

Calculate greenhouse gas emissions from dairy cows

- 1 Calculate how many kilograms of carbon dioxide are stored per day in the Otway Project.
- 2 Calculate the equivalent kilograms of methane.
- 3 Decide which month you wish to use for your cow emissions (or calculate an average daily figure across the four figures given).
- 4 Calculate the number of cows that would emit the mass of methane found in 2 (don't forget to convert grams/day to kg/day).

Data

Approximate rate of carbon dioxide storage in the Otway Basin: 120 tonnes/day.

Global Warming Potential of Methane = 25 (over 100 years). To find out how much CO₂ would have the same greenhouse effect as methane, multiply the mass of methane by 25.

Methane emissions from grazing dairy cows

Month	Average methane emissions (g/cow per day)
November	487
February	623
May	521
September	344

Auldist, Cavanagh, Eckard and Grainger, "Methane Emissions from Grazing Dairy Cows in Victoria", Proceedings of the ASAP 26th Biennial Conference, <http://www.asap.asn.au/proceedings.php>

