

Fact sheet

FEEDLOTS

Feedlot emissions in detail

The primary greenhouse gas from lot fed cattle is methane that is released into the atmosphere via belching. Known as enteric methane, it accounts for approximately 85% of scope one and scope two emissions. Emissions (methane and nitrous oxide) from manure account for approximately 11% of emissions.

Sources of emissions

The emissions, grouped by scope and type of gas that originate from feedlots are shown below.

Figure 1: Emission sources

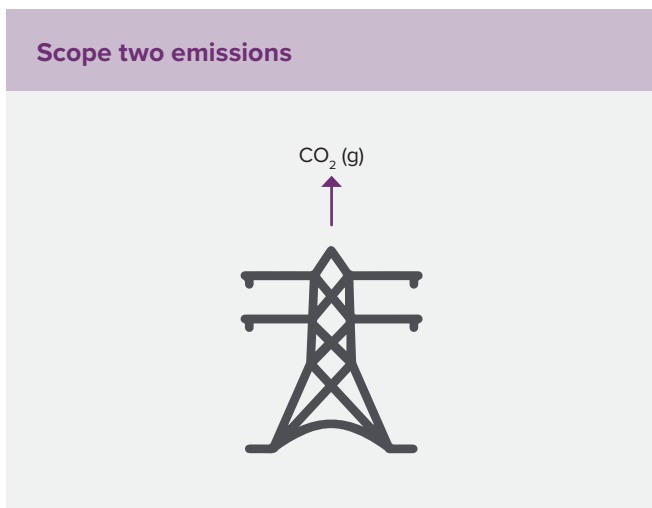
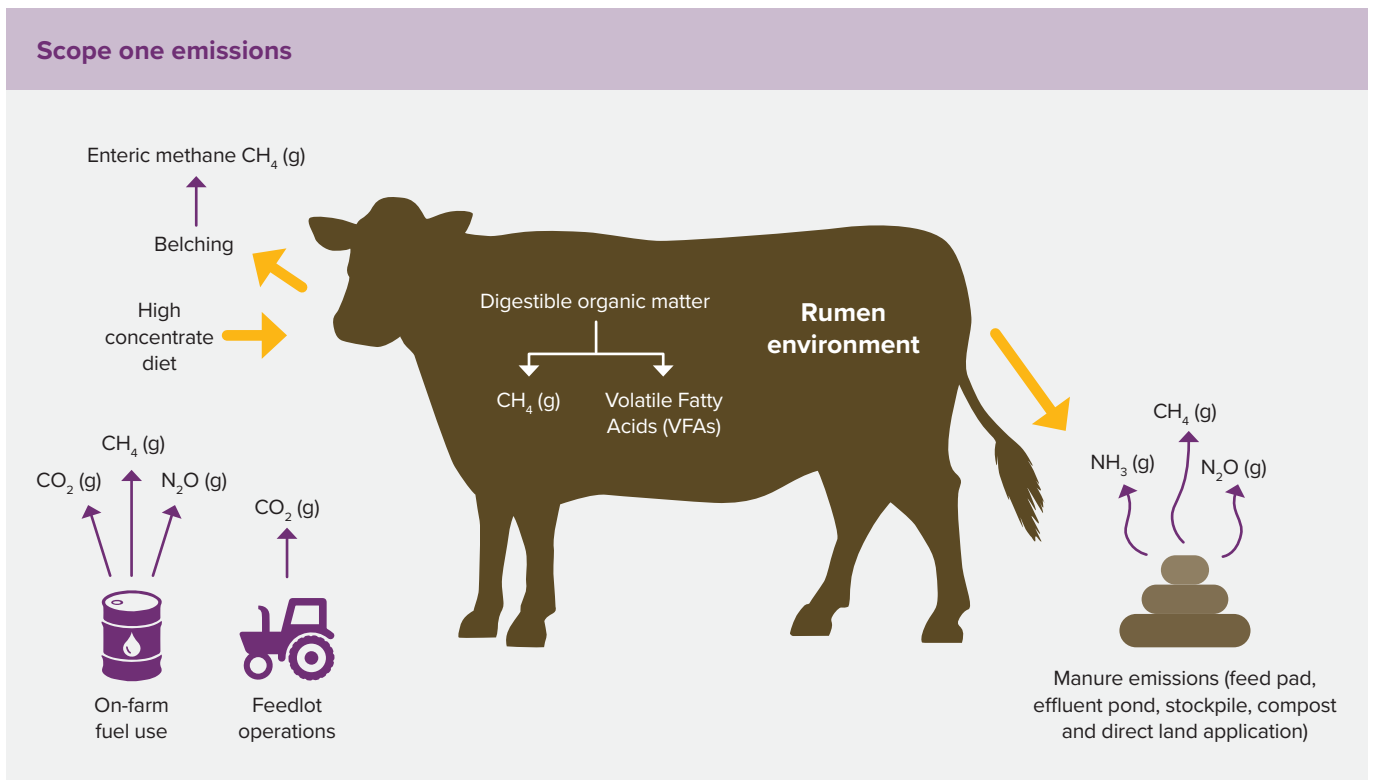
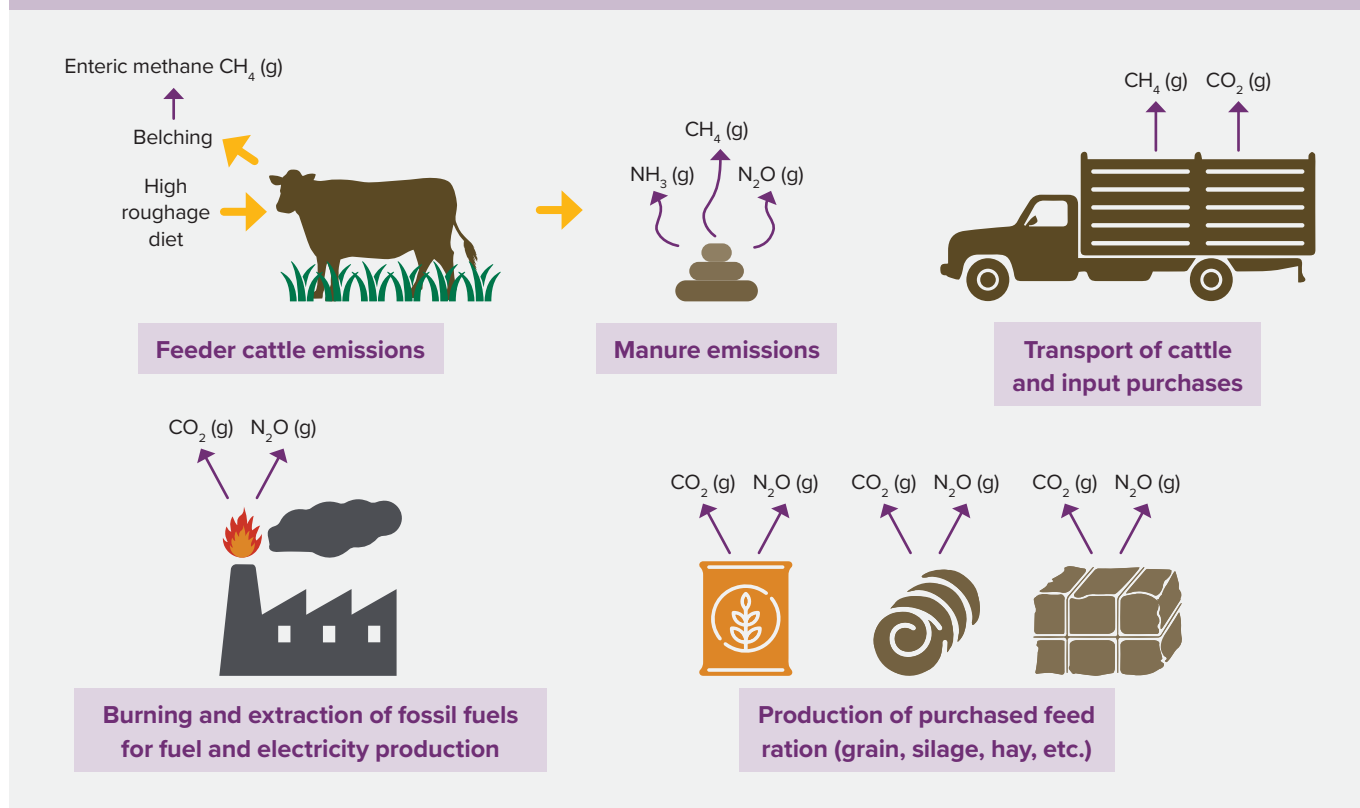


Image: Australian Lot Feeders' Association

Scope three emissions



Feedlot carbon footprint

Table 1 is an example of a full carbon footprint for several feedlot cattle types (based on a hypothetical 10,000 head feedlot). The hotspot indicates high (red), medium (yellow-orange) and low (green) emission sources.

Table 1: Carbon footprint for different feedlot cattle types

Emission source	Domestic	Short-fed export	Long-fed export
Scope one			
Enteric methane	7.0%	10.3%	17.1%
Manure methane	0.3%	0.4%	0.6%
Manure direct nitrous oxide	0.6%	1.1%	1.6%
Feedlot services	0.1%	0.1%	0.2%
Feedmilling and feed production	0.3%	0.4%	0.7%
Scope two			
Feedlot services	0.0%	0.1%	0.1%
Feedmilling and feed production	0.1%	0.1%	0.2%
Scope three			
Manure indirect nitrous oxide	0.1%	0.2%	0.3%
Feedlot services	0.0%	0.0%	0.0%
Feedmilling and feed production	3.0%	3.8%	7.2%
Transport	0.3%	0.4%	0.8%
Feeder cattle emissions	88.1%	83.2%	71.1%
Emission intensity (kg CO ₂ -e/kg LWG)	10.3	9.6	9.2

More information

Read the *Moving towards carbon neutrality – Opportunities for the feedlot industry* technical manual.