

	Data on numbers slaughtered		Regionalization		Determining live weight based on percentage from beef vs dairy herds						Weight of cattle slaughtered (millions of kgs)	Conv. factor	Carcass wt. (millions of kgs)	Conv. factor	EMISSIONS		
	Cattle slaughtered annually (millions of head)	Reference year of slaughter estimates	Production regions and slaughter numbers or percentages	Regions (based on FAO/ GLEAM categorization)	Percent activity in each region	Cattle slaughtered in region annually (millions of head)	Typical percentage of slaughter cattle drawn from beef herd in region	Typical percentage of slaughter cattle drawn from dairy herd in region	Typical average live weight of slaughter cattle from the beef herd (kgs)	Typical average live weight of slaughter cattle from the dairy herd (kgs)					Weight of cattle slaughtered (millions of kgs)	Dressing percentages / carcass weight conversion factors (kg carcass per kg live wt.)	Beef processed, carcass weight (millions of kgs)
1. JBS S.A. (Brazil)	17.40	2016	Capacity: Can. & US 29,000/day; Australia 10,200/d; Brazil 34,500/d; Argentina 2,000/d; Uruguay 900/d; Paraguay 3,000/d (a)	Region 1	N. America	36%	6.33	76%	24%	598.2	614.5	3,811.96	56.67%	2,160.11	35.74	77.202	236,167,829
				Region 2	Oceania (b)	13%	2.23	62%	38%	382.0	421.0	883.66	51.67%	456.56	32.56	14.865	
				Region 3	LAC (c)	51%	8.84	69%	31%	449.5	503.5	4,122.45	51.67%	2,129.93	67.65	144.100	
2. Tyson Foods, Inc. (USA)	7.70	2016	All in the US (a)	Region 1	N. America	100%	7.70	76%	24%	598.2	614.5	4,636.07	56.67%	2,627.10	35.74	93.891	93,891,084
3. Cargill, Inc. (USA)	7.60	2016	Can. & US 6 mill./year; Australia 1.6 mill./year (a)	Region 1	N. America	79%	6.00	76%	24%	598.2	614.5	3,614.93	56.67%	2,048.46	35.74	73.211	83,865,168
				Region 2	Oceania (b)	21%	1.60	62%	38%	382.0	421.0	633.32	51.67%	327.22	32.56	10.655	
4. National Beef Packing Company, LLC (USA)	3.40		All in the US (a)	Region 1	N. America	100%	3.40	76%	24%	598.2	614.5	2,047.09	56.67%	1,160.02	35.74	41.458	41,458,401
5. Minerva Foods S.A. (Brazil)	2.13	2016	All production in Brazil, Uruguay, Paraguay, with a little in Columbia (a)	Region 1	LAC (c)	100%	2.13	69%	31%	449.5	503.5	993.09	51.67%	513.10	67.65	34,713	34,713,450
6. Marfrig Global Foods S.A. (Brazil)	2.11	2015	Largely Brazil. Probably Brazil, Uruguay, and Chile	Region 1	LAC (c)	100%	2.11	69%	31%	449.5	503.5	983.77	51.67%	508.28	67.65	34,388	34,387,502
7. Groupe Bigard SA (France)	1.50	2014	Largely in France	Region 1	W. Europe	100%	1.50	30%	70%	531.0	549.8	816.28	50.67%	413.58	20.32	8,403	8,402,794
8. ABP Food Group (Ireland)	1.00	2015	Ireland, UK, Denmark, Poland, Austria, Holland, and Spain (a)	Region 1	W. Europe	83%	0.83	30%	70%	531.0	549.8	451.67	50.67%	228.85	20.32	4,650	5,399,624
				Region 2	E. Europe	17%	0.17	1%	99%	530.0	527.3	89.65	50.67%	45.42	16.51	750	
9. VION Food Group (Netherlands)	0.92	2016	"All ... in Netherlands and Germany" (a)	Region 1	W. Europe	100%	0.92	30%	70%	531.0	549.8	500.65	50.67%	253.66	20.32	5,154	5,153,714
10. NH Foods Ltd. (Japan)	0.78	2016	Australia, Uruguay, and Japan (a)	Region 1	Oceania (b)	75%	0.5840	62%	38%	382.0	421.0	231.73	51.67%	119.73	32.56	3,898	6,837,590
				Region 2	LAC (c)	18%	0.1447	69%	31%	449.5	503.5	67.45	51.67%	34.85	67.65	2,358	
				Region 3	E&SE Asia	7%	0.0540	77%	23%	350.8	335.5	18.76	51.67%	9.69	60.02	582	

	Data on numbers slaughtered		Live weight each	Weight of hogs	Conv. factor	Carcass wt.	Conv. factor	EMISSIONS	
	Hogs slaughtered annually (millions of head)	Reference year of slaughter estimates	Typical average live weight of slaughter hogs (kgs)	Weight of hogs slaughtered (millions of kgs)	Dressing percentages / carcass weight conversion factors (kg carcass per kg live wt.)	Pork processed, carcass weight (millions of kgs)	Emissions factor (uses global average) (kg CO2-eq per kg carcass weight) (k)	Corporation's TOTAL GHG emissions from hog production (millions of kgs of CO2-eq)	Corporation's TOTAL GHG emissions from hog production (tonnes of CO2-eq)
1. Smithfield Foods, Inc. / WH Group, Ltd. (China / Hong Kong)	48.30	2016	115.0	5,554.50	75%	4,165.88	7.23	30,107.61	30,107,612
2. JBS S.A. (Brazil)	28.00	2016	115.0	3,220.00	75%	2,415.00	7.23	17,453.69	17,453,688
3. Tyson Foods, Inc. (USA)	22.10	2016	115.0	2,541.50	75%	1,906.13	7.23	13,775.95	13,775,947
4. Danish Crown AmbA (Denmark)	22.00	2016	115.0	2,530.00	75%	1,897.50	7.23	13,713.61	13,713,612
5. Tönnies Lebensmittel GmbH & Co. (Germany)	17.50	2016	115.0	2,012.50	75%	1,509.38	7.23	10,908.56	10,908,555
6. China Yurun Food Group Limited (China)	16.50	2016	115.0	1,897.50	75%	1,423.13	7.23	10,285.21	10,285,209
7. VION Food Group (Netherlands)	16.10	2016	115.0	1,851.50	75%	1,388.63	7.23	10,035.87	10,035,871
8. Hormel Foods Corporation (US)	13.00	2016	115.0	1,495.00	75%	1,121.25	7.23	8,103.50	8,103,498
9. Coren Group (Spain)	10.00	2016	115.0	1,150.00	75%	862.50	7.23	6,233.46	6,233,460
10. BRF S.A. (Brazil)	9.60	2016	115.0	1,104.00	75%	828.00	7.23	5,984.12	5,984,122

	Data on numbers slaughtered		Rough regionalization	Live weight	Weight of chickens	Conv. factor	Carcass wt.	Conv. factor	EMISSIONS	
	Poultry slaughtered annually (millions of head)	Reference year of slaughter estimates							Assumed production region(s)	Typical average live weight of a slaughter chicken (broiler only) (kgs)
1. JBS S.A. (Brazil)	3500.00	2016	LAC, WE & NA	2.57	8,995.00	78%	7,016.10	3.76	26,405.16	26,405,165
2. Tyson Foods, Inc. (USA)	1895.00	2016	NA	2.67	5,059.65	68%	3,440.56	3.03	10,431.86	10,431,855
3. BRF S.A. (Brazil)	1724.00	2016	LAC	2.47	4,258.28	88%	3,747.29	4.56	17,072.89	17,072,892
4. New Hope Group, Ltd. (China)	800.00	2016	E&SEA	1.89	1,512.00	63%	952.56	7.52	7,163.84	7,163,841
5. Guangdong Wens Foodstuff Group Co., Ltd. (China)	744.00	2016	E&SEA	1.89	1,406.16	63%	885.88	7.52	6,662.37	6,662,372
6. Perdue Farms, Inc. (US)	675.00	2016	NA	2.67	1,802.25	68%	1,225.53	3.03	3,715.83	3,715,832
7. Industrias Bachoco, S.A.B. de C.V. (Mexico)	672.00	2016	NA	2.67	1,794.24	68%	1,220.08	3.03	3,699.32	3,699,318
8. CP Group (Thailand)	632.30	2016	E&SEA	1.89	1,195.05	63%	752.88	7.52	5,662.12	5,662,121
9. Koch Foods, Inc. (US)	624.00	2016	NA	2.67	1,666.08	68%	1,132.93	3.03	3,435.08	3,435,081
10. Arab Company for Livestock Development (ACOLID) (Saudi Arabia)	500.00	2016	NENA	1.87	935.00	67%	626.45	5.20	3,256.63	3,256,630

	Data on milk processed		Rough regionalization	Conv. factor	EMISSIONS	
	Milk intake (millions of tonnes annually)	Reference year of milk intake estimates			Assumed production region	Emissions factor (kg CO2-eq/kg FPCM (n))
1. Dairy Farmers of America, Inc. (US)	28.10	2015	N.America	1.86	52,151	52,150,572
2. Fonterra Co-operative Group Limited (New Zealand)	22.10	2015	Oceania	1.88	41,536	41,535,799
3. Le Groupe Lactalis (France)	15.10	2015	W.Europe	1.58	23,854	23,854,117
4. Arla Foods (Denmark)	14.20	2015	W.Europe	1.58	22,432	22,432,349
5. Nestlé S.A. (Switzerland)	14.00	2015	W.Europe	1.58	22,116	22,116,400
6. FrieslandCampina (Netherlands)	12.60	2015	W.Europe	1.58	19,905	19,904,760
7. Dean Foods (US)	10.30	2015	N.America	1.86	19,116	19,115,690
8. DMK Deutsches Milchkontor GmbH (Germany)	7.80	2015	W.Europe	1.58	12,322	12,321,994
9. Saputo Inc. (Canada)	7.70	2015	N.America (85.5% of total rev. fr. US & Canada)	1.86	14,290	14,290,370
10. California Dairies, Inc. (US)	7.70	2015	N.America	1.86	14,290	14,290,370

Greenhouse gas emissions (tonnes of CO2-eq per year)						
Calculated using FAO/GLEAM methodology (incl. scope 1, 2, and 3 emissions)						
Company	Beef	Pork	Chicken	Dairy	Total	Rank
JBS S.A. (Brazil)	236,167,829	17,453,688	26,405,165		280,026,682	1
Tyson Foods, Inc. (USA)	93,891,084	13,775,947	10,431,855		118,098,886	2
Cargill, Inc. (USA)	83,865,168		2,438,687		86,303,855	3
Dairy Farmers of America, Inc. (US)				52,150,572	52,150,572	4
Fonterra Co-operative Group Limited (New Zealand)				41,535,799	41,535,799	5
National Beef Packing Company, LLC (USA)	41,458,401				41,458,401	6
Marfrig Global Foods S.A. (Brazil)	34,387,502	39,354	4,135,920		38,562,776	7
Minerva Foods S.A. (Brazil)	34,713,450				34,713,450	8
Smithfield Foods / WH Group, Ltd. (China/Hong Kong)		30,107,612			30,107,612	9
Le Groupe Lactalis (France)				23,854,117	23,854,117	10
BRF S.A. (Brazil)		5,984,122	17,072,892		23,057,014	11
Arla Foods (Denmark)				22,432,349	22,432,349	12
Nestlé S.A. (Switzerland)				22,116,400	22,116,400	13
FrieslandCampina (Netherlands)				19,904,760	19,904,760	14
Dean Foods (US)				19,115,690	19,115,690	15
Yili Group (China)				18,139,657	18,139,657	16
Danish Crown AmbA (Denmark)	2,800,931	13,713,612			16,514,543	17
VION Food Group (Netherlands)	5,153,714	10,035,871			15,189,585	18
California Dairies, Inc. (US)				14,290,370	14,290,370	19
Saputo Inc. (Canada)				14,290,370	14,290,370	19