAS | SW WA | SA | VIC | QLD | NT | NW WA |

Is your property north of the Tropic of Capricorn?  **YES**  **NO**

Does your farm get enough rainfall or irrigation to drain through the soil profile, i.e., typically above 600mm?  **YES**  **NO**

Livestock Data – Beef cattle

LIVESTOCK NUMBERS

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BREEDER CATTLE AND OWNER BRED CATTLE | | | | | | | | |
| Seasons | Bulls >1 | Steers <1 | steers 1-2 | steers >2 | cows >2 | heifers <1 | heifers 1-2 | heifers >2  (not calving)\* |
| Spring |  |  |  |  |  |  |  |  |
| Summer |  |  |  |  |  |  |  |  |
| Autumn |  |  |  |  |  |  |  |  |
| Winter |  |  |  |  |  |  |  |  |
| TRADED CATTLE | | | | | | | | |
| Seasons | Bulls >1 | Steers <1 | steers 1-2 | steers >2 | cows >2 | heifers <1 | heifers 1-2 | heifers >2  (not calving)\* |
| Spring |  |  |  |  |  |  |  |  |
| Summer |  |  |  |  |  |  |  |  |
| Autumn |  |  |  |  |  |  |  |  |
| Winter |  |  |  |  |  |  |  |  |

*\*include calving heifers in “cows >2”*

Live weight (kg/head)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BREEDER CATTLE AND OWNER BRED CATTLE | | | | | | | | |
| Seasons | Bulls >1 | Steers <1 | steers 1-2 | steers >2 | cows >2 | heifers <1 | heifers 1-2 | heifers >2  (not calving)\* |
| Spring |  |  |  |  |  |  |  |  |
| Summer |  |  |  |  |  |  |  |  |
| Autumn |  |  |  |  |  |  |  |  |
| Winter |  |  |  |  |  |  |  |  |
| TRADED CATTLE | | | | | | | | |
| Seasons | Bulls >1 | Steers <1 | steers 1-2 | steers >2 | cows >2 | heifers <1 | heifers 1-2 | heifers >2  (not calving)\* |
| Spring |  |  |  |  |  |  |  |  |
| Summer |  |  |  |  |  |  |  |  |
| Autumn |  |  |  |  |  |  |  |  |
| Winter |  |  |  |  |  |  |  |  |

*\*include calving heifers in “cows >2”*

Live weight gain (lwg) (kg/day)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BREEDER CATTLE AND OWNER BRED CATTLE | | | | | | | | |
| Seasons | Bulls >1 | Steers <1 | steers 1-2 | steers >2 | cows >2 | heifers <1 | heifers 1-2 | heifers >2  (not calving)\* |
| Spring |  |  |  |  |  |  |  |  |
| Summer |  |  |  |  |  |  |  |  |
| Autumn |  |  |  |  |  |  |  |  |
| Winter |  |  |  |  |  |  |  |  |
| TRADED CATTLE | | | | | | | | |
| Seasons | Bulls >1 | Steers <1 | steers 1-2 | steers >2 | cows >2 | heifers <1 | heifers 1-2 | heifers >2  (not calving)\* |
| Spring |  |  |  |  |  |  |  |  |
| Summer |  |  |  |  |  |  |  |  |
| Autumn |  |  |  |  |  |  |  |  |
| Winter |  |  |  |  |  |  |  |  |

*\*include calving heifers in “cows >2”*

feed quality

*If feed quality is unknown, leave the table blank. Default data for your area will be used.*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| crude protein (cp%) | | | | | | | | |
| BREEDER CATTLE AND OWNER BRED CATTLE | | | | | | | | |
| Seasons | Bulls >1 | Steers <1 | steers 1-2 | steers >2 | cows >2 | heifers <1 | heifers 1-2 | heifers >2  (not calving)\* |
| Spring |  |  |  |  |  |  |  |  |
| Summer |  |  |  |  |  |  |  |  |
| Autumn |  |  |  |  |  |  |  |  |
| Winter |  |  |  |  |  |  |  |  |
| TRADED CATTLE | | | | | | | | |
| Seasons | Bulls >1 | Steers <1 | steers 1-2 | steers >2 | cows >2 | heifers <1 | heifers 1-2 | heifers >2  (not calving)\* |
| Spring |  |  |  |  |  |  |  |  |
| Summer |  |  |  |  |  |  |  |  |
| Autumn |  |  |  |  |  |  |  |  |
| Winter |  |  |  |  |  |  |  |  |

*\*include calving heifers in “cows >2”*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **DRY MATTER DIGESTIBILITY (DMD%)** | | | | | | | | |
| BREEDER CATTLE AND OWNER BRED CATTLE | | | | | | | | |
| Seasons | Bulls >1 | Steers <1 | steers 1-2 | steers >2 | cows >2 | heifers <1 | heifers 1-2 | heifers >2  (not calving)\* |
| Spring |  |  |  |  |  |  |  |  |
| Summer |  |  |  |  |  |  |  |  |
| Autumn |  |  |  |  |  |  |  |  |
| Winter |  |  |  |  |  |  |  |  |
| TRADED CATTLE | | | | | | | | |
| Seasons | Bulls >1 | Steers <1 | steers 1-2 | steers >2 | cows >2 | heifers <1 | heifers 1-2 | heifers >2  (not calving)\* |
| Spring |  |  |  |  |  |  |  |  |
| Summer |  |  |  |  |  |  |  |  |
| Autumn |  |  |  |  |  |  |  |  |
| Winter |  |  |  |  |  |  |  |  |

purchase inventory

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BREEDER CATTLE AND OWNER BRED CATTLE | | | | | | | | | TRADED CATTLE | | |
| Seasons | Bulls >1 | Steers <1 | steers 1-2 | steers >2 | cows >2 | heifers <1 | heifers 1-2 | heifers >2  (not calving)\* | >2 YEARS | 1-2 YEARS | <1 year |
| Number of head |  |  |  |  |  |  |  |  |  |  |  |
| Purchase weight |  |  |  |  |  |  |  |  |  |  |  |
| Origin (from list below table) |  |  |  |  |  |  |  |  |  |  |  |

**Origin options**

* Dairy
* Nth/Sth/central QLD
* Nth/Sth NSW/VIC/Sth SA
* NSW/SA pastoral zone
* sw WA
* WA pastoral
* TAS
* NT

SALE inventory

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BREEDER CATTLE AND OWNER BRED CATTLE | | | | | | | | | TRADED CATTLE | | |
| Seasons | Bulls >1 | Steers <1 | steers 1-2 | steers >2 | cows >2 | heifers <1 | heifers 1-2 | heifers >2  (not calving)\* | >2 YEARS | 1-2 YEARS | <1 year |
| Number of head |  |  |  |  |  |  |  |  |  |  |  |
| Purchase weight |  |  |  |  |  |  |  |  |  |  |  |

*\*include calving heifers in “cows >2”*

PERCENTAGE OF COWS CALVING

|  |  |  |
| --- | --- | --- |
| **Spring** |  | **Instructions:**  Use preg tested in calf data as your input data. If 90% of your females are pregnant add this to the season they are calving. If calving occurs across two seasons make sure the two numbers add up to the total preg tested in calf. |
| **Summer** |  |
| **Autumn** |  |
| **Winter** |  |

MINERAL SUPPLEMENTATION (CATTLE PRODUCTION ONLY)

|  |  |
| --- | --- |
| MINERAL SUPPLEMENTS | t UREA |
| Mineral block |  |
| Weaner block |  |
| Dry season mix |  |

fertiliser use (cattle production only)

|  |  |  |  |
| --- | --- | --- | --- |
| Nitrogen fertilisers | | DRYLAND | IRRIGATED |
| Urea fertiliser pasture (tonnes of urea) | |  |  |
| Urea fertiliser crops (used for grazing cattle – tonnes urea) | |  |  |
| Monoammonium phosphate (MAP) - tonnes | |  |  |
| Diammonium phosphate (DAP) – tonnes | |  |  |
| Urea-Ammonium nitrate (UAN) – tonnes | |  |  |
| Ammonium nitrate (AN) – tonnes | |  |  |
| Calcium ammonium nitrate (CAN) - tonnes | |  |  |
| other | | | |
| Single Superphosphate (tonnes) | |  | |
| Phosphate fertiliser use (tonnes) |  | Percentage phosphate |  |
| Limestone applied to soils (total tonnes) | | Fraction as CaCO3 (vs dolomite) |  |

Energy and fuel (cattle production only)

|  |  |
| --- | --- |
| Energy and fuel | |
| Electricity source (please highlight or circle) | State Grid or Renewable |
| Annual diesel consumption (for cattle enterprise) (litres/year) |  |
| Annual petrol consumption (for cattle enterprise) (litres/year) |  |
| Annual electricity use (for cattle enterprise) (KWh) |  |

other (cattle production)

|  |  |
| --- | --- |
| other | |
| Grain purchased for cattle feed (all grains) (tonnes) |  |
| Cotton seed purchased for cattle feed (tonnes) |  |
| Hay purchased for cattle feed (tonnes) |  |
| Herbicides (Paraquat, Diquat, Glyphosate) (cattle production only) (total kg Active Ingredient) |  |
| Other herbicides/pesticide (cattle production only) (total kg Active Ingredient) |  |

SAVANNAH BURNING

|  |  |
| --- | --- |
| SAVANNAH BURNING | |
| Rainfall | Low High |
| Vegetation class | Shrubland (heath) with hummock grass  Woodland with hummock grass  Open woodland with mixed grass  Woodland with mixed grass  Woodland with tussock grass |
| Patchiness | Low High |
| Fuel class size | Course Fine |

Livestock Data – Sheep

LIVESTOCK NUMBERS

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BREEDING STOCK | | | | | | | | TRADED SHEEP | | | |
| Seasons | RAMS | WETHERS | MAIDEN EWES | BREEDING EWES | OTHER EWES | EWE LAMBS | WETHER LAMBS | LAMBS & HOGGETS | TRADE WETHERS | TRADE EWES | RAMS |
| Spring |  |  |  |  |  |  |  |  |  |  |  |
| Summer |  |  |  |  |  |  |  |  |  |  |  |
| Autumn |  |  |  |  |  |  |  |  |  |  |  |
| Winter |  |  |  |  |  |  |  |  |  |  |  |

Liveweight (kg/head)

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BREEDING STOCK | | | | | | | | TRADED SHEEP | | | |
| Seasons | RAMS | WETHERS | MAIDEN EWES | BREEDING EWES | OTHER EWES | EWE LAMBS | WETHER LAMBS | LAMBS & HOGGETS | TRADE WETHERS | TRADE EWES | RAMS |
| Spring |  |  |  |  |  |  |  |  |  |  |  |
| Summer |  |  |  |  |  |  |  |  |  |  |  |
| Autumn |  |  |  |  |  |  |  |  |  |  |  |
| Winter |  |  |  |  |  |  |  |  |  |  |  |

LIVEWEIGHT GAIN (LWG) (KG/DAY)

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BREEDING STOCK | | | | | | | | TRADED SHEEP | | | |
| Seasons | RAMS | WETHERS | MAIDEN EWES | BREEDING EWES | OTHER EWES | EWE LAMBS | WETHER LAMBS | LAMBS & HOGGETS | TRADE WETHERS | TRADE EWES | RAMS |
| Spring |  |  |  |  |  |  |  |  |  |  |  |
| Summer |  |  |  |  |  |  |  |  |  |  |  |
| Autumn |  |  |  |  |  |  |  |  |  |  |  |
| Winter |  |  |  |  |  |  |  |  |  |  |  |

feed availability (t/ha)

*If feed availability is unknown, leave the table blank. Default data from your area will be used.*

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BREEDING STOCK | | | | | | | | TRADED SHEEP | | | |
| Seasons | RAMS | WETHERS | MAIDEN EWES | BREEDING EWES | OTHER EWES | EWE LAMBS | WETHER LAMBS | LAMBS & HOGGETS | TRADE WETHERS | TRADE EWES | RAMS |
| Spring |  |  |  |  |  |  |  |  |  |  |  |
| Summer |  |  |  |  |  |  |  |  |  |  |  |
| Autumn |  |  |  |  |  |  |  |  |  |  |  |
| Winter |  |  |  |  |  |  |  |  |  |  |  |

feed quality

*If feed quality is unknown, leave the table blank. Default data for your area will be used.*

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| crude protein (cp%) | | | | | | | | | | | | |
| BREEDING STOCK | | | | | | | | | TRADED SHEEP | | | |
| Seasons | Bulls >1 | Steers <1 | steers 1-2 | steers >2 | cows >2 | heifers <1 | heifers 1-2 | heifers >2  (not calving)\* | cows | heifers | steers | Bulls |
| Spring |  |  |  |  |  |  |  |  |  |  |  |  |
| Summer |  |  |  |  |  |  |  |  |  |  |  |  |
| Autumn |  |  |  |  |  |  |  |  |  |  |  |  |
| Winter |  |  |  |  |  |  |  |  |  |  |  |  |
| **DRY MATTER DIGESTIBILITY (DMD%)** | | | | | | | | | | | | |
| BREEDING STOCK | | | | | | | | | TRADED SHEEP | | | |
| Seasons | Bulls >1 | Steers <1 | steers 1-2 | steers >2 | cows >2 | heifers <1 | heifers 1-2 | heifers >2  (not calving)\* | cows | heifers | steers | Bulls |
| Spring |  |  |  |  |  |  |  |  |  |  |  |  |
| Summer |  |  |  |  |  |  |  |  |  |  |  |  |
| Autumn |  |  |  |  |  |  |  |  |  |  |  |  |
| Winter |  |  |  |  |  |  |  |  |  |  |  |  |

purchase inventory

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BREEDing stock | | | | | | | | TRADED SHEEP | | | |
|  | RAMs | WETHERS | MAIDEN EWES | BREEDING EWES | OTHER EWES | EWE LAMBS | WETHER LAMBS | LAMBS & HOGGETS | TRADE WETHERS | TRADE EWES | RAMS |
| Number of head |  |  |  |  |  |  |  |  |  |  |  |
| Purchase weight |  |  |  |  |  |  |  |  |  |  |  |

|  |  |  |
| --- | --- | --- |
| PERCENT OF SHEEP PURCHASED: | Merino % | cross-bred % |

sale inventory

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BREEDing stock | | | | | | | | TRADED SHEEP | | | |
| Seasons | RAMs | WETHERS | MAIDEN EWES | BREEDING EWES | OTHER EWES | EWE LAMBS | WETHER LAMBS | LAMBS & HOGGETS | TRADE WETHERS | TRADE EWES | RAMS |
| Number of head |  |  |  |  |  |  |  |  |  |  |  |
| Sale weight |  |  |  |  |  |  |  |  |  |  |  |

fleece

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BREEDing stock | | | | | | | | TRADED SHEEP | | | |
|  | RAMs | WETHERS | MAIDEN EWES | BREEDING EWES | OTHER EWES | EWE LAMBS | WETHER LAMBS | LAMBS & HOGGETS | TRADE WETHERS | TRADE EWES | RAMS |
| Number shorn |  |  |  |  |  |  |  |  |  |  |  |
| Wool shorn (kg/head) |  |  |  |  |  |  |  |  |  |  |  |
| Greasy wool production (kg/yr) |  |  |  |  |  |  |  |  |  |  |  |
| Clean wool yield (%) |  |  |  |  |  |  |  |  |  |  |  |

|  |  |
| --- | --- |
| carbon content of wool (%)\*: |  |

\*If unknown, default values can be used.

proportion of ewes lambing (%) seasonal lambing rates (%)

|  |  |
| --- | --- |
| **Spring** |  |
| **Summer** |  |
| **Autumn** |  |
| **Winter** |  |

|  |  |
| --- | --- |
| **Spring** |  |
| **Summer** |  |
| **Autumn** |  |
| **Winter** |  |

**Instructions:** If lambing occurs over more than one season, ensure the total (as a percentage) matches the annual lambing rate. For example, if you have a lambing rate of 150% and half your lambing is in spring and the other half is in autumn, then each season should have 75% allocated to it. If all your lambing is in spring then 150% should be entered in spring

fertiliser use (sheep production only)

|  |  |  |  |
| --- | --- | --- | --- |
| Nitrogen fertilisers | | DRYLAND | IRRIGATED |
| Urea fertiliser pasture (tonnes of urea) | |  |  |
| Urea fertiliser crops (used for grazing cattle – tonnes urea) | |  |  |
| Monoammonium phosphate (MAP) - tonnes | |  |  |
| Diammonium phosphate (DAP) – tonnes | |  |  |
| Urea-Ammonium nitrate (UAN) – tonnes | |  |  |
| Ammonium nitrate (AN) – tonnes | |  |  |
| Calcium ammonium nitrate (CAN) - tonnes | |  |  |
| other | | | |
| Single Superphosphate (tonnes) | |  | |
| Phosphate fertiliser use (tonnes) |  | Percentage phosphate |  |
| Limestone applied to soils (total tonnes) | | Fraction as CaCO3 (vs dolomite) |  |

Energy and fuel (sheep production only)

|  |  |
| --- | --- |
| Energy and fuel | |
| Electricity source (please highlight or circle) | State Grid or Renewable |
| Annual diesel consumption (for sheep enterprise) (litres/year) |  |
| Annual petrol consumption (for sheep enterprise) (litres/year) |  |
| Annual electricity use (for sheep enterprise) (KWh) |  |

other (sheep production)

|  |  |
| --- | --- |
| other | |
| Grain purchased for cattle feed (all grains) (tonnes) |  |
| Cotton seed purchased for cattle feed (tonnes) |  |
| Hay purchased for cattle feed (tonnes) |  |
| Herbicides (Paraquat, Diquat, Glyphosate) (cattle production only) (total kg Active Ingredient) |  |
| Other herbicides/pesticide (cattle production only) (total kg Active Ingredient) |  |