C1 N CHAIN CALCULATIONS SHEET C: N CHAINS BASED UPON DANISH VALUES AND WITH NORMAL IPCC N2O EMISSION VALUES BASIC VALUES By Jacob Bugge Version 310308, Available at www.ppo.bugge.com See terms of use on Sheet A C1

Note 33

Crop, fodder/food	WRS	WWH	WWB	WBA	RYE	TRI	SBA	SWH	OAT	MCC	MCW	GRO	GCR	CGR	GHP	GRP	CGR0	CONC	
Crop #	22	11	13	10	14	16	1	2	3	5	216	263	260	261	2520	252	2610	9999	Note 1
<NUE/e>	0.64	0.64	0.54	0.60	0.59	0.53	0.60	0.58	0.73	0.62	1.05	0.83	1.33	11.68	0.44	0.81	-2.75	1.00	Note 16
N digestibility, crop/crop part with N	0.84	0.67	0.68	0.66	0.62	0.65	0.65	0.67	0.64	0.62	0.63	0.78	0.80	0.80	0.66	0.78	0.80	0.87	Note 4
<NUE/e> addition before cereal	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.04	0.11	29.21	0.00	0.00	-0.81	0.00	Note 34
<NUE/e> addition from straw	0.15	0.11	0.09	0.12	0.17	0.13	0.12	0.07	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Note 34
Recalculated N norm, kg N/ha	144	157	198	147	117	141	118	118	93	140	160	309	199	21	132	132	-87		Note 14

Crop, PPO/biodiesel/bioethanol	WRB	WWHB	WWBB	WBB	RYB	TRB	SBB	SWB	OAB	MCB	
Crop #	229	119	139	109	149	169	19	29	39	59	Note 1
<NUE/e>	0.64	0.64	0.54	0.60	0.59	0.53	0.60	0.58	0.73	0.62	Note 16
N digestibility, crop part with N	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.83	Note 4
<NUE/e> addition before cereal	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Note 34
<NUE/e> addition from straw	0.15	0.11	0.09	0.12	0.17	0.13	0.12	0.07	0.13	0.00	Note 34
Recalculated N norm, kg N/ha	144	157	198	147	117	141	118	118	93	140	Note 14
<NUE/e> amounts from crop res	0.03	0.11	0.09	0.08	0.15	0.12	0.09	0.12	0.11	0.21	Note 34
<NUE/e> amounts from N fixation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Note 34

Manure/fertilizer kind, #	None 0	N 1	Cattle manure 2	2	2	2	Pig manure 3	3	3	3	Poultry manure 4	4	4	4	Sheep manure 5	5	Goat manure 6	6	Green 71	Green 72	None 0	None 0	Note 35 Note 35
Manure handling	None		Liquid	Separated	Deep litter	Grazing	Liquid	Separated	Deep litter	Rooting	Liquid	Separated	Deep litter	Scraping	Deep litter	Grazing	Deep litter	Grazing	high N	low N	None	None	Note 35 Note 35
#	0	1	21	22	23	24	31	32	33	34	41	42	43	44	53	54	63	64	71	72	0	0	Note 35
Manure+straw, relative		1.000	1.016	1.016	1.159	1.000	1.000	1.024	1.127	1.000	1.000	1.000	1.013	1.000	1.162	1.000	1.162	1.000	1.000	1.000			Note 36
Vol/NH3 House	0.000	0.000	0.080	0.050	0.060	0.000	0.140	0.180	0.250	0.000	0.100	0.250	0.400	0.000	0.150	0.000	0.150	0.000	0.000	0.000			Note 37
Vol/NH3 Store	0.000	0.000	0.022	0.085	0.300	0.000	0.027	0.214	0.400	0.000	0.020	0.150	0.175	0.000	0.150	0.000	0.150	0.000	0.000	0.000			Note 37
% use of field store					20				70				85										Note 38
Vol/NH3 Field	0.000	0.022	0.250	0.250	0.250	0.070	0.250	0.250	0.250	0.070	0.250	0.250	0.250	0.070	0.250	0.070	0.250	0.070	0.250	0.250			Note 37
N efficiency	0.000	1.000	0.700	0.650	0.450	0.450	0.750	0.650	0.650	0.650	0.650	0.650	0.450	0.450	0.450	0.450	0.450	0.450	0.700	0.400			Note 39
N-Vol/NH3 efficiency		1.022	0.933	0.867	0.600	0.484	1.000	0.867	0.867	0.699	0.867	0.867	0.600	0.484	0.600	0.484	0.600	0.484	0.933	0.533			Note 39

Use	Kind	Waste moved	Waste in field	Cattle Dairy	Cattle Beef	Pig Pork	Poultry Meat	Poultry Eggs	Sheep Milk/mutton	Goat Milk/meat	N crop high N	N crop low N	Food/ beverage	Fuel/ other	
#		-1	0	21	22	32	42	43	51	61	71	72	8	9	Note 41
Fodder to food	N eff	NON		0.264	0.227	0.418	0.510	0.241	0.142	0.096					Note 41
Fodder to food	N eff	ORG		0.264	0.146	0.269	0.328	0.272	0.142	0.096					Note 41
Fodder to food	ND eff	NON		0.351	0.310										Note 41
Fodder to food	ND eff	ORG		0.351	0.199										Note 41

Ratios of N2O-N to N according to		IPCC 1996 (current inventories)			IPCC 2006 (newest values, not yet used for inventories)			Note 42
Fertilizer/manure		N	Animal	Green	N	Animal	Green	Note 42
Handling/	Slurry and liquid manure	0	0.0010	0	0	0.0050	0	Note 42
house/store	Solid manure and deep litter	0	0.0200	0	0	0.0050	0	Note 42
Application/field		0.0125	0.0125	0.0125	0.0100	0.0100	0.0100	Note 42
Grazing cattle, rooting pigs, craping poultry		0	0.0200	0	0	0.0200	0	Note 42
Grazing, others		0	0.0200	0	0	0.0100	0	Note 42
Volatilisation/NH3		0.0100	0.0100	0.0100	0.0100	0.0100	0.0100	Note 42
Crop residues		0	0.0000	0.0125	0	0.0000	0.0100	Note 42
N fixing crops		0	0.0000	0.0125	0	0.0000	0.0000	Note 42
Leaching		0.0250	0.0250	0.0250	0.0075	0.0075	0.0075	Note 42

N CHAIN STARTING WITH N FERTILIZER TO PRODUCE WINTER WHEAT FOR BIOETHANOL AND CATTLE DAIRY Note 43
AND CONTINUING WITH LIQUID CATTLE MANURE TO PRODUCE WINTER WHEAT FOR CATTLE DAIRY Note 43

Year	Fertlizer/manure # Name	Store 1/0	Amounts Store	Amounts Field	Organic 1/0	Nnorm proportion, %	Crop # Name	Cereal benefit 1/0	Straw used 1/0	Crop use & leach	Use # Name	Fodder: Uses #21-61 Fed	Fodder: Uses #21-61 Food	N crop #71/ #72	Food/ bev #8	Fuel/ other #9	Manure handling # Name	Final N amounts	N2O-N emission IPCC 1996 Each	N2O-N emission IPCC 1996 Total	N2O-N emission IPCC 2006 Each	N2O-N emission IPCC 2006 Total	Note 44 Note 44 Note 44
Total	N		RATIO OF N2O-N TO N IN FIRST CROP				TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED							41.5	41.1				2.06	3.20	1.94	2.45	Note 45
Year	N NH3		ACCORDING TO		IPCC 1996		IPCC 2006				TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3			23.1	22.9				0.23		0.23		Note 45
1-10	N leach		FIRST YEAR		0.0269		0.0206				TOTAL N AMOUNTS IN KG AND % LEACHED			36.4	36.0				0.91		0.27		Note 45
			TOTAL		0.0426		0.0326				TOTAL N AMOUNTS IN KG AND %			101.0	100.0								Note 45

N2O-N/N in food/beverage/fuel/other 0.0772 0.0590 Note 46

Year																									
Year	N	1	0	100.0	100.0	0	100	119	0	1	97.8	21	64.3	19.0	0.0	0.0	10.8	21	45.3	1.40	2.02	1.32	1.55	Note 47
1	Vol/NH3	N	NO	0.0	2.2	NON	100.00	WWHB	1.000	YES	22.7	Cattle	0.84				0.0	Cattle	3.6	0.06	0.0125	0.06	0.0100	Note 48
	N leach		1.022	1.000		ORG	1.00	1.000	0.343	10.8	22.7	Dairy	2				10.6	Liquid	0.0	0.57	0.0010	0.17	0.0050	Note 49
Year	N	21	0	42.3	42.3	0	100	11	0	1	31.8	21	19.0	4.5	0.0	0.0	3.5	21	14.6	0.45	0.80	0.43	0.61	Note 47
2	Vol/NH3	Cattle	NO	0.0	10.6	NON	100.00	WWH	1.000	YES	9.2	Cattle	0.67				0.0	Cattle	1.2	0.12	0.0125	0.12	0.0100	Note 48
	N leach	Liquid	0.933	1.016		ORG	1.00	1.000	0.400	3.5	9.2	Dairy	2				3.4	Liquid	0.0	0.23	0.0010	0.07	0.0050	Note 49
Year	N	21	0	13.6	13.6	0	100	11	0	1	10.2	21	6.1	1.4	0.0	0.0	1.1	21	4.7	0.15	0.26	0.14	0.20	Note 47
3	Vol/NH3	Cattle	NO	0.0	3.4	NON	100.00	WWH	1.000	YES	3.0	Cattle	0.67				0.0	Cattle	0.4	0.04	0.0125	0.04	0.0100	Note 48
	N leach	Liquid	0.933	1.016		ORG	1.00	1.000	0.400	1.1	3.0	Dairy	2				1.1	Liquid	0.0	0.07	0.0010	0.02	0.0050	Note 49
Year	N	21	0	4.4	4.4	0	100	1	0	1	3.3	21	1.8	0.4	0.0	0.0	0.4	21	1.4	0.05	0.08	0.04	0.06	Note 47
4	Vol/NH3	Cattle	NO	0.0	1.1	NON	100.00	SBA	1.000	YES	1.1	Cattle	0.65				0.0	Cattle	0.1	0.01	0.0125	0.01	0.0100	Note 48
	N leach	Liquid	0.933	1.016		ORG	1.00	1.000	0.443	0.4	1.1	Dairy	2				0.3	Liquid	0.0	0.03	0.0010	0.01	0.0050	Note 49
Year	N	21	0	1.3	1.3	0	100	10	0	1	1.0	21	0.6	0.1	0.0	0.0	0.1	21	0.4	0.01	0.03	0.01	0.02	Note 47
5	Vol/NH3	Cattle	NO	0.0	0.3	NON	100.00	WBA	1.000	YES	0.3	Cattle	0.66				0.0	Cattle	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Liquid	0.933	1.016		ORG	1.00	1.000	0.444	0.1	0.3	Dairy	2				0.1	Liquid	0.0	0.01	0.0010	0.00	0.0050	Note 49
Year	N	21	0	0.4	0.4	0	100	119	0	1	0.3	21	0.2	0.1	0.0	0.0	0.0	21	0.1	0.00	0.01	0.00	0.01	Note 47
6	Vol/NH3	Cattle	NO	0.0	0.1	NON	100.00	WWHB	1.000	YES	0.1	Cattle	0.84				0.0	Cattle	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Liquid	0.933	1.016		ORG	1.00	1.000	0.400	0.0	0.1	Dairy	2				0.0	Liquid	0.0	0.00	0.0010	0.00	0.0050	Note 49
Year	N	21	0	0.1	0.1	0	100	11	0	1	0.1	21	0.1	0.0	0.0	0.0	0.0	21	0.0	0.00	0.00	0.00	0.00	Note 47
7	Vol/NH3	Cattle	NO	0.0	0.0	NON	100.00	WWH	1.000	YES	0.0	Cattle	0.67				0.0	Cattle	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Liquid	0.933	1.016		ORG	1.00	1.000	0.400	0.0	0.0	Dairy	2				0.0	Liquid	0.0	0.00	0.0010	0.00	0.0050	Note 49
Year	N	21	0	0.0	0.0	0	100	11	0	1	0.0	21	0.0	0.0	0.0	0.0	0.0	21	0.0	0.00	0.00	0.00	0.00	Note 47
8	Vol/NH3	Cattle	NO	0.0	0.0	NON	100.00	WWH	1.000	YES	0.0	Cattle	0.67				0.0	Cattle	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Liquid	0.933	1.016		ORG	1.00	1.000	0.400	0.0	0.0	Dairy	2				0.0	Liquid	0.0	0.00	0.0010	0.00	0.0050	Note 49
Year	N	21	0	0.0	0.0	0	100	1	0	1	0.0	21	0.0	0.0	0.0	0.0	0.0	21	0.0	0.00	0.00	0.00	0.00	Note 47
9	Vol/NH3	Cattle	NO	0.0	0.0	NON	100.00	SBA	1.000	YES	0.0	Cattle	0.65				0.0	Cattle	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Liquid	0.933	1.016		ORG	1.00	1.000	0.443	0.0	0.0	Dairy	2				0.0	Liquid	0.0	0.00	0.0010	0.00	0.0050	Note 49
Year	N	21	0	0.0	0.0	0	100	10	0	1	0.0	21	0.0	0.0	0.0	0.0	0.0	21	0.0	0.00	0.00	0.00	0.00	Note 47
10	Vol/NH3	Cattle	NO	0.0	0.0	NON	100.00	WBA	1.000	YES	0.0	Cattle	0.66				0.0	Cattle	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Liquid	0.933	1.016		ORG	1.00	1.000	0.444	0.0	0.0	Dairy	2				0.0	Liquid	0.0	0.00	0.0010	0.00	0.0050	Note 49

Year	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year10	Total	Total/year 1	
Area with crop, ha	0.64	0.25	0.08	0.03	0.01	0.00	0.00	0.00	0.00	0.00	1.01	1.58	Note 50

Possible additional non IPCC N2O-N emissions	Value												Kind of source	Total IPCC and non IPCC N2O		Note 51
N residues emissions, ratio of N2O-N to N:	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Current crops	3.20	2.45	Note 51
Increased soil N emissions, kg N2O-N/ha:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Total anthropogenic	3.20	2.45	Note 51
Natural background emissions, kg N2O-N/ha:	1.00	0.64	0.25	0.08	0.03	0.01	0.00	0.00	0.00	0.00	0.00	1.01	Total including natural	4.21	3.46	Note 51

N CHAIN STARTING WITH N FERTILIZER TO PRODUCE WINTER WHEAT FOR BIOETHANOL AND CATTLE DAIRY Note 43
AND CONTINUING WITH SEPARATED CATTLE MANURE TO PRODUCE WINTER WHEAT FOR CATTLE DAIRY Note 43

Year	Fertilizer/manure # Name	Store 1/0	Amounts Store	Amounts Field	Organic 1/0	Nnorm proportion, %	Crop # Name	Cereal benefit 1/0	Straw used 1/0	Crop use & leach	Use # Name	Fodder: Uses #21-61 Fed	Fodder: Uses #21-61 Food	N crop #71/ #72	Food/ bev #8	Fuel/ other #9	Manure handling # Name	Final N amounts	N2O-N emission IPCC 1996 Each	N2O-N emission IPCC 1996 Total	N2O-N emission IPCC 2006 Each	N2O-N emission IPCC 2006 Total	Note 44 Note 44 Note 44
Total	N		RATIO OF N2O-N TO N IN FIRST CROP				TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED							41.2	40.8				2.66	3.84	1.96	2.46	Note 45
Year	N NH3		ACCORDING TO		IPCC 1996		IPCC 2006				TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3			21.2	21.0				0.21		0.21		Note 45
1-10	N leach		FIRST YEAR		0.0322		0.0205				TOTAL N AMOUNTS IN KG AND % LEACHED			38.6	38.2				0.96		0.29		Note 45
			TOTAL		0.0511		0.0327				TOTAL N AMOUNTS IN KG AND %			101.0	100.0								Note 45
N2O-N/N in food/beverage/fuel/other																				0.0932		0.0597	Note 46
Year	N	1	0	100.0	100.0	0	100	119	0	1	97.8	21	64.3	19.0	0.0	0.0	10.8	22	45.3	1.81	2.42	1.33	1.54	Note 47
1	Vol/NH3	N	NO	0.0	2.2	NON	100.00	WWHB	1.000	YES	22.7	Cattle	0.84				0.0	Cattle	2.3	0.04	0.0125	0.04	0.0100	Note 48
	N leach		1.022	1.000		ORG	1.00	1.000	0.343	10.8	22.7	Dairy	2				10.6	Sep	0.0	0.57	0.0105	0.17	0.0050	Note 49
Year	N	22	0	43.7	43.7	0	100	11	0	1	32.8	21	18.3	4.3	0.0	0.0	3.6	22	14.0	0.59	0.98	0.44	0.64	Note 47
2	Vol/NH3	Cattle	NO	0.0	10.9	NON	100.00	WWH	1.000	YES	10.9	Cattle	0.67				0.0	Cattle	0.7	0.12	0.0125	0.12	0.0100	Note 48
	N leach	Sep	0.867	1.016		ORG	1.00	1.000	0.443	3.6	10.9	Dairy	2				3.5	Sep	0.0	0.27	0.0105	0.08	0.0050	Note 49
Year	N	22	0	13.5	13.5	0	100	11	0	1	10.1	21	5.6	1.3	0.0	0.0	1.1	22	4.3	0.18	0.30	0.14	0.20	Note 47
3	Vol/NH3	Cattle	NO	0.0	3.4	NON	100.00	WWH	1.000	YES	3.4	Cattle	0.67				0.0	Cattle	0.2	0.04	0.0125	0.04	0.0100	Note 48
	N leach	Sep	0.867	1.016		ORG	1.00	1.000	0.443	1.1	3.4	Dairy	2				1.1	Sep	0.0	0.08	0.0105	0.03	0.0050	Note 49
Year	N	22	0	4.2	4.2	0	100	1	0	1	3.1	21	1.6	0.4	0.0	0.0	0.4	22	1.2	0.05	0.09	0.04	0.06	Note 47
4	Vol/NH3	Cattle	NO	0.0	1.0	NON	100.00	SBA	1.000	YES	1.1	Cattle	0.65				0.0	Cattle	0.1	0.01	0.0125	0.01	0.0100	Note 48
	N leach	Sep	0.867	1.016		ORG	1.00	1.000	0.483	0.4	1.1	Dairy	2				0.3	Sep	0.0	0.03	0.0105	0.01	0.0050	Note 49
Year	N	22	0	1.2	1.2	0	100	10	0	1	0.9	21	0.5	0.1	0.0	0.0	0.1	22	0.4	0.02	0.03	0.01	0.02	Note 47
5	Vol/NH3	Cattle	NO	0.0	0.3	NON	100.00	WBA	1.000	YES	0.3	Cattle	0.66				0.0	Cattle	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Sep	0.867	1.016		ORG	1.00	1.000	0.483	0.1	0.3	Dairy	2				0.1	Sep	0.0	0.01	0.0105	0.00	0.0050	Note 49
Year	N	22	0	0.3	0.3	0	100	119	0	1	0.3	21	0.1	0.0	0.0	0.0	0.0	22	0.1	0.00	0.01	0.00	0.00	Note 47
6	Vol/NH3	Cattle	NO	0.0	0.1	NON	100.00	WWHB	1.000	YES	0.1	Cattle	0.84				0.0	Cattle	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Sep	0.867	1.016		ORG	1.00	1.000	0.443	0.0	0.1	Dairy	2				0.0	Sep	0.0	0.00	0.0105	0.00	0.0050	Note 49
Year	N	22	0	0.1	0.1	0	100	11	0	1	0.1	21	0.0	0.0	0.0	0.0	0.0	22	0.0	0.00	0.00	0.00	0.00	Note 47
7	Vol/NH3	Cattle	NO	0.0	0.0	NON	100.00	WWH	1.000	YES	0.0	Cattle	0.67				0.0	Cattle	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Sep	0.867	1.016		ORG	1.00	1.000	0.443	0.0	0.0	Dairy	2				0.0	Sep	0.0	0.00	0.0105	0.00	0.0050	Note 49
Year	N	22	0	0.0	0.0	0	100	11	0	1	0.0	21	0.0	0.0	0.0	0.0	0.0	22	0.0	0.00	0.00	0.00	0.00	Note 47
8	Vol/NH3	Cattle	NO	0.0	0.0	NON	100.00	WWH	1.000	YES	0.0	Cattle	0.67				0.0	Cattle	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Sep	0.867	1.016		ORG	1.00	1.000	0.443	0.0	0.0	Dairy	2				0.0	Sep	0.0	0.00	0.0105	0.00	0.0050	Note 49
Year	N	22	0	0.0	0.0	0	100	1	0	1	0.0	21	0.0	0.0	0.0	0.0	0.0	22	0.0	0.00	0.00	0.00	0.00	Note 47
9	Vol/NH3	Cattle	NO	0.0	0.0	NON	100.00	SBA	1.000	YES	0.0	Cattle	0.65				0.0	Cattle	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Sep	0.867	1.016		ORG	1.00	1.000	0.483	0.0	0.0	Dairy	2				0.0	Sep	0.0	0.00	0.0105	0.00	0.0050	Note 49
Year	N	22	0	0.0	0.0	0	100	10	0	1	0.0	21	0.0	0.0	0.0	0.0	0.0	22	0.0	0.00	0.00	0.00	0.00	Note 47
10	Vol/NH3	Cattle	NO	0.0	0.0	NON	100.00	WBA	1.000	YES	0.0	Cattle	0.66				0.0	Cattle	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Sep	0.867	1.016		ORG	1.00	1.000	0.483	0.0	0.0	Dairy	2				0.0	Sep	0.0	0.00	0.0105	0.00	0.0050	Note 49

Year	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year10	Total	Total/year 1	
Area with crop, ha	0.64	0.24	0.07	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.98	1.55	Note 50

Possible additional non IPCC N2O-N emissions	Value												Kind of source	Total IPCC and non IPCC N2O		Note 51
N residues emissions, ratio of N2O-N to N:	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Current crops	3.84	2.46	Note 51
Increased soil N emissions, kg N2O-N/ha:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Total anthropogenic	3.84	2.46	Note 51
Natural background emissions, kg N2O-N/ha:	1.00	0.64	0.24	0.07	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.98	Total including natural	4.82	3.44	Note 51

N CHAIN STARTING WITH	N FERTILIZER	TO PRODUCE	WINTER WHEAT FOR BIOETHANOL AND	CATTLE DAIRY	Note 43
AND CONTINUING WITH	CATTLE DEEP LITTER	TO PRODUCE	WINTER WHEAT FOR	CATTLE DAIRY	Note 43

Year	Fertlizer/manure # Name	Store 1/0	Amounts Store	Amounts Field	Organic 1/0	Nnorm proportion, %	Crop # Name	Cereal benefit 1/0	Straw used 1/0	Crop use & leach	Use # Name	Fodder: Uses #21-61 Fed	Fodder: Uses #21-61 Food	N crop #71/ #72	Food/ bev #8	Fuel/ other #9	Manure handling # Name	Final N amounts	N2O-N emission IPCC 1996 Each	N2O-N emission IPCC 1996 Total	N2O-N emission IPCC 2006 Each	N2O-N emission IPCC 2006 Total	Note 44 Note 44 Note 44
Total	N																						Note 45
Year	N NH3																						Note 45
1-10	N leach																						Note 45
																							Note 45

RATIO OF N2O-N TO N IN FIRST CROP		TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED	39.6	36.3
ACCORDING TO	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	22.0	20.2
FIRST YEAR	0.0376	0.0205	TOTAL N AMOUNTS IN KG AND % LEACHED	47.3	43.5
TOTAL	0.0606	0.0335	TOTAL N AMOUNTS IN KG AND %	108.9	100.0

N2O-N/N in food/beverage/fuel/other 0.1150 0.0636 Note 46

Year	N	1	0	100.0	100.0	0	100	119	0	1	97.8	21	64.3	19.0	0.0	0.0	10.8	23	45.3	2.21	2.82	1.32	1.54	Note 47
1	Vol/NH3	N	NO	0.0	2.2	NON	100.00	WWHB	1.000	YES	22.7	Cattle	0.84				0.0	Cattle	2.7	0.05	0.0125	0.05	0.0100	Note 48
	N leach		1.022	1.000		ORG	1.00	1.000	0.343	10.8	22.7	Dairy	2				10.6	Deep	0.0	0.57	0.0200	0.17	0.0050	Note 49
Year	N	23	0	49.4	49.4	0	100	11	0	1	37.0	21	14.3	3.4	0.0	0.0	4.1	23	10.9	0.72	1.31	0.47	0.74	Note 47
2	Vol/NH3	Cattle	NO	0.0	12.3	NON	100.00	WWH	1.000	YES	18.7	Cattle	0.67				0.0	Cattle	0.7	0.13	0.0125	0.13	0.0100	Note 48
	N leach	Deep	0.600	1.159		ORG	1.00	1.000	0.614	4.1	18.7	Dairy	2				4.0	Deep	0.0	0.47	0.0200	0.14	0.0050	Note 49
Year	N	23	0	11.9	11.9	0	100	11	0	1	8.9	21	3.4	0.8	0.0	0.0	1.0	23	2.6	0.17	0.32	0.11	0.18	Note 47
3	Vol/NH3	Cattle	NO	0.0	3.0	NON	100.00	WWH	1.000	YES	4.5	Cattle	0.67				0.0	Cattle	0.2	0.03	0.0125	0.03	0.0100	Note 48
	N leach	Deep	0.600	1.159		ORG	1.00	1.000	0.614	1.0	4.5	Dairy	2				1.0	Deep	0.0	0.11	0.0200	0.03	0.0050	Note 49
Year	N	23	0	2.9	2.9	0	100	1	0	1	2.1	21	0.8	0.2	0.0	0.0	0.2	23	0.6	0.04	0.08	0.03	0.04	Note 47
4	Vol/NH3	Cattle	NO	0.0	0.7	NON	100.00	SBA	1.000	YES	1.1	Cattle	0.65				0.0	Cattle	0.0	0.01	0.0125	0.01	0.0100	Note 48
	N leach	Deep	0.600	1.159		ORG	1.00	1.000	0.642	0.2	1.1	Dairy	2				0.2	Deep	0.0	0.03	0.0200	0.01	0.0050	Note 49
Year	N	23	0	0.6	0.6	0	100	10	0	1	0.5	21	0.2	0.0	0.0	0.0	0.1	23	0.1	0.01	0.02	0.01	0.01	Note 47
5	Vol/NH3	Cattle	NO	0.0	0.2	NON	100.00	WBA	1.000	YES	0.3	Cattle	0.66				0.0	Cattle	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Deep	0.600	1.159		ORG	1.00	1.000	0.642	0.1	0.3	Dairy	2				0.0	Deep	0.0	0.01	0.0200	0.00	0.0050	Note 49
Year	N	23	0	0.1	0.1	0	100	119	0	1	0.1	21	0.0	0.0	0.0	0.0	0.0	23	0.0	0.00	0.00	0.00	0.00	Note 47
6	Vol/NH3	Cattle	NO	0.0	0.0	NON	100.00	WWHB	1.000	YES	0.1	Cattle	0.84				0.0	Cattle	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Deep	0.600	1.159		ORG	1.00	1.000	0.614	0.0	0.1	Dairy	2				0.0	Deep	0.0	0.00	0.0200	0.00	0.0050	Note 49
Year	N	23	0	0.0	0.0	0	100	11	0	1	0.0	21	0.0	0.0	0.0	0.0	0.0	23	0.0	0.00	0.00	0.00	0.00	Note 47
7	Vol/NH3	Cattle	NO	0.0	0.0	NON	100.00	WWH	1.000	YES	0.0	Cattle	0.67				0.0	Cattle	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Deep	0.600	1.159		ORG	1.00	1.000	0.614	0.0	0.0	Dairy	2				0.0	Deep	0.0	0.00	0.0200	0.00	0.0050	Note 49
Year	N	23	0	0.0	0.0	0	100	11	0	1	0.0	21	0.0	0.0	0.0	0.0	0.0	23	0.0	0.00	0.00	0.00	0.00	Note 47
8	Vol/NH3	Cattle	NO	0.0	0.0	NON	100.00	WWH	1.000	YES	0.0	Cattle	0.67				0.0	Cattle	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Deep	0.600	1.159		ORG	1.00	1.000	0.614	0.0	0.0	Dairy	2				0.0	Deep	0.0	0.00	0.0200	0.00	0.0050	Note 49
Year	N	23	0	0.0	0.0	0	100	1	0	1	0.0	21	0.0	0.0	0.0	0.0	0.0	23	0.0	0.00	0.00	0.00	0.00	Note 47
9	Vol/NH3	Cattle	NO	0.0	0.0	NON	100.00	SBA	1.000	YES	0.0	Cattle	0.65				0.0	Cattle	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Deep	0.600	1.159		ORG	1.00	1.000	0.642	0.0	0.0	Dairy	2				0.0	Deep	0.0	0.00	0.0200	0.00	0.0050	Note 49
Year	N	23	0	0.0	0.0	0	100	10	0	1	0.0	21	0.0	0.0	0.0	0.0	0.0	23	0.0	0.00	0.00	0.00	0.00	Note 47
10	Vol/NH3	Cattle	NO	0.0	0.0	NON	100.00	WBA	1.000	YES	0.0	Cattle	0.66				0.0	Cattle	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Deep	0.600	1.159		ORG	1.00	1.000	0.642	0.0	0.0	Dairy	2				0.0	Deep	0.0	0.00	0.0200	0.00	0.0050	Note 49

Year	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year10	Total	Total/year 1	
Area with crop, ha	0.64	0.18	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.88	1.39	Note 50

Possible additional non IPCC N2O-N emissions	Value												Kind of source	Total IPCC and non IPCC N2O		Note 51
N residues emissions, ratio of N2O-N to N:	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Current crops	4.55	2.52	Note 51
Increased soil N emissions, kg N2O-N/ha:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Total anthropogenic	4.55	2.52	Note 51
Natural background emissions, kg N2O-N/ha:	1.00	0.64	0.18	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.88	Total including natural	5.43	3.40	Note 51

N CHAIN STARTING WITH	N FERTILIZER	TO PRODUCE	WINTER WHEAT FOR BIOETHANOL AND	CATTLE DAIRY	Note 43
AND CONTINUING WITH	MANURE FROM GRAZING CATTLE	TO PRODUCE	WINTER WHEAT FOR	CATTLE DAIRY	Note 43

Year	Fertilizer/manure # Name	Store 1/0	Amounts Store	Amounts Field	Organic 1/0	Nnorm proportion, %	Crop # Name	Cereal benefit 1/0	Straw used 1/0	Crop use & leach	Use # Name	Fodder: Uses #21-61 Fed	Fodder: Uses #21-61 Food	N crop #71/ #72	Food/ bev #8	Fuel/ other #9	Manure handling # Name	Final N amounts	N2O-N emission IPCC 1996 Each	N2O-N emission IPCC 1996 Total	N2O-N emission IPCC 2006 Each	N2O-N emission IPCC 2006 Total	Note 44 Note 44 Note 44
Total	N																						Note 45
Year	N NH3																						Note 45
1-10	N leach																						Note 45
																							Note 45

RATIO OF N2O-N TO N IN FIRST CROP	TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED	39.7	39.7
ACCORDING TO IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	6.3	6.3
FIRST YEAR 0.0380	0.0294	TOTAL N AMOUNTS IN KG AND % LEACHED	54.0	54.0
TOTAL 0.0623	0.0447	TOTAL N AMOUNTS IN KG AND %	100.0	100.0

N2O-N/N in food/beverage/fuel/other																						0.1178		0.0845	Note 46
Year	N	1	0	100.0	100.0	0	100	119	0	1	97.8	21	64.3	19.0	0.0	0.0	10.8	24	45.3	2.26	2.85	2.02	2.21	Note 47
1	Vol/NH3	N	NO	0.0	2.2	NON	100.00	WWHB	1.000	YES	22.7	Cattle	0.84				0.0	Cattle	0.0	0.02	0.0125	0.02	0.0100	Note 48
	N leach		1.022	1.000		ORG	1.00	1.000	0.343	10.8	22.7	Dairy	2				10.6	Graz	0.0	0.57	0.0200	0.17	0.0200	Note 49
Year	N	24	0	45.3	45.3	0	100	11	0	1	42.1	21	13.1	3.1	0.0	0.0	4.7	24	10.0	0.78	1.42	0.68	0.89	Note 47
2	Vol/NH3	Cattle	NO	0.0	3.2	NON	100.00	WWH	1.000	YES	24.4	Cattle	0.67				0.0	Cattle	0.0	0.03	0.0125	0.03	0.0100	Note 48
	N leach	Graz	0.484	1.000		ORG	1.00	1.000	0.689	4.7	24.4	Dairy	2				4.6	Graz	0.0	0.61	0.0200	0.18	0.0200	Note 49
Year	N	24	0	10.0	10.0	0	100	11	0	1	9.3	21	2.9	0.7	0.0	0.0	1.0	24	2.2	0.17	0.32	0.15	0.20	Note 47
3	Vol/NH3	Cattle	NO	0.0	0.7	NON	100.00	WWH	1.000	YES	5.4	Cattle	0.67				0.0	Cattle	0.0	0.01	0.0125	0.01	0.0100	Note 48
	N leach	Graz	0.484	1.000		ORG	1.00	1.000	0.689	1.0	5.4	Dairy	2				1.0	Graz	0.0	0.13	0.0200	0.04	0.0200	Note 49
Year	N	24	0	2.2	2.2	0	100	1	0	1	2.1	21	0.6	0.1	0.0	0.0	0.2	24	0.5	0.04	0.07	0.03	0.04	Note 47
4	Vol/NH3	Cattle	NO	0.0	0.2	NON	100.00	SBA	1.000	YES	1.2	Cattle	0.65				0.0	Cattle	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Graz	0.484	1.000		ORG	1.00	1.000	0.711	0.2	1.2	Dairy	2				0.2	Graz	0.0	0.03	0.0200	0.01	0.0200	Note 49
Year	N	24	0	0.5	0.5	0	100	10	0	1	0.4	21	0.1	0.0	0.0	0.0	0.0	24	0.1	0.01	0.01	0.01	0.01	Note 47
5	Vol/NH3	Cattle	NO	0.0	0.0	NON	100.00	WBA	1.000	YES	0.3	Cattle	0.66				0.0	Cattle	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Graz	0.484	1.000		ORG	1.00	1.000	0.712	0.0	0.3	Dairy	2				0.0	Graz	0.0	0.01	0.0200	0.00	0.0200	Note 49
Year	N	24	0	0.1	0.1	0	100	119	0	1	0.1	21	0.0	0.0	0.0	0.0	0.0	24	0.0	0.00	0.00	0.00	0.00	Note 47
6	Vol/NH3	Cattle	NO	0.0	0.0	NON	100.00	WWHB	1.000	YES	0.1	Cattle	0.84				0.0	Cattle	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Graz	0.484	1.000		ORG	1.00	1.000	0.689	0.0	0.1	Dairy	2				0.0	Graz	0.0	0.00	0.0200	0.00	0.0200	Note 49
Year	N	24	0	0.0	0.0	0	100	11	0	1	0.0	21	0.0	0.0	0.0	0.0	0.0	24	0.0	0.00	0.00	0.00	0.00	Note 47
7	Vol/NH3	Cattle	NO	0.0	0.0	NON	100.00	WWH	1.000	YES	0.0	Cattle	0.67				0.0	Cattle	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Graz	0.484	1.000		ORG	1.00	1.000	0.689	0.0	0.0	Dairy	2				0.0	Graz	0.0	0.00	0.0200	0.00	0.0200	Note 49
Year	N	24	0	0.0	0.0	0	100	11	0	1	0.0	21	0.0	0.0	0.0	0.0	0.0	24	0.0	0.00	0.00	0.00	0.00	Note 47
8	Vol/NH3	Cattle	NO	0.0	0.0	NON	100.00	WWH	1.000	YES	0.0	Cattle	0.67				0.0	Cattle	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Graz	0.484	1.000		ORG	1.00	1.000	0.689	0.0	0.0	Dairy	2				0.0	Graz	0.0	0.00	0.0200	0.00	0.0200	Note 49
Year	N	24	0	0.0	0.0	0	100	1	0	1	0.0	21	0.0	0.0	0.0	0.0	0.0	24	0.0	0.00	0.00	0.00	0.00	Note 47
9	Vol/NH3	Cattle	NO	0.0	0.0	NON	100.00	SBA	1.000	YES	0.0	Cattle	0.65				0.0	Cattle	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Graz	0.484	1.000		ORG	1.00	1.000	0.711	0.0	0.0	Dairy	2				0.0	Graz	0.0	0.00	0.0200	0.00	0.0200	Note 49
Year	N	24	0	0.0	0.0	0	100	10	0	1	0.0	21	0.0	0.0	0.0	0.0	0.0	24	0.0	0.00	0.00	0.00	0.00	Note 47
10	Vol/NH3	Cattle	NO	0.0	0.0	NON	100.00	WBA	1.000	YES	0.0	Cattle	0.66				0.0	Cattle	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Graz	0.484	1.000		ORG	1.00	1.000	0.712	0.0	0.0	Dairy	2				0.0	Graz	0.0	0.00	0.0200	0.00	0.0200	Note 49

Year	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year10	Total	Total/year 1	
Area with crop, ha	0.64	0.14	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.81	1.28	Note 50

Possible additional non IPCC N2O-N emissions	Value												Kind of source	Total IPCC and non IPCC N2O		Note 51
N residues emissions, ratio of N2O-N to N:	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Current crops	4.68	3.35	Note 51
Increased soil N emissions, kg N2O-N/ha:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Total anthropogenic	4.68	3.35	Note 51
Natural background emissions, kg N2O-N/ha:	1.00	0.64	0.14	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.81	Total including natural	5.49	4.17	Note 51

C2 N CHAIN CALCULATIONS SHEET C: N CHAINS BASED UPON DANISH VALUES CALCULATIONS By Jacob Bugge Available at www.ppo.bugge.com C2

N CHAIN STARTING WITH N FERTILIZER TO PRODUCE WINTER WHEAT FOR BIOETHANOL AND CATTLE BEEF Note 43
AND CONTINUING WITH LIQUID CATTLE MANURE TO PRODUCE WINTER WHEAT FOR CATTLE BEEF Note 43

Year	Fertlizer/manure # Name	Store 1/0	Amounts Store	Amounts Field	Organic 1/0	Nnorm proportion, %	Crop # Name	Cereal benefit 1/0	Straw used 1/0	Crop use & leach	Use # Name	Fodder: Uses #21-61 Fed	Fodder: Uses #21-61 Food	N crop #71/ #72	Food/ bev #8	Fuel/ other #9	Manure handling # Name	Final N amounts	N2O-N emission IPCC 1996 Each	N2O-N emission IPCC 1996 Total	N2O-N emission IPCC 2006 Each	N2O-N emission IPCC 2006 Total	Note 44
Total	N																						Note 44
Year	N NH3																						Note 44
1-10	N leach																						Note 44

RATIO OF N2O-N TO N IN FIRST CROP		TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED	39.2	38.8	Note 45
ACCORDING TO	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	24.5	24.2	Note 45
FIRST YEAR	0.0270	0.0208	TOTAL N AMOUNTS IN KG AND % LEACHED	37.3	37.0	Note 45
TOTAL	0.0438	0.0336	TOTAL N AMOUNTS IN KG AND %	101.0	100.0	Note 45

N2O-N/N in food/beverage/fuel/other 0.0838 0.0644 Note 46

Year		#	Store 1/0	Amounts Store	Amounts Field	Organic 1/0	Nnorm proportion, %	#	Cereal benefit 1/0	Straw used 1/0	Crop use & leach	#	Fed	Food	#71/ #72	#8	#9	#	Final N amounts	IPCC 1996 Each	IPCC 1996 Total	IPCC 2006 Each	IPCC 2006 Total	Note
Year	N	1	0	100.0	100.0	0	100	119	0	1	97.8	22	64.3	16.7	0.0	0.0	10.8	21	47.5	1.40	2.03	1.33	1.56	Note 47
1	Vol/NH3	N	NO	0.0	2.2	NON	100.00	WWHB	1.000	YES	22.7	Cattle	0.84				0.0	Cattle	3.8	0.06	0.0125	0.06	0.0100	Note 48
	N leach		1.022	1.000		ORG	1.00	1.000	0.343	10.8	22.7	Beef	2				10.6	Liquid	0.0	0.57	0.0010	0.17	0.0050	Note 49
Year	N	21	0	44.4	44.4	0	100	11	0	1	33.3	22	20.0	4.2	0.0	0.0	3.7	21	15.8	0.48	0.84	0.45	0.65	Note 47
2	Vol/NH3	Cattle	NO	0.0	11.1	NON	100.00	WWH	1.000	YES	9.7	Cattle	0.67				0.0	Cattle	1.3	0.12	0.0125	0.12	0.0100	Note 48
	N leach	Liquid	0.933	1.016		ORG	1.00	1.000	0.400	3.7	9.7	Beef	2				3.6	Liquid	0.0	0.24	0.0010	0.07	0.0050	Note 49
Year	N	21	0	14.8	14.8	0	100	11	0	1	11.1	22	6.7	1.4	0.0	0.0	1.2	21	5.3	0.16	0.28	0.15	0.22	Note 47
3	Vol/NH3	Cattle	NO	0.0	3.7	NON	100.00	WWH	1.000	YES	3.2	Cattle	0.67				0.0	Cattle	0.4	0.04	0.0125	0.04	0.0100	Note 48
	N leach	Liquid	0.933	1.016		ORG	1.00	1.000	0.400	1.2	3.2	Beef	2				1.2	Liquid	0.0	0.08	0.0010	0.02	0.0050	Note 49
Year	N	21	0	4.9	4.9	0	100	1	0	1	3.7	22	2.1	0.4	0.0	0.0	0.4	21	1.6	0.05	0.10	0.05	0.07	Note 47
4	Vol/NH3	Cattle	NO	0.0	1.2	NON	100.00	SBA	1.000	YES	1.2	Cattle	0.65				0.0	Cattle	0.1	0.01	0.0125	0.01	0.0100	Note 48
	N leach	Liquid	0.933	1.016		ORG	1.00	1.000	0.443	0.4	1.2	Beef	2				0.3	Liquid	0.0	0.03	0.0010	0.01	0.0050	Note 49
Year	N	21	0	1.5	1.5	0	100	10	0	1	1.2	22	0.6	0.1	0.0	0.0	0.1	21	0.5	0.02	0.03	0.01	0.02	Note 47
5	Vol/NH3	Cattle	NO	0.0	0.4	NON	100.00	WBA	1.000	YES	0.4	Cattle	0.66				0.0	Cattle	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Liquid	0.933	1.016		ORG	1.00	1.000	0.444	0.1	0.4	Beef	2				0.1	Liquid	0.0	0.01	0.0010	0.00	0.0050	Note 49
Year	N	21	0	0.5	0.5	0	100	119	0	1	0.4	22	0.2	0.1	0.0	0.0	0.0	21	0.2	0.01	0.01	0.00	0.01	Note 47
6	Vol/NH3	Cattle	NO	0.0	0.1	NON	100.00	WWHB	1.000	YES	0.1	Cattle	0.84				0.0	Cattle	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Liquid	0.933	1.016		ORG	1.00	1.000	0.400	0.0	0.1	Beef	2				0.0	Liquid	0.0	0.00	0.0010	0.00	0.0050	Note 49
Year	N	21	0	0.1	0.1	0	100	11	0	1	0.1	22	0.1	0.0	0.0	0.0	0.0	21	0.1	0.00	0.00	0.00	0.00	Note 47
7	Vol/NH3	Cattle	NO	0.0	0.0	NON	100.00	WWH	1.000	YES	0.0	Cattle	0.67				0.0	Cattle	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Liquid	0.933	1.016		ORG	1.00	1.000	0.400	0.0	0.0	Beef	2				0.0	Liquid	0.0	0.00	0.0010	0.00	0.0050	Note 49
Year	N	21	0	0.0	0.0	0	100	11	0	1	0.0	22	0.0	0.0	0.0	0.0	0.0	21	0.0	0.00	0.00	0.00	0.00	Note 47
8	Vol/NH3	Cattle	NO	0.0	0.0	NON	100.00	WWH	1.000	YES	0.0	Cattle	0.67				0.0	Cattle	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Liquid	0.933	1.016		ORG	1.00	1.000	0.400	0.0	0.0	Beef	2				0.0	Liquid	0.0	0.00	0.0010	0.00	0.0050	Note 49
Year	N	21	0	0.0	0.0	0	100	1	0	1	0.0	22	0.0	0.0	0.0	0.0	0.0	21	0.0	0.00	0.00	0.00	0.00	Note 47
9	Vol/NH3	Cattle	NO	0.0	0.0	NON	100.00	SBA	1.000	YES	0.0	Cattle	0.65				0.0	Cattle	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Liquid	0.933	1.016		ORG	1.00	1.000	0.443	0.0	0.0	Beef	2				0.0	Liquid	0.0	0.00	0.0010	0.00	0.0050	Note 49
Year	N	21	0	0.0	0.0	0	100	10	0	1	0.0	22	0.0	0.0	0.0	0.0	0.0	21	0.0	0.00	0.00	0.00	0.00	Note 47
10	Vol/NH3	Cattle	NO	0.0	0.0	NON	100.00	WBA	1.000	YES	0.0	Cattle	0.66				0.0	Cattle	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Liquid	0.933	1.016		ORG	1.00	1.000	0.444	0.0	0.0	Beef	2				0.0	Liquid	0.0	0.00	0.0010	0.00	0.0050	Note 49

Year	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year10	Total	Total/year 1	
Area with crop, ha	0.64	0.26	0.09	0.04	0.01	0.00	0.00	0.00	0.00	0.00	1.03	1.62	Note 50

Possible additional non IPCC N2O-N emissions	Value												Kind of source	Total IPCC and non IPCC N2O		Note 51
N residues emissions, ratio of N2O-N to N:	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Current crops	3.29	2.53	Note 51
Increased soil N emissions, kg N2O-N/ha:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Total anthropogenic	3.29	2.53	Note 51
Natural background emissions, kg N2O-N/ha:	1.00	0.64	0.26	0.09	0.04	0.01	0.00	0.00	0.00	0.00	0.00	1.03	Total including natural	4.32	3.56	Note 51

N CHAIN STARTING WITH	N FERTILIZER	TO PRODUCE	WINTER WHEAT FOR BIOETHANOL AND	CATTLE BEEF	Note 43
AND CONTINUING WITH	SEPARATED CATTLE MANURE	TO PRODUCE	WINTER WHEAT FOR	CATTLE BEEF	Note 43

Year	Fertilizer/manure # Name	Store 1/0	Amounts Store	Amounts Field	Organic 1/0	Nnorm proportion, %	Crop # Name	Cereal benefit 1/0	Straw used 1/0	Crop use & leach	Use # Name	Fodder: Uses #21-61 Fed	Fodder: Uses #21-61 Food	N crop #71/ #72	Food/ bev #8	Fuel/ other #9	Manure handling # Name	Final N amounts	N2O-N emission IPCC 1996 Each	N2O-N emission IPCC 1996 Total	N2O-N emission IPCC 2006 Each	N2O-N emission IPCC 2006 Total	Note 44 Note 44 Note 44
Total	N		RATIO OF N2O-N TO N IN FIRST CROP				TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED							38.9	38.5				2.75	3.96	2.01	2.53	Note 45
Year	N NH3		ACCORDING TO		IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3							22.5	22.3				0.22		0.22		Note 45
1-10	N leach		FIRST YEAR		0.0325	0.0207	TOTAL N AMOUNTS IN KG AND % LEACHED							39.6	39.2				0.99		0.30		Note 45
			TOTAL		0.0528	0.0338	TOTAL N AMOUNTS IN KG AND %							101.1	100.0								Note 45
N2O-N/N in food/beverage/fuel/other																				0.1018		0.0651	Note 46
Year	N	1	0	100.0	100.0	0	100	119	0	1	97.8	22	64.3	16.7	0.0	0.0	10.8	22	47.5	1.83	2.44	1.34	1.55	Note 47
1	Vol/NH3	N	NO	0.0	2.2	NON	100.00	WWHB	1.000	YES	22.7	Cattle	0.84				0.0	Cattle	2.4	0.05	0.0125	0.05	0.0100	Note 48
	N leach		1.022	1.000		ORG	1.00	1.000	0.343	10.8	22.7	Beef	2				10.6	Sep	0.0	0.57	0.0105	0.17	0.0050	Note 49
Year	N	22	0	45.9	45.9	0	100	11	0	1	34.4	22	19.2	4.0	0.0	0.0	3.8	22	15.2	0.63	1.04	0.46	0.67	Note 47
2	Vol/NH3	Cattle	NO	0.0	11.5	NON	100.00	WWH	1.000	YES	11.4	Cattle	0.67				0.0	Cattle	0.8	0.12	0.0125	0.12	0.0100	Note 48
	N leach	Sep	0.867	1.016		ORG	1.00	1.000	0.443	3.8	11.4	Beef	2				3.7	Sep	0.0	0.29	0.0105	0.09	0.0050	Note 49
Year	N	22	0	14.7	14.7	0	100	11	0	1	11.0	22	6.1	1.3	0.0	0.0	1.2	22	4.9	0.20	0.33	0.15	0.21	Note 47
3	Vol/NH3	Cattle	NO	0.0	3.7	NON	100.00	WWH	1.000	YES	3.7	Cattle	0.67				0.0	Cattle	0.2	0.04	0.0125	0.04	0.0100	Note 48
	N leach	Sep	0.867	1.016		ORG	1.00	1.000	0.443	1.2	3.7	Beef	2				1.2	Sep	0.0	0.09	0.0105	0.03	0.0050	Note 49
Year	N	22	0	4.7	4.7	0	100	1	0	1	3.5	22	1.8	0.4	0.0	0.0	0.4	22	1.5	0.06	0.11	0.05	0.07	Note 47
4	Vol/NH3	Cattle	NO	0.0	1.2	NON	100.00	SBA	1.000	YES	1.3	Cattle	0.65				0.0	Cattle	0.1	0.01	0.0125	0.01	0.0100	Note 48
	N leach	Sep	0.867	1.016		ORG	1.00	1.000	0.483	0.4	1.3	Beef	2				0.3	Sep	0.0	0.03	0.0105	0.01	0.0050	Note 49
Year	N	22	0	1.4	1.4	0	100	10	0	1	1.1	22	0.5	0.1	0.0	0.0	0.1	22	0.4	0.02	0.03	0.01	0.02	Note 47
5	Vol/NH3	Cattle	NO	0.0	0.4	NON	100.00	WBA	1.000	YES	0.4	Cattle	0.66				0.0	Cattle	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Sep	0.867	1.016		ORG	1.00	1.000	0.483	0.1	0.4	Beef	2				0.1	Sep	0.0	0.01	0.0105	0.00	0.0050	Note 49
Year	N	22	0	0.4	0.4	0	100	119	0	1	0.3	22	0.2	0.0	0.0	0.0	0.0	22	0.1	0.01	0.01	0.00	0.01	Note 47
6	Vol/NH3	Cattle	NO	0.0	0.1	NON	100.00	WWHB	1.000	YES	0.1	Cattle	0.84				0.0	Cattle	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Sep	0.867	1.016		ORG	1.00	1.000	0.443	0.0	0.1	Beef	2				0.0	Sep	0.0	0.00	0.0105	0.00	0.0050	Note 49
Year	N	22	0	0.1	0.1	0	100	11	0	1	0.1	22	0.1	0.0	0.0	0.0	0.0	22	0.0	0.00	0.00	0.00	0.00	Note 47
7	Vol/NH3	Cattle	NO	0.0	0.0	NON	100.00	WWH	1.000	YES	0.0	Cattle	0.67				0.0	Cattle	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Sep	0.867	1.016		ORG	1.00	1.000	0.443	0.0	0.0	Beef	2				0.0	Sep	0.0	0.00	0.0105	0.00	0.0050	Note 49
Year	N	22	0	0.0	0.0	0	100	11	0	1	0.0	22	0.0	0.0	0.0	0.0	0.0	22	0.0	0.00	0.00	0.00	0.00	Note 47
8	Vol/NH3	Cattle	NO	0.0	0.0	NON	100.00	WWH	1.000	YES	0.0	Cattle	0.67				0.0	Cattle	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Sep	0.867	1.016		ORG	1.00	1.000	0.443	0.0	0.0	Beef	2				0.0	Sep	0.0	0.00	0.0105	0.00	0.0050	Note 49
Year	N	22	0	0.0	0.0	0	100	1	0	1	0.0	22	0.0	0.0	0.0	0.0	0.0	22	0.0	0.00	0.00	0.00	0.00	Note 47
9	Vol/NH3	Cattle	NO	0.0	0.0	NON	100.00	SBA	1.000	YES	0.0	Cattle	0.65				0.0	Cattle	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Sep	0.867	1.016		ORG	1.00	1.000	0.483	0.0	0.0	Beef	2				0.0	Sep	0.0	0.00	0.0105	0.00	0.0050	Note 49
Year	N	22	0	0.0	0.0	0	100	10	0	1	0.0	22	0.0	0.0	0.0	0.0	0.0	22	0.0	0.00	0.00	0.00	0.00	Note 47
10	Vol/NH3	Cattle	NO	0.0	0.0	NON	100.00	WBA	1.000	YES	0.0	Cattle	0.66				0.0	Cattle	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Sep	0.867	1.016		ORG	1.00	1.000	0.483	0.0	0.0	Beef	2				0.0	Sep	0.0	0.00	0.0105	0.00	0.0050	Note 49

Year	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year10	Total	Total/year 1	
Area with crop, ha	0.64	0.25	0.08	0.03	0.01	0.00	0.00	0.00	0.00	0.00	1.01	1.58	Note 50

Possible additional non IPCC N2O-N emissions	Value												Kind of source	Total IPCC and non IPCC N2O		Note 51
N residues emissions, ratio of N2O-N to N:	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Current crops	3.96	2.53	Note 51
Increased soil N emissions, kg N2O-N/ha:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Total anthropogenic	3.96	2.53	Note 51
Natural background emissions, kg N2O-N/ha:	1.00	0.64	0.25	0.08	0.03	0.01	0.00	0.00	0.00	0.00	0.00	1.01	Total including natural	4.97	3.54	Note 51

C2 N CHAIN CALCULATIONS SHEET C: N CHAINS BASED UPON DANISH VALUES CALCULATIONS By Jacob Bugge Available at www.ppo.bugge.com C2

N CHAIN STARTING WITH N FERTILIZER TO PRODUCE WINTER WHEAT FOR BIOETHANOL AND CATTLE BEEF Note 43
AND CONTINUING WITH CATTLE DEEP LITTER TO PRODUCE WINTER WHEAT FOR CATTLE BEEF Note 43

Year	Fertilizer/manure # Name	Store 1/0	Amounts Store	Amounts Field	Organic 1/0	Nnorm proportion, %	Crop # Name	Cereal benefit 1/0	Straw used 1/0	Crop use & leach	Use # Name	Fodder: Uses #21-61 Fed	Fodder: Uses #21-61 Food	N crop #71/#72	Food/bev #8	Fuel/other #9	Manure handling # Name	Final N amounts	N2O-N emission IPCC 1996 Each	N2O-N emission IPCC 1996 Total	N2O-N emission IPCC 2006 Each	N2O-N emission IPCC 2006 Total	Note 44 Note 44 Note 44
Total	N																						Note 45
Year	N NH3																						Note 45
1-10	N leach																						Note 45
																							Note 45
N2O-N/N in food/beverage/fuel/other																				0.1261		0.0693	Note 46
Year 1	N	1	0	100.0	100.0	0	100	119	0	1	97.8	22	64.3	16.7	0.0	0.0	10.8	23	47.5	2.25	2.87	1.33	1.55 Note 47
	Vol/NH3	N	NO	0.0	2.2	NON	100.00	WWHB	1.000	YES	22.7	Cattle	0.84				0.0	Cattle	2.9	0.05	0.0125	0.05	0.0100 Note 48
	N leach		1.022	1.000		ORG	1.00	1.000	0.343	10.8	22.7	Beef	2				10.6	Deep	0.0	0.57	0.0200	0.17	0.0050 Note 49
Year 2	N	23	0	51.8	51.8	0	100	11	0	1	38.8	22	15.0	3.1	0.0	0.0	4.3	23	11.9	0.76	1.39	0.50	0.78 Note 47
	Vol/NH3	Cattle	NO	0.0	12.9	NON	100.00	WWH	1.000	YES	19.6	Cattle	0.67				0.0	Cattle	0.7	0.14	0.0125	0.14	0.0100 Note 48
	N leach	Deep	0.600	1.159		ORG	1.00	1.000	0.614	4.3	19.6	Beef	2				4.2	Deep	0.0	0.49	0.0200	0.15	0.0050 Note 49
Year 3	N	23	0	12.9	12.9	0	100	11	0	1	9.7	22	3.7	0.8	0.0	0.0	1.1	23	3.0	0.19	0.35	0.12	0.19 Note 47
	Vol/NH3	Cattle	NO	0.0	3.2	NON	100.00	WWH	1.000	YES	4.9	Cattle	0.67				0.0	Cattle	0.2	0.03	0.0125	0.03	0.0100 Note 48
	N leach	Deep	0.600	1.159		ORG	1.00	1.000	0.614	1.1	4.9	Beef	2				1.0	Deep	0.0	0.12	0.0200	0.04	0.0050 Note 49
Year 4	N	23	0	3.2	3.2	0	100	1	0	1	2.4	22	0.9	0.2	0.0	0.0	0.3	23	0.7	0.05	0.09	0.03	0.05 Note 47
	Vol/NH3	Cattle	NO	0.0	0.8	NON	100.00	SBA	1.000	YES	1.3	Cattle	0.65				0.0	Cattle	0.0	0.01	0.0125	0.01	0.0100 Note 48
	N leach	Deep	0.600	1.159		ORG	1.00	1.000	0.642	0.3	1.3	Beef	2				0.2	Deep	0.0	0.03	0.0200	0.01	0.0050 Note 49
Year 5	N	23	0	0.8	0.8	0	100	10	0	1	0.6	22	0.2	0.0	0.0	0.0	0.1	23	0.2	0.01	0.02	0.01	0.01 Note 47
	Vol/NH3	Cattle	NO	0.0	0.2	NON	100.00	WBA	1.000	YES	0.3	Cattle	0.66				0.0	Cattle	0.0	0.00	0.0125	0.00	0.0100 Note 48
	N leach	Deep	0.600	1.159		ORG	1.00	1.000	0.642	0.1	0.3	Beef	2				0.0	Deep	0.0	0.01	0.0200	0.00	0.0050 Note 49
Year 6	N	23	0	0.2	0.2	0	100	119	0	1	0.1	22	0.1	0.0	0.0	0.0	0.0	23	0.0	0.00	0.00	0.00	0.00 Note 47
	Vol/NH3	Cattle	NO	0.0	0.0	NON	100.00	WWHB	1.000	YES	0.1	Cattle	0.84				0.0	Cattle	0.0	0.00	0.0125	0.00	0.0100 Note 48
	N leach	Deep	0.600	1.159		ORG	1.00	1.000	0.614	0.0	0.1	Beef	2				0.0	Deep	0.0	0.00	0.0200	0.00	0.0050 Note 49
Year 7	N	23	0	0.0	0.0	0	100	11	0	1	0.0	22	0.0	0.0	0.0	0.0	0.0	23	0.0	0.00	0.00	0.00	0.00 Note 47
	Vol/NH3	Cattle	NO	0.0	0.0	NON	100.00	WWH	1.000	YES	0.0	Cattle	0.67				0.0	Cattle	0.0	0.00	0.0125	0.00	0.0100 Note 48
	N leach	Deep	0.600	1.159		ORG	1.00	1.000	0.614	0.0	0.0	Beef	2				0.0	Deep	0.0	0.00	0.0200	0.00	0.0050 Note 49
Year 8	N	23	0	0.0	0.0	0	100	11	0	1	0.0	22	0.0	0.0	0.0	0.0	0.0	23	0.0	0.00	0.00	0.00	0.00 Note 47
	Vol/NH3	Cattle	NO	0.0	0.0	NON	100.00	WWH	1.000	YES	0.0	Cattle	0.67				0.0	Cattle	0.0	0.00	0.0125	0.00	0.0100 Note 48
	N leach	Deep	0.600	1.159		ORG	1.00	1.000	0.614	0.0	0.0	Beef	2				0.0	Deep	0.0	0.00	0.0200	0.00	0.0050 Note 49
Year 9	N	23	0	0.0	0.0	0	100	1	0	1	0.0	22	0.0	0.0	0.0	0.0	0.0	23	0.0	0.00	0.00	0.00	0.00 Note 47
	Vol/NH3	Cattle	NO	0.0	0.0	NON	100.00	SBA	1.000	YES	0.0	Cattle	0.65				0.0	Cattle	0.0	0.00	0.0125	0.00	0.0100 Note 48
	N leach	Deep	0.600	1.159		ORG	1.00	1.000	0.642	0.0	0.0	Beef	2				0.0	Deep	0.0	0.00	0.0200	0.00	0.0050 Note 49
Year 10	N	23	0	0.0	0.0	0	100	10	0	1	0.0	22	0.0	0.0	0.0	0.0	0.0	23	0.0	0.00	0.00	0.00	0.00 Note 47
	Vol/NH3	Cattle	NO	0.0	0.0	NON	100.00	WBA	1.000	YES	0.0	Cattle	0.66				0.0	Cattle	0.0	0.00	0.0125	0.00	0.0100 Note 48
	N leach	Deep	0.600	1.159		ORG	1.00	1.000	0.642	0.0	0.0	Beef	2				0.0	Deep	0.0	0.00	0.0200	0.00	0.0050 Note 49

Year	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year10	Total	Total/year 1	
Area with crop, ha	0.64	0.19	0.05	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.90	1.41	Note 50

Possible additional non IPCC N2O-N emissions	Value												Kind of source	Total IPCC and non IPCC N2O		Note 51
N residues emissions, ratio of N2O-N to N:	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Current crops	4.71	2.59	Note 51
Increased soil N emissions, kg N2O-N/ha:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Total anthropogenic	4.71	2.59	Note 51
Natural background emissions, kg N2O-N/ha:	1.00	0.64	0.19	0.05	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.90	Total including natural	5.61	3.49	Note 51

C2 N CHAIN CALCULATIONS SHEET C: N CHAINS BASED UPON DANISH VALUES CALCULATIONS By Jacob Bugge Available at www.ppo.bugge.com C2

N CHAIN STARTING WITH N FERTILIZER TO PRODUCE WINTER WHEAT FOR BIOETHANOL AND CATTLE BEEF Note 43
AND CONTINUING WITH MANURE FROM GRAZING CATTLE TO PRODUCE WINTER WHEAT FOR CATTLE BEEF Note 43

Year	Fertlizer/manure # Name	Store 1/0	Amounts Store	Amounts Field	Organic 1/0	Nnorm proportion, %	Crop # Name	Cereal benefit 1/0	Straw used 1/0	Crop use & leach	Use # Name	Fodder: Uses #21-61 Fed	Fodder: Uses #21-61 Food	N crop #71/ #72	Food/ bev #8	Fuel/ other #9	Manure handling # Name	Final N amounts	N2O-N emission IPCC 1996 Each	N2O-N emission IPCC 1996 Total	N2O-N emission IPCC 2006 Each	N2O-N emission IPCC 2006 Total	Note 44 Note 44 Note 44
Total	N		RATIO OF N2O-N TO N IN FIRST CROP				TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED							37.6	37.6				3.38	4.84	2.99	3.48	Note 45
Year	N NH3		ACCORDING TO		IPCC 1996		IPCC 2006				TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3			6.5	6.5				0.07		0.07		Note 45
1-10	N leach		FIRST YEAR		0.0386		0.0300				TOTAL N AMOUNTS IN KG AND % LEACHED			55.9	55.9				1.40		0.42		Note 45
			TOTAL		0.0645		0.0463				TOTAL N AMOUNTS IN KG AND %			100.0	100.0								Note 45
N2O-N/N in food/beverage/fuel/other																				0.1289		0.0926	Note 46
Year	N	1	0	100.0	100.0	0	100	119	0	1	97.8	22	64.3	16.7	0.0	0.0	10.8	24	47.5	2.31	2.90	2.06	2.25	Note 47
1	Vol/NH3	N	NO	0.0	2.2	NON	100.00	WWHB	1.000	YES	22.7	Cattle	0.84				0.0	Cattle	0.0	0.02	0.0125	0.02	0.0100	Note 48
	N leach		1.022	1.000		ORG	1.00	1.000	0.343	10.8	22.7	Beef	2				10.6	Graz	0.0	0.57	0.0200	0.17	0.0200	Note 49
Year	N	24	0	47.5	47.5	0	100	11	0	1	44.2	22	13.7	2.9	0.0	0.0	4.9	24	10.9	0.83	1.50	0.72	0.94	Note 47
2	Vol/NH3	Cattle	NO	0.0	3.3	NON	100.00	WWH	1.000	YES	25.6	Cattle	0.67				0.0	Cattle	0.0	0.03	0.0125	0.03	0.0100	Note 48
	N leach	Graz	0.484	1.000		ORG	1.00	1.000	0.689	4.9	25.6	Beef	2				4.8	Graz	0.0	0.64	0.0200	0.19	0.0200	Note 49
Year	N	24	0	10.9	10.9	0	100	11	0	1	10.1	22	3.2	0.7	0.0	0.0	1.1	24	2.5	0.19	0.34	0.16	0.22	Note 47
3	Vol/NH3	Cattle	NO	0.0	0.8	NON	100.00	WWH	1.000	YES	5.9	Cattle	0.67				0.0	Cattle	0.0	0.01	0.0125	0.01	0.0100	Note 48
	N leach	Graz	0.484	1.000		ORG	1.00	1.000	0.689	1.1	5.9	Beef	2				1.1	Graz	0.0	0.15	0.0200	0.04	0.0200	Note 49
Year	N	24	0	2.5	2.5	0	100	1	0	1	2.3	22	0.7	0.1	0.0	0.0	0.3	24	0.5	0.04	0.08	0.04	0.05	Note 47
4	Vol/NH3	Cattle	NO	0.0	0.2	NON	100.00	SBA	1.000	YES	1.4	Cattle	0.65				0.0	Cattle	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Graz	0.484	1.000		ORG	1.00	1.000	0.711	0.3	1.4	Beef	2				0.2	Graz	0.0	0.03	0.0200	0.01	0.0200	Note 49
Year	N	24	0	0.5	0.5	0	100	10	0	1	0.5	22	0.1	0.0	0.0	0.0	0.1	24	0.1	0.01	0.02	0.01	0.01	Note 47
5	Vol/NH3	Cattle	NO	0.0	0.0	NON	100.00	WBA	1.000	YES	0.3	Cattle	0.66				0.0	Cattle	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Graz	0.484	1.000		ORG	1.00	1.000	0.712	0.1	0.3	Beef	2				0.0	Graz	0.0	0.01	0.0200	0.00	0.0200	Note 49
Year	N	24	0	0.1	0.1	0	100	119	0	1	0.1	22	0.0	0.0	0.0	0.0	0.0	24	0.0	0.00	0.00	0.00	0.00	Note 47
6	Vol/NH3	Cattle	NO	0.0	0.0	NON	100.00	WWHB	1.000	YES	0.1	Cattle	0.84				0.0	Cattle	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Graz	0.484	1.000		ORG	1.00	1.000	0.689	0.0	0.1	Beef	2				0.0	Graz	0.0	0.00	0.0200	0.00	0.0200	Note 49
Year	N	24	0	0.0	0.0	0	100	11	0	1	0.0	22	0.0	0.0	0.0	0.0	0.0	24	0.0	0.00	0.00	0.00	0.00	Note 47
7	Vol/NH3	Cattle	NO	0.0	0.0	NON	100.00	WWH	1.000	YES	0.0	Cattle	0.67				0.0	Cattle	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Graz	0.484	1.000		ORG	1.00	1.000	0.689	0.0	0.0	Beef	2				0.0	Graz	0.0	0.00	0.0200	0.00	0.0200	Note 49
Year	N	24	0	0.0	0.0	0	100	11	0	1	0.0	22	0.0	0.0	0.0	0.0	0.0	24	0.0	0.00	0.00	0.00	0.00	Note 47
8	Vol/NH3	Cattle	NO	0.0	0.0	NON	100.00	WWH	1.000	YES	0.0	Cattle	0.67				0.0	Cattle	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Graz	0.484	1.000		ORG	1.00	1.000	0.689	0.0	0.0	Beef	2				0.0	Graz	0.0	0.00	0.0200	0.00	0.0200	Note 49
Year	N	24	0	0.0	0.0	0	100	1	0	1	0.0	22	0.0	0.0	0.0	0.0	0.0	24	0.0	0.00	0.00	0.00	0.00	Note 47
9	Vol/NH3	Cattle	NO	0.0	0.0	NON	100.00	SBA	1.000	YES	0.0	Cattle	0.65				0.0	Cattle	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Graz	0.484	1.000		ORG	1.00	1.000	0.711	0.0	0.0	Beef	2				0.0	Graz	0.0	0.00	0.0200	0.00	0.0200	Note 49
Year	N	24	0	0.0	0.0	0	100	10	0	1	0.0	22	0.0	0.0	0.0	0.0	0.0	24	0.0	0.00	0.00	0.00	0.00	Note 47
10	Vol/NH3	Cattle	NO	0.0	0.0	NON	100.00	WBA	1.000	YES	0.0	Cattle	0.66				0.0	Cattle	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Graz	0.484	1.000		ORG	1.00	1.000	0.712	0.0	0.0	Beef	2				0.0	Graz	0.0	0.00	0.0200	0.00	0.0200	Note 49

Year	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year10	Total	Total/year 1	
Area with crop, ha	0.64	0.14	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.82	1.30	Note 50

Possible additional non IPCC N2O-N emissions	Value												Kind of source	Total IPCC and non IPCC N2O	Note 51
N residues emissions, ratio of N2O-N to N:	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Current crops	4.84	3.48 Note 51
Increased soil N emissions, kg N2O-N/ha:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Total anthropogenic	4.84	3.48 Note 51
Natural background emissions, kg N2O-N/ha:	1.00	0.64	0.14	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.82	Total including natural	5.67	4.30 Note 51

N CHAIN STARTING WITH	N FERTILIZER	TO PRODUCE	WINTER WHEAT FOR BIOETHANOL AND	PIG PORK	Note 43
AND CONTINUING WITH	LIQUID PIG MANURE	TO PRODUCE	WINTER WHEAT FOR	PIG PORK	Note 43

Year	Fertlizer/manure # Name	Store 1/0	Amounts Store	Amounts Field	Organic 1/0	Nnorm proportion, %	Crop # Name	Cereal benefit 1/0	Straw used 1/0	Crop use & leach	Use # Name	Fodder: Uses #21-61 Fed	Fodder: Uses #21-61 Food	N crop #71/ #72	Food/ bev #8	Fuel/ other #9	Manure handling # Name	Final N amounts	N2O-N emission IPCC 1996 Each	N2O-N emission IPCC 1996 Total	N2O-N emission IPCC 2006 Each	N2O-N emission IPCC 2006 Total	Note 44 Note 44 Note 44
Total	N																						Note 45
Year	N NH3																						Note 45
1-10	N leach																						Note 45
																							Note 45

RATIO OF N2O-N TO N IN FIRST CROP		TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED	49.7	49.7
ACCORDING TO	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	19.7	19.7
FIRST YEAR	0.0270	0.0202	TOTAL N AMOUNTS IN KG AND % LEACHED	30.6	30.6
TOTAL	0.0373	0.0281	TOTAL N AMOUNTS IN KG AND %	100.0	100.0

N2O-N/N in food/beverage/fuel/other 0.0563 0.0424 Note 46

Year																									
Year	N	1	0	100.0	100.0	0	100	119	0	1	97.8	32	64.3	26.9	0.0	0.0	10.8	31	37.4	1.39	2.03	1.27	1.52	Note 47
1	Vol/NH3	N	NO	0.0	2.2	NON	100.00	WWHB	1.000	YES	22.7	Pig	0.84				0.0	Pig	5.2	0.07	0.0125	0.07	0.0100	Note 48
	N leach		1.022	1.000		ORG	1.00	1.000	0.343	10.8	22.7	Pork	3				10.6	Liquid	0.0	0.57	0.0010	0.17	0.0050	Note 49
Year	N	31	0	32.2	32.2	0	100	11	0	1	24.1	32	15.5	6.5	0.0	0.0	2.7	31	9.0	0.34	0.58	0.31	0.45	Note 47
2	Vol/NH3	Pig	NO	0.0	8.0	NON	100.00	WWH	1.000	YES	6.0	Pig	0.67				0.0	Pig	1.3	0.09	0.0125	0.09	0.0100	Note 48
	N leach	Liquid	1.000	1.000		ORG	1.00	1.000	0.357	2.7	6.0	Pork	3				2.6	Liquid	0.0	0.15	0.0010	0.04	0.0050	Note 49
Year	N	31	0	7.8	7.8	0	100	11	0	1	5.8	32	3.7	1.6	0.0	0.0	0.6	31	2.2	0.08	0.14	0.08	0.11	Note 47
3	Vol/NH3	Pig	NO	0.0	1.9	NON	100.00	WWH	1.000	YES	1.4	Pig	0.67				0.0	Pig	0.3	0.02	0.0125	0.02	0.0100	Note 48
	N leach	Liquid	1.000	1.000		ORG	1.00	1.000	0.357	0.6	1.4	Pork	3				0.6	Liquid	0.0	0.04	0.0010	0.01	0.0050	Note 49
Year	N	31	0	1.9	1.9	0	100	1	0	1	1.4	32	0.8	0.4	0.0	0.0	0.2	31	0.5	0.02	0.03	0.02	0.03	Note 47
4	Vol/NH3	Pig	NO	0.0	0.5	NON	100.00	SBA	1.000	YES	0.4	Pig	0.65				0.0	Pig	0.1	0.01	0.0125	0.01	0.0100	Note 48
	N leach	Liquid	1.000	1.000		ORG	1.00	1.000	0.403	0.2	0.4	Pork	3				0.1	Liquid	0.0	0.01	0.0010	0.00	0.0050	Note 49
Year	N	31	0	0.4	0.4	0	100	10	0	1	0.3	32	0.2	0.1	0.0	0.0	0.0	31	0.1	0.00	0.01	0.00	0.01	Note 47
5	Vol/NH3	Pig	NO	0.0	0.1	NON	100.00	WBA	1.000	YES	0.1	Pig	0.66				0.0	Pig	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Liquid	1.000	1.000		ORG	1.00	1.000	0.404	0.0	0.1	Pork	3				0.0	Liquid	0.0	0.00	0.0010	0.00	0.0050	Note 49
Year	N	31	0	0.1	0.1	0	100	119	0	1	0.1	32	0.0	0.0	0.0	0.0	0.0	31	0.0	0.00	0.00	0.00	0.00	Note 47
6	Vol/NH3	Pig	NO	0.0	0.0	NON	100.00	WWHB	1.000	YES	0.0	Pig	0.84				0.0	Pig	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Liquid	1.000	1.000		ORG	1.00	1.000	0.357	0.0	0.0	Pork	3				0.0	Liquid	0.0	0.00	0.0010	0.00	0.0050	Note 49
Year	N	31	0	0.0	0.0	0	100	11	0	1	0.0	32	0.0	0.0	0.0	0.0	0.0	31	0.0	0.00	0.00	0.00	0.00	Note 47
7	Vol/NH3	Pig	NO	0.0	0.0	NON	100.00	WWH	1.000	YES	0.0	Pig	0.67				0.0	Pig	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Liquid	1.000	1.000		ORG	1.00	1.000	0.357	0.0	0.0	Pork	3				0.0	Liquid	0.0	0.00	0.0010	0.00	0.0050	Note 49
Year	N	31	0	0.0	0.0	0	100	11	0	1	0.0	32	0.0	0.0	0.0	0.0	0.0	31	0.0	0.00	0.00	0.00	0.00	Note 47
8	Vol/NH3	Pig	NO	0.0	0.0	NON	100.00	WWH	1.000	YES	0.0	Pig	0.67				0.0	Pig	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Liquid	1.000	1.000		ORG	1.00	1.000	0.357	0.0	0.0	Pork	3				0.0	Liquid	0.0	0.00	0.0010	0.00	0.0050	Note 49
Year	N	31	0	0.0	0.0	0	100	1	0	1	0.0	32	0.0	0.0	0.0	0.0	0.0	31	0.0	0.00	0.00	0.00	0.00	Note 47
9	Vol/NH3	Pig	NO	0.0	0.0	NON	100.00	SBA	1.000	YES	0.0	Pig	0.65				0.0	Pig	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Liquid	1.000	1.000		ORG	1.00	1.000	0.403	0.0	0.0	Pork	3				0.0	Liquid	0.0	0.00	0.0010	0.00	0.0050	Note 49
Year	N	31	0	0.0	0.0	0	100	10	0	1	0.0	32	0.0	0.0	0.0	0.0	0.0	31	0.0	0.00	0.00	0.00	0.00	Note 47
10	Vol/NH3	Pig	NO	0.0	0.0	NON	100.00	WBA	1.000	YES	0.0	Pig	0.66				0.0	Pig	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Liquid	1.000	1.000		ORG	1.00	1.000	0.404	0.0	0.0	Pork	3				0.0	Liquid	0.0	0.00	0.0010	0.00	0.0050	Note 49

Year	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year10	Total	Total/year 1	
Area with crop, ha	0.64	0.20	0.05	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.90	1.42	Note 50

Possible additional non IPCC N2O-N emissions	Value												Kind of source	Total IPCC and non IPCC N2O		Note 51
N residues emissions, ratio of N2O-N to N:	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Current crops	2.80	2.11	Note 51
Increased soil N emissions, kg N2O-N/ha:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Total anthropogenic	2.80	2.11	Note 51
Natural background emissions, kg N2O-N/ha:	1.00	0.64	0.20	0.05	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.90	Total including natural	3.70	3.01	Note 51

N CHAIN STARTING WITH N FERTILIZER TO PRODUCE WINTER WHEAT FOR BIOETHANOL AND PIG PORK Note 43
AND CONTINUING WITH SEPARATED PIG MANURE TO PRODUCE WINTER WHEAT FOR PIG PORK Note 43

Year	Fertlizer/manure # Name	Store 1/0	Amounts Store	Amounts Field	Organic 1/0	Nnorm proportion, %	Crop # Name	Cereal benefit 1/0	Straw used 1/0	Crop use & leach	Use # Name	Fodder: Uses #21-61 Fed	Fodder: Uses #21-61 Food	N crop #71/#72	Food/bev #8	Fuel/other #9	Manure handling # Name	Final N amounts	N2O-N emission IPCC 1996 Each	N2O-N emission IPCC 1996 Total	N2O-N emission IPCC 2006 Each	N2O-N emission IPCC 2006 Total	Note 44
Total	N																						Note 44
Year	N NH3																						Note 44
1-10	N leach																						Note 44
Year 1	N	1	0	100.0	100.0	0	100	119	0	1	97.8	32	64.3	26.9	0.0	0.0	10.8	32	37.4	1.68	2.33	1.26	1.52	Note 47
	Vol/NH3	N	NO	0.0	2.2	NON	100.00	WWHB	1.000	YES	22.7	Pig	0.84				0.0	Pig	6.7	0.09	0.0125	0.09	0.0100	Note 48
	N leach		1.022	1.000		ORG	1.00	1.000	0.343	10.8	22.7	Pork	3				10.6	Sep	0.0	0.57	0.0105	0.17	0.0050	Note 49
Year 2	N	32	0	31.4	31.4	0	100	11	0	1	23.6	32	13.1	5.5	0.0	0.0	2.6	32	7.6	0.39	0.68	0.30	0.45	Note 47
	Vol/NH3	Pig	NO	0.0	7.9	NON	100.00	WWH	1.000	YES	7.8	Pig	0.67				0.0	Pig	1.4	0.09	0.0125	0.09	0.0100	Note 48
	N leach	Sep	0.867	1.024		ORG	1.00	1.000	0.443	2.6	7.8	Pork	3				2.5	Sep	0.0	0.20	0.0105	0.06	0.0050	Note 49
Year 3	N	32	0	6.4	6.4	0	100	11	0	1	4.8	32	2.7	1.1	0.0	0.0	0.5	32	1.6	0.08	0.14	0.06	0.09	Note 47
	Vol/NH3	Pig	NO	0.0	1.6	NON	100.00	WWH	1.000	YES	1.6	Pig	0.67				0.0	Pig	0.3	0.02	0.0125	0.02	0.0100	Note 48
	N leach	Sep	0.867	1.024		ORG	1.00	1.000	0.443	0.5	1.6	Pork	3				0.5	Sep	0.0	0.04	0.0105	0.01	0.0050	Note 49
Year 4	N	32	0	1.3	1.3	0	100	1	0	1	1.0	32	0.5	0.2	0.0	0.0	0.1	32	0.3	0.02	0.03	0.01	0.02	Note 47
	Vol/NH3	Pig	NO	0.0	0.3	NON	100.00	SBA	1.000	YES	0.4	Pig	0.65				0.0	Pig	0.1	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Sep	0.867	1.024		ORG	1.00	1.000	0.483	0.1	0.4	Pork	3				0.1	Sep	0.0	0.01	0.0105	0.00	0.0050	Note 49
Year 5	N	32	0	0.2	0.2	0	100	10	0	1	0.2	32	0.1	0.0	0.0	0.0	0.0	32	0.1	0.00	0.01	0.00	0.00	Note 47
	Vol/NH3	Pig	NO	0.0	0.1	NON	100.00	WBA	1.000	YES	0.1	Pig	0.66				0.0	Pig	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Sep	0.867	1.024		ORG	1.00	1.000	0.483	0.0	0.1	Pork	3				0.0	Sep	0.0	0.00	0.0105	0.00	0.0050	Note 49
Year 6	N	32	0	0.0	0.0	0	100	119	0	1	0.0	32	0.0	0.0	0.0	0.0	0.0	32	0.0	0.00	0.00	0.00	0.00	Note 47
	Vol/NH3	Pig	NO	0.0	0.0	NON	100.00	WWHB	1.000	YES	0.0	Pig	0.84				0.0	Pig	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Sep	0.867	1.024		ORG	1.00	1.000	0.443	0.0	0.0	Pork	3				0.0	Sep	0.0	0.00	0.0105	0.00	0.0050	Note 49
Year 7	N	32	0	0.0	0.0	0	100	11	0	1	0.0	32	0.0	0.0	0.0	0.0	0.0	32	0.0	0.00	0.00	0.00	0.00	Note 47
	Vol/NH3	Pig	NO	0.0	0.0	NON	100.00	WWH	1.000	YES	0.0	Pig	0.67				0.0	Pig	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Sep	0.867	1.024		ORG	1.00	1.000	0.443	0.0	0.0	Pork	3				0.0	Sep	0.0	0.00	0.0105	0.00	0.0050	Note 49
Year 8	N	32	0	0.0	0.0	0	100	11	0	1	0.0	32	0.0	0.0	0.0	0.0	0.0	32	0.0	0.00	0.00	0.00	0.00	Note 47
	Vol/NH3	Pig	NO	0.0	0.0	NON	100.00	WWH	1.000	YES	0.0	Pig	0.67				0.0	Pig	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Sep	0.867	1.024		ORG	1.00	1.000	0.443	0.0	0.0	Pork	3				0.0	Sep	0.0	0.00	0.0105	0.00	0.0050	Note 49
Year 9	N	32	0	0.0	0.0	0	100	1	0	1	0.0	32	0.0	0.0	0.0	0.0	0.0	32	0.0	0.00	0.00	0.00	0.00	Note 47
	Vol/NH3	Pig	NO	0.0	0.0	NON	100.00	SBA	1.000	YES	0.0	Pig	0.65				0.0	Pig	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Sep	0.867	1.024		ORG	1.00	1.000	0.483	0.0	0.0	Pork	3				0.0	Sep	0.0	0.00	0.0105	0.00	0.0050	Note 49
Year 10	N	32	0	0.0	0.0	0	100	10	0	1	0.0	32	0.0	0.0	0.0	0.0	0.0	32	0.0	0.00	0.00	0.00	0.00	Note 47
	Vol/NH3	Pig	NO	0.0	0.0	NON	100.00	WBA	1.000	YES	0.0	Pig	0.66				0.0	Pig	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Sep	0.867	1.024		ORG	1.00	1.000	0.483	0.0	0.0	Pork	3				0.0	Sep	0.0	0.00	0.0105	0.00	0.0050	Note 49

	RATIO OF N2O-N TO N IN FIRST CROP		TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED	47.8	47.4	2.17	3.19	1.64	2.09	Note 45
	ACCORDING TO	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	20.5	20.3	0.21		0.21		Note 45
	FIRST YEAR	0.0311	0.0203	TOTAL N AMOUNTS IN KG AND % LEACHED	32.6	32.3	0.81		0.24		Note 45
	TOTAL	0.0425	0.0278	TOTAL N AMOUNTS IN KG AND %	100.9	100.0					Note 45

N2O-N/N in food/beverage/fuel/other 0.0667 0.0437 Note 46

Year																								
Year 1	Vol/NH3	N leach	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep
Year 2	Vol/NH3	N leach	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep
Year 3	Vol/NH3	N leach	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep
Year 4	Vol/NH3	N leach	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep
Year 5	Vol/NH3	N leach	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep
Year 6	Vol/NH3	N leach	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep
Year 7	Vol/NH3	N leach	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep
Year 8	Vol/NH3	N leach	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep
Year 9	Vol/NH3	N leach	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep
Year 10	Vol/NH3	N leach	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep	Pig	Sep

Year	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year10	Total	Total/year 1	
Area with crop, ha	0.64	0.17	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.85	1.34	Note 50

Possible additional non IPCC N2O-N emissions	Value												Kind of source	Total IPCC and non IPCC N2O		Note 51
N residues emissions, ratio of N2O-N to N:	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Current crops	3.19	2.09	Note 51
Increased soil N emissions, kg N2O-N/ha:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Total anthropogenic	3.19	2.09	Note 51
Natural background emissions, kg N2O-N/ha:	1.00	0.64	0.17	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.85	Total including natural	4.04	2.94	Note 51

N CHAIN STARTING WITH	N FERTILIZER	TO PRODUCE	WINTER WHEAT FOR BIOETHANOL AND	PIG PORK	Note 43
AND CONTINUING WITH	PIG DEEP LITTER	TO PRODUCE	WINTER WHEAT FOR	PIG PORK	Note 43

Year		Fertilizer/manure # Name	Store 1/0	Amounts Store	Amounts Field	Organic 1/0	Nnorm proportion, %	Crop # Name	Cereal benefit 1/0	Straw used 1/0	Crop use & leach	Use # Name	Fodder: Uses #21-61 Fed	Fodder: Uses #21-61 Food	N crop #71/ #72	Food/ bev #8	Fuel/ other #9	Manure handling # Name	Final N amounts	N2O-N emission IPCC 1996 Each	N2O-N emission IPCC 1996 Total	N2O-N emission IPCC 2006 Each	N2O-N emission IPCC 2006 Total	Note 44 Note 44 Note 44
Total	N																							Note 45
Year	N NH3																							Note 45
1-10	N leach																							Note 45
																								Note 45

RATIO OF N2O-N TO N IN FIRST CROP		TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED	47.9	45.8
ACCORDING TO IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	23.9	22.9
FIRST YEAR 0.0346	0.0205	TOTAL N AMOUNTS IN KG AND % LEACHED	32.7	31.3
TOTAL 0.0470	0.0281	TOTAL N AMOUNTS IN KG AND %	104.5	100.0

N2O-N/N in food/beverage/fuel/other																						0.0737		0.0440	Note 46
Year	N	1	0	100.0	100.0	0	100	119	0	1	97.8	32	64.3	26.9	0.0	0.0	10.8	33	37.4	1.92	2.60	1.25	1.54	Note 47
1	Vol/NH3	N	NO	0.0	2.2	NON	100.00	WWHB	1.000	YES	22.7	Pig	0.84				0.0	Pig	9.4	0.12	0.0125	0.12	0.0100	Note 48
	N leach		1.022	1.000		ORG	1.00	1.000	0.343	10.8	22.7	Pork	3				10.6	Deep	0.0	0.57	0.0200	0.17	0.0050	Note 49
Year	N	33	0	31.6	31.6	0	100	11	0	1	23.7	32	13.2	5.5	0.0	0.0	2.6	33	7.7	0.44	0.74	0.30	0.46	Note 47
2	Vol/NH3	Pig	NO	0.0	7.9	NON	100.00	WWH	1.000	YES	7.9	Pig	0.67				0.0	Pig	1.9	0.10	0.0125	0.10	0.0100	Note 48
	N leach	Deep	0.867	1.127		ORG	1.00	1.000	0.443	2.6	7.9	Pork	3				2.6	Deep	0.0	0.20	0.0200	0.06	0.0050	Note 49
Year	N	33	0	6.5	6.5	0	100	11	0	1	4.9	32	2.7	1.1	0.0	0.0	0.5	33	1.6	0.09	0.15	0.06	0.09	Note 47
3	Vol/NH3	Pig	NO	0.0	1.6	NON	100.00	WWH	1.000	YES	1.6	Pig	0.67				0.0	Pig	0.4	0.02	0.0125	0.02	0.0100	Note 48
	N leach	Deep	0.867	1.127		ORG	1.00	1.000	0.443	0.5	1.6	Pork	3				0.5	Deep	0.0	0.04	0.0200	0.01	0.0050	Note 49
Year	N	33	0	1.3	1.3	0	100	1	0	1	1.0	32	0.5	0.2	0.0	0.0	0.1	33	0.3	0.02	0.03	0.01	0.02	Note 47
4	Vol/NH3	Pig	NO	0.0	0.3	NON	100.00	SBA	1.000	YES	0.4	Pig	0.65				0.0	Pig	0.1	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Deep	0.867	1.127		ORG	1.00	1.000	0.483	0.1	0.4	Pork	3				0.1	Deep	0.0	0.01	0.0200	0.00	0.0050	Note 49
Year	N	33	0	0.3	0.3	0	100	10	0	1	0.2	32	0.1	0.0	0.0	0.0	0.0	33	0.1	0.00	0.01	0.00	0.00	Note 47
5	Vol/NH3	Pig	NO	0.0	0.1	NON	100.00	WBA	1.000	YES	0.1	Pig	0.66				0.0	Pig	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Deep	0.867	1.127		ORG	1.00	1.000	0.483	0.0	0.1	Pork	3				0.0	Deep	0.0	0.00	0.0200	0.00	0.0050	Note 49
Year	N	33	0	0.0	0.0	0	100	119	0	1	0.0	32	0.0	0.0	0.0	0.0	0.0	33	0.0	0.00	0.00	0.00	0.00	Note 47
6	Vol/NH3	Pig	NO	0.0	0.0	NON	100.00	WWHB	1.000	YES	0.0	Pig	0.84				0.0	Pig	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Deep	0.867	1.127		ORG	1.00	1.000	0.443	0.0	0.0	Pork	3				0.0	Deep	0.0	0.00	0.0200	0.00	0.0050	Note 49
Year	N	33	0	0.0	0.0	0	100	11	0	1	0.0	32	0.0	0.0	0.0	0.0	0.0	33	0.0	0.00	0.00	0.00	0.00	Note 47
7	Vol/NH3	Pig	NO	0.0	0.0	NON	100.00	WWH	1.000	YES	0.0	Pig	0.67				0.0	Pig	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Deep	0.867	1.127		ORG	1.00	1.000	0.443	0.0	0.0	Pork	3				0.0	Deep	0.0	0.00	0.0200	0.00	0.0050	Note 49
Year	N	33	0	0.0	0.0	0	100	11	0	1	0.0	32	0.0	0.0	0.0	0.0	0.0	33	0.0	0.00	0.00	0.00	0.00	Note 47
8	Vol/NH3	Pig	NO	0.0	0.0	NON	100.00	WWH	1.000	YES	0.0	Pig	0.67				0.0	Pig	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Deep	0.867	1.127		ORG	1.00	1.000	0.443	0.0	0.0	Pork	3				0.0	Deep	0.0	0.00	0.0200	0.00	0.0050	Note 49
Year	N	33	0	0.0	0.0	0	100	1	0	1	0.0	32	0.0	0.0	0.0	0.0	0.0	33	0.0	0.00	0.00	0.00	0.00	Note 47
9	Vol/NH3	Pig	NO	0.0	0.0	NON	100.00	SBA	1.000	YES	0.0	Pig	0.65				0.0	Pig	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Deep	0.867	1.127		ORG	1.00	1.000	0.483	0.0	0.0	Pork	3				0.0	Deep	0.0	0.00	0.0200	0.00	0.0050	Note 49
Year	N	33	0	0.0	0.0	0	100	10	0	1	0.0	32	0.0	0.0	0.0	0.0	0.0	33	0.0	0.00	0.00	0.00	0.00	Note 47
10	Vol/NH3	Pig	NO	0.0	0.0	NON	100.00	WBA	1.000	YES	0.0	Pig	0.66				0.0	Pig	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Deep	0.867	1.127		ORG	1.00	1.000	0.483	0.0	0.0	Pork	3				0.0	Deep	0.0	0.00	0.0200	0.00	0.0050	Note 49

Year	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year10	Total	Total/year 1	
Area with crop, ha	0.64	0.17	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.85	1.34	Note 50

Possible additional non IPCC N2O-N emissions	Value												Kind of source	Total IPCC and non IPCC N2O		Note 51
N residues emissions, ratio of N2O-N to N:	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Current crops	3.53	2.11	Note 51
Increased soil N emissions, kg N2O-N/ha:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Total anthropogenic	3.53	2.11	Note 51
Natural background emissions, kg N2O-N/ha:	1.00	0.64	0.17	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.85	Total including natural	4.38	2.96	Note 51

N CHAIN STARTING WITH	N FERTILIZER	TO PRODUCE	WINTER WHEAT FOR BIOETHANOL AND	PIG PORK	Note 43
AND CONTINUING WITH	MANURE FROM ROOTING PIGS	TO PRODUCE	WINTER WHEAT FOR	PIG PORK	Note 43

Year		Fertlizer/manure # Name	Store 1/0	Amounts Store	Amounts Field	Or-ganic 1/0	Nnorm propor tion, %	Crop # Name	Cereal benefit 1/0	Straw used 1/0	Crop use & leach	Use # Name	Fodder: Uses #21-61 Fed	Fodder: Uses #21-61 Food	N crop #71/ #72	Food/ bev #8	Fuel/ other #9	Manure handling # Name	Final N a-mounts	N2O-N emission IPCC 1996 Each	N2O-N emission IPCC 1996 Total	N2O-N emission IPCC 2006 Each	N2O-N emission IPCC 2006 Total	Note 44 Note 44 Note 44
Total	N																							Note 45
Year	N NH3																							Note 45
1-10	N leach																							Note 45
																								Note 45

RATIO OF N2O-N TO N IN FIRST CROP	TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED	51.3	51.3		
ACCORDING TO IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	5.7	5.7	
FIRST YEAR 0.0359	0.0273	TOTAL N AMOUNTS IN KG AND % LEACHED	43.0	43.0	
TOTAL 0.0547	0.0399	TOTAL N AMOUNTS IN KG AND %	100.0	100.0	

N2O-N/N in food/beverage/fuel/other 0.0800 0.0584 Note 46

Year																									
Year	N	1	0	100.0	100.0	0	100	119	0	1	97.8	32	64.3	26.9	0.0	0.0	10.8	34	37.4	2.10	2.69	1.86	2.05	Note 47
1	Vol/NH3	N	NO	0.0	2.2	NON	100.00	WWHB	1.000	YES	22.7	Pig	0.84				0.0	Pig	0.0	0.02	0.0125	0.02	0.0100	Note 48
	N leach		1.022	1.000		ORG	1.00	1.000	0.343	10.8	22.7	Pork	3				10.6	Root	0.0	0.57	0.0200	0.17	0.0200	Note 49
Year	N	34	0	37.4	37.4	0	100	11	0	1	34.8	32	15.6	6.5	0.0	0.0	3.8	34	9.1	0.66	1.07	0.58	0.72	Note 47
2	Vol/NH3	Pig	NO	0.0	2.6	NON	100.00	WWH	1.000	YES	15.3	Pig	0.67				0.0	Pig	0.0	0.03	0.0125	0.03	0.0100	Note 48
	N leach	Root	0.699	1.000		ORG	1.00	1.000	0.551	3.8	15.3	Pork	3				3.8	Root	0.0	0.38	0.0200	0.11	0.0200	Note 49
Year	N	34	0	9.1	9.1	0	100	11	0	1	8.5	32	3.8	1.6	0.0	0.0	0.9	34	2.2	0.16	0.26	0.14	0.17	Note 47
3	Vol/NH3	Pig	NO	0.0	0.6	NON	100.00	WWH	1.000	YES	3.7	Pig	0.67				0.0	Pig	0.0	0.01	0.0125	0.01	0.0100	Note 48
	N leach	Root	0.699	1.000		ORG	1.00	1.000	0.551	0.9	3.7	Pork	3				0.9	Root	0.0	0.09	0.0200	0.03	0.0200	Note 49
Year	N	34	0	2.2	2.2	0	100	1	0	1	2.1	32	0.9	0.4	0.0	0.0	0.2	34	0.5	0.04	0.06	0.03	0.04	Note 47
4	Vol/NH3	Pig	NO	0.0	0.2	NON	100.00	SBA	1.000	YES	1.0	Pig	0.65				0.0	Pig	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Root	0.699	1.000		ORG	1.00	1.000	0.583	0.2	1.0	Pork	3				0.2	Root	0.0	0.02	0.0200	0.01	0.0200	Note 49
Year	N	34	0	0.5	0.5	0	100	10	0	1	0.5	32	0.2	0.1	0.0	0.0	0.1	34	0.1	0.01	0.01	0.01	0.01	Note 47
5	Vol/NH3	Pig	NO	0.0	0.0	NON	100.00	WBA	1.000	YES	0.2	Pig	0.66				0.0	Pig	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Root	0.699	1.000		ORG	1.00	1.000	0.583	0.1	0.2	Pork	3				0.0	Root	0.0	0.01	0.0200	0.00	0.0200	Note 49
Year	N	34	0	0.1	0.1	0	100	119	0	1	0.1	32	0.0	0.0	0.0	0.0	0.0	34	0.0	0.00	0.00	0.00	0.00	Note 47
6	Vol/NH3	Pig	NO	0.0	0.0	NON	100.00	WWHB	1.000	YES	0.0	Pig	0.84				0.0	Pig	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Root	0.699	1.000		ORG	1.00	1.000	0.551	0.0	0.0	Pork	3				0.0	Root	0.0	0.00	0.0200	0.00	0.0200	Note 49
Year	N	34	0	0.0	0.0	0	100	11	0	1	0.0	32	0.0	0.0	0.0	0.0	0.0	34	0.0	0.00	0.00	0.00	0.00	Note 47
7	Vol/NH3	Pig	NO	0.0	0.0	NON	100.00	WWH	1.000	YES	0.0	Pig	0.67				0.0	Pig	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Root	0.699	1.000		ORG	1.00	1.000	0.551	0.0	0.0	Pork	3				0.0	Root	0.0	0.00	0.0200	0.00	0.0200	Note 49
Year	N	34	0	0.0	0.0	0	100	11	0	1	0.0	32	0.0	0.0	0.0	0.0	0.0	34	0.0	0.00	0.00	0.00	0.00	Note 47
8	Vol/NH3	Pig	NO	0.0	0.0	NON	100.00	WWH	1.000	YES	0.0	Pig	0.67				0.0	Pig	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Root	0.699	1.000		ORG	1.00	1.000	0.551	0.0	0.0	Pork	3				0.0	Root	0.0	0.00	0.0200	0.00	0.0200	Note 49
Year	N	34	0	0.0	0.0	0	100	1	0	1	0.0	32	0.0	0.0	0.0	0.0	0.0	34	0.0	0.00	0.00	0.00	0.00	Note 47
9	Vol/NH3	Pig	NO	0.0	0.0	NON	100.00	SBA	1.000	YES	0.0	Pig	0.65				0.0	Pig	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Root	0.699	1.000		ORG	1.00	1.000	0.583	0.0	0.0	Pork	3				0.0	Root	0.0	0.00	0.0200	0.00	0.0200	Note 49
Year	N	34	0	0.0	0.0	0	100	10	0	1	0.0	32	0.0	0.0	0.0	0.0	0.0	34	0.0	0.00	0.00	0.00	0.00	Note 47
10	Vol/NH3	Pig	NO	0.0	0.0	NON	100.00	WBA	1.000	YES	0.0	Pig	0.66				0.0	Pig	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Root	0.699	1.000		ORG	1.00	1.000	0.583	0.0	0.0	Pork	3				0.0	Root	0.0	0.00	0.0200	0.00	0.0200	Note 49

Year	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year10	Total	Total/year 1	
Area with crop, ha	0.64	0.16	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.85	1.34	Note 50

Possible additional non IPCC N2O-N emissions	Value												Kind of source	Total IPCC and non IPCC N2O		Note 51
N residues emissions, ratio of N2O-N to N:	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Current crops	4.11	3.00	Note 51
Increased soil N emissions, kg N2O-N/ha:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Total anthropogenic	4.11	3.00	Note 51
Natural background emissions, kg N2O-N/ha:	1.00	0.64	0.16	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.85	Total including natural	4.96	3.85	Note 51

N CHAIN STARTING WITH N FERTILIZER TO PRODUCE WINTER WHEAT FOR BIOETHANOL AND POULTRY MEAT Note 43
AND CONTINUING WITH LIQUID POULTRY MANURE TO PRODUCE WINTER WHEAT FOR POULTRY MEAT Note 43

Year	Fertlizer/manure # Name	Store 1/0	Amounts Store	Amounts Field	Organic 1/0	Nnorm proportion, %	Crop # Name	Cereal benefit 1/0	Straw used 1/0	Crop use & leach	Use # Name	Fodder: Uses #21-61 Fed	Fodder: Uses #21-61 Food	N crop #71/ #72	Food/ bev #8	Fuel/ other #9	Manure handling # Name	Final N amounts	N2O-N emission IPCC 1996 Each	N2O-N emission IPCC 1996 Total	N2O-N emission IPCC 2006 Each	N2O-N emission IPCC 2006 Total	Note 44 Note 44 Note 44
Total	N		RATIO OF N2O-N TO N IN FIRST CROP				TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED							53.8	53.8				1.75	2.68	1.58	1.96	Note 45
Year	N NH3		ACCORDING TO		IPCC 1996		IPCC 2006				TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3			14.7	14.7				0.15		0.15		Note 45
1-10	N leach		FIRST YEAR		0.0267		0.0197				TOTAL N AMOUNTS IN KG AND % LEACHED			31.4	31.4				0.79		0.24		Note 45
			TOTAL		0.0357		0.0261				TOTAL N AMOUNTS IN KG AND %			100.0	100.0								Note 45

N2O-N/N in food/beverage/fuel/other 0.0498 0.0364 Note 46

Year																									
Year	N	1	0	100.0	100.0	0	100	119	0	1	97.8	42	64.3	32.8	0.0	0.0	10.8	41	31.5	1.38	2.00	1.25	1.48	Note 47
1	Vol/NH3	N	NO	0.0	2.2	NON	100.00	WWHB	1.000	YES	22.7	Poultry	0.84				0.0	Poultry	3.1	0.05	0.0125	0.05	0.0100	Note 48
	N leach		1.022	1.000		ORG	1.00	1.000	0.343	10.8	22.7	Meat	4				10.6	Liquid	0.0	0.57	0.0010	0.17	0.0050	Note 49
Year	N	41	0	28.3	28.3	0	100	11	0	1	21.3	42	11.8	6.0	0.0	0.0	2.3	41	5.8	0.30	0.55	0.27	0.40	Note 47
2	Vol/NH3	Poultry	NO	0.0	7.1	NON	100.00	WWH	1.000	YES	7.1	Poultry	0.67				0.0	Poultry	0.6	0.08	0.0125	0.08	0.0100	Note 48
	N leach	Liquid	0.867	1.000		ORG	1.00	1.000	0.443	2.3	7.1	Meat	4				2.3	Liquid	0.0	0.18	0.0010	0.05	0.0050	Note 49
Year	N	41	0	5.2	5.2	0	100	11	0	1	3.9	42	2.2	1.1	0.0	0.0	0.4	41	1.1	0.06	0.10	0.05	0.07	Note 47
3	Vol/NH3	Poultry	NO	0.0	1.3	NON	100.00	WWH	1.000	YES	1.3	Poultry	0.67				0.0	Poultry	0.1	0.01	0.0125	0.01	0.0100	Note 48
	N leach	Liquid	0.867	1.000		ORG	1.00	1.000	0.443	0.4	1.3	Meat	4				0.4	Liquid	0.0	0.03	0.0010	0.01	0.0050	Note 49
Year	N	41	0	1.0	1.0	0	100	1	0	1	0.7	42	0.4	0.2	0.0	0.0	0.1	41	0.2	0.01	0.02	0.01	0.01	Note 47
4	Vol/NH3	Poultry	NO	0.0	0.2	NON	100.00	SBA	1.000	YES	0.3	Poultry	0.65				0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Liquid	0.867	1.000		ORG	1.00	1.000	0.483	0.1	0.3	Meat	4				0.1	Liquid	0.0	0.01	0.0010	0.00	0.0050	Note 49
Year	N	41	0	0.2	0.2	0	100	10	0	1	0.1	42	0.1	0.0	0.0	0.0	0.0	41	0.0	0.00	0.00	0.00	0.00	Note 47
5	Vol/NH3	Poultry	NO	0.0	0.0	NON	100.00	WBA	1.000	YES	0.0	Poultry	0.66				0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Liquid	0.867	1.000		ORG	1.00	1.000	0.483	0.0	0.0	Meat	4				0.0	Liquid	0.0	0.00	0.0010	0.00	0.0050	Note 49
Year	N	41	0	0.0	0.0	0	100	119	0	1	0.0	42	0.0	0.0	0.0	0.0	0.0	41	0.0	0.00	0.00	0.00	0.00	Note 47
6	Vol/NH3	Poultry	NO	0.0	0.0	NON	100.00	WWHB	1.000	YES	0.0	Poultry	0.84				0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Liquid	0.867	1.000		ORG	1.00	1.000	0.443	0.0	0.0	Meat	4				0.0	Liquid	0.0	0.00	0.0010	0.00	0.0050	Note 49
Year	N	41	0	0.0	0.0	0	100	11	0	1	0.0	42	0.0	0.0	0.0	0.0	0.0	41	0.0	0.00	0.00	0.00	0.00	Note 47
7	Vol/NH3	Poultry	NO	0.0	0.0	NON	100.00	WWH	1.000	YES	0.0	Poultry	0.67				0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Liquid	0.867	1.000		ORG	1.00	1.000	0.443	0.0	0.0	Meat	4				0.0	Liquid	0.0	0.00	0.0010	0.00	0.0050	Note 49
Year	N	41	0	0.0	0.0	0	100	11	0	1	0.0	42	0.0	0.0	0.0	0.0	0.0	41	0.0	0.00	0.00	0.00	0.00	Note 47
8	Vol/NH3	Poultry	NO	0.0	0.0	NON	100.00	WWH	1.000	YES	0.0	Poultry	0.67				0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Liquid	0.867	1.000		ORG	1.00	1.000	0.443	0.0	0.0	Meat	4				0.0	Liquid	0.0	0.00	0.0010	0.00	0.0050	Note 49
Year	N	41	0	0.0	0.0	0	100	1	0	1	0.0	42	0.0	0.0	0.0	0.0	0.0	41	0.0	0.00	0.00	0.00	0.00	Note 47
9	Vol/NH3	Poultry	NO	0.0	0.0	NON	100.00	SBA	1.000	YES	0.0	Poultry	0.65				0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Liquid	0.867	1.000		ORG	1.00	1.000	0.483	0.0	0.0	Meat	4				0.0	Liquid	0.0	0.00	0.0010	0.00	0.0050	Note 49
Year	N	41	0	0.0	0.0	0	100	10	0	1	0.0	42	0.0	0.0	0.0	0.0	0.0	41	0.0	0.00	0.00	0.00	0.00	Note 47
10	Vol/NH3	Poultry	NO	0.0	0.0	NON	100.00	WBA	1.000	YES	0.0	Poultry	0.66				0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Liquid	0.867	1.000		ORG	1.00	1.000	0.483	0.0	0.0	Meat	4				0.0	Liquid	0.0	0.00	0.0010	0.00	0.0050	Note 49

Year	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year10	Total	Total/year 1	
Area with crop, ha	0.64	0.15	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.83	1.30	Note 50

Possible additional non IPCC N2O-N emissions	Value												Kind of source	Total IPCC and non IPCC N2O		Note 51
N residues emissions, ratio of N2O-N to N:	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Current crops	2.68	1.96	Note 51
Increased soil N emissions, kg N2O-N/ha:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Total anthropogenic	2.68	1.96	Note 51
Natural background emissions, kg N2O-N/ha:	1.00	0.64	0.15	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.83	Total including natural	3.51	2.79	Note 51

N CHAIN STARTING WITH N FERTILIZER TO PRODUCE WINTER WHEAT FOR BIOETHANOL AND POULTRY MEAT Note 43
AND CONTINUING WITH SEPARATED POULTRY MANURE TO PRODUCE WINTER WHEAT FOR POULTRY MEAT Note 43

Year	Fertlizer/manure # Name	Store 1/0	Amounts Store	Amounts Field	Or-ganic 1/0	Nnorm propor tion, %	Crop # Name	Cereal benefit 1/0	Straw used 1/0	Crop use & leach	Use # Name	Fodder: Uses #21-61 Fed	Fodder: Uses #21-61 Food	N crop #71/ #72	Food/ bev #8	Fuel/ other #9	Manure handling # Name	Final N a-mounts	N2O-N emission IPCC 1996 Each	N2O-N emission IPCC 1996 Total	N2O-N emission IPCC 2006 Each	N2O-N emission IPCC 2006 Total	Note 44 Note 44 Note 44
Total	N		RATIO OF N2O-N TO N IN FIRST CROP				TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED							51.8	51.8				1.94	2.86	1.49	1.89	Note 45
Year	N NH3		ACCORDING TO		IPCC 1996		IPCC 2006				TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3			18.5	18.5				0.18		0.18		Note 45
1-10	N leach		FIRST YEAR		0.0303		0.0200				TOTAL N AMOUNTS IN KG AND % LEACHED			29.7	29.7				0.74		0.22		Note 45
			TOTAL		0.0382		0.0252				TOTAL N AMOUNTS IN KG AND %			100.0	100.0								Note 45
N2O-N/N in food/beverage/fuel/other																				0.0553		0.0366	Note 46
Year	N	1	0	100.0	100.0	0	100	119	0	1	97.8	42	64.3	32.8	0.0	0.0	10.8	42	31.5	1.60	2.27	1.23	1.50	Note 47
1	Vol/NH3	N	NO	0.0	2.2	NON	100.00	WWHB	1.000	YES	22.7	Poultry	0.84				0.0	Poultry	7.9	0.10	0.0125	0.10	0.0100	Note 48
	N leach		1.022	1.000		ORG	1.00	1.000	0.343	10.8	22.7	Meat	4				10.6	Sep	0.0	0.57	0.0105	0.17	0.0050	Note 49
Year	N	42	0	23.6	23.6	0	100	11	0	1	17.7	42	9.9	5.0	0.0	0.0	2.0	42	4.8	0.28	0.50	0.22	0.33	Note 47
2	Vol/NH3	Poultry	NO	0.0	5.9	NON	100.00	WWH	1.000	YES	5.9	Poultry	0.67				0.0	Poultry	1.2	0.07	0.0125	0.07	0.0100	Note 48
	N leach	Sep	0.867	1.000		ORG	1.00	1.000	0.443	2.0	5.9	Meat	4				1.9	Sep	0.0	0.15	0.0105	0.04	0.0050	Note 49
Year	N	42	0	3.6	3.6	0	100	11	0	1	2.7	42	1.5	0.8	0.0	0.0	0.3	42	0.7	0.04	0.08	0.03	0.05	Note 47
3	Vol/NH3	Poultry	NO	0.0	0.9	NON	100.00	WWH	1.000	YES	0.9	Poultry	0.67				0.0	Poultry	0.2	0.01	0.0125	0.01	0.0100	Note 48
	N leach	Sep	0.867	1.000		ORG	1.00	1.000	0.443	0.3	0.9	Meat	4				0.3	Sep	0.0	0.02	0.0105	0.01	0.0050	Note 49
Year	N	42	0	0.6	0.6	0	100	1	0	1	0.4	42	0.2	0.1	0.0	0.0	0.0	42	0.1	0.01	0.01	0.01	0.01	Note 47
4	Vol/NH3	Poultry	NO	0.0	0.1	NON	100.00	SBA	1.000	YES	0.2	Poultry	0.65				0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Sep	0.867	1.000		ORG	1.00	1.000	0.483	0.0	0.2	Meat	4				0.0	Sep	0.0	0.00	0.0105	0.00	0.0050	Note 49
Year	N	42	0	0.1	0.1	0	100	10	0	1	0.1	42	0.0	0.0	0.0	0.0	0.0	42	0.0	0.00	0.00	0.00	0.00	Note 47
5	Vol/NH3	Poultry	NO	0.0	0.0	NON	100.00	WBA	1.000	YES	0.0	Poultry	0.66				0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Sep	0.867	1.000		ORG	1.00	1.000	0.483	0.0	0.0	Meat	4				0.0	Sep	0.0	0.00	0.0105	0.00	0.0050	Note 49
Year	N	42	0	0.0	0.0	0	100	119	0	1	0.0	42	0.0	0.0	0.0	0.0	0.0	42	0.0	0.00	0.00	0.00	0.00	Note 47
6	Vol/NH3	Poultry	NO	0.0	0.0	NON	100.00	WWHB	1.000	YES	0.0	Poultry	0.84				0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Sep	0.867	1.000		ORG	1.00	1.000	0.443	0.0	0.0	Meat	4				0.0	Sep	0.0	0.00	0.0105	0.00	0.0050	Note 49
Year	N	42	0	0.0	0.0	0	100	11	0	1	0.0	42	0.0	0.0	0.0	0.0	0.0	42	0.0	0.00	0.00	0.00	0.00	Note 47
7	Vol/NH3	Poultry	NO	0.0	0.0	NON	100.00	WWH	1.000	YES	0.0	Poultry	0.67				0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Sep	0.867	1.000		ORG	1.00	1.000	0.443	0.0	0.0	Meat	4				0.0	Sep	0.0	0.00	0.0105	0.00	0.0050	Note 49
Year	N	42	0	0.0	0.0	0	100	11	0	1	0.0	42	0.0	0.0	0.0	0.0	0.0	42	0.0	0.00	0.00	0.00	0.00	Note 47
8	Vol/NH3	Poultry	NO	0.0	0.0	NON	100.00	WWH	1.000	YES	0.0	Poultry	0.67				0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Sep	0.867	1.000		ORG	1.00	1.000	0.443	0.0	0.0	Meat	4				0.0	Sep	0.0	0.00	0.0105	0.00	0.0050	Note 49
Year	N	42	0	0.0	0.0	0	100	1	0	1	0.0	42	0.0	0.0	0.0	0.0	0.0	42	0.0	0.00	0.00	0.00	0.00	Note 47
9	Vol/NH3	Poultry	NO	0.0	0.0	NON	100.00	SBA	1.000	YES	0.0	Poultry	0.65				0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Sep	0.867	1.000		ORG	1.00	1.000	0.483	0.0	0.0	Meat	4				0.0	Sep	0.0	0.00	0.0105	0.00	0.0050	Note 49
Year	N	42	0	0.0	0.0	0	100	10	0	1	0.0	42	0.0	0.0	0.0	0.0	0.0	42	0.0	0.00	0.00	0.00	0.00	Note 47
10	Vol/NH3	Poultry	NO	0.0	0.0	NON	100.00	WBA	1.000	YES	0.0	Poultry	0.66				0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Sep	0.867	1.000		ORG	1.00	1.000	0.483	0.0	0.0	Meat	4				0.0	Sep	0.0	0.00	0.0105	0.00	0.0050	Note 49

Year	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year10	Total	Total/year 1	
Area with crop, ha	0.64	0.13	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.79	1.24	Note 50

Possible additional non IPCC N2O-N emissions	Value												Kind of source	Total IPCC and non IPCC N2O		Note 51
N residues emissions, ratio of N2O-N to N:	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Current crops	2.86	1.89	Note 51
Increased soil N emissions, kg N2O-N/ha:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Total anthropogenic	2.86	1.89	Note 51
Natural background emissions, kg N2O-N/ha:	1.00	0.64	0.13	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.79	Total including natural	3.65	2.68	Note 51

C2 N CHAIN CALCULATIONS SHEET C: N CHAINS BASED UPON DANISH VALUES CALCULATIONS By Jacob Bugge Available at www.ppo.bugge.com C2

N CHAIN STARTING WITH N FERTILIZER TO PRODUCE WINTER WHEAT FOR BIOETHANOL AND POULTRY MEAT Note 43
AND CONTINUING WITH POULTRY DEEP LITTER TO PRODUCE WINTER WHEAT FOR POULTRY MEAT Note 43

Year	Fertlizer/manure # Name	Store 1/0	Amounts Store	Amounts Field	Organic 1/0	Nnorm proportion, %	Crop # Name	Cereal benefit 1/0	Straw used 1/0	Crop use & leach	Use # Name	Fodder: Uses #21-61 Fed	Fodder: Uses #21-61 Food	N crop #71/#72	Food/bev #8	Fuel/other #9	Manure handling # Name	Final N amounts	N2O-N emission IPCC 1996 Each	N2O-N emission IPCC 1996 Total	N2O-N emission IPCC 2006 Each	N2O-N emission IPCC 2006 Total	Note 44
Total	N																						Note 44
Year	N NH3																						Note 44
1-10	N leach																						Note 44
Total	N	RATIO OF N2O-N TO N IN FIRST CROP					TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED											48.4	48.3	1.99	2.96	1.39	1.83	Note 45
Year	N NH3	ACCORDING TO			IPCC 1996		IPCC 2006				TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3							21.2	21.2	0.21		0.21		Note 45
1-10	N leach	FIRST YEAR			0.0326		0.0203				TOTAL N AMOUNTS IN KG AND % LEACHED							30.6	30.6	0.77		0.23		Note 45
		TOTAL			0.0395		0.0244				TOTAL N AMOUNTS IN KG AND %							100.3	100.0					Note 45
N2O-N/N in food/beverage/fuel/other																					0.0612		0.0379	Note 46
Year	N	1	0	100.0	100.0	0	100	119	0	1	97.8	42	64.3	32.8	0.0	0.0	10.8	43	31.5	1.73	2.45	1.20	1.52	Note 47
1	Vol/NH3	N	NO	0.0	2.2	NON	100.00	WWHB	1.000	YES	22.7	Poultry	0.84				0.0	Poultry	12.6	0.15	0.0125	0.15	0.0100	Note 48
	N leach		1.022	1.000		ORG	1.00	1.000	0.343	10.8	22.7	Meat	4				10.6	Deep	0.0	0.57	0.0200	0.17	0.0050	Note 49
Year	N	43	0	19.1	19.1	0	100	11	0	1	14.4	42	5.5	2.8	0.0	0.0	1.6	43	2.7	0.23	0.47	0.17	0.28	Note 47
2	Vol/NH3	Poultry	NO	0.0	4.8	NON	100.00	WWH	1.000	YES	7.2	Poultry	0.67				0.0	Poultry	1.1	0.06	0.0125	0.06	0.0100	Note 48
	N leach	Deep	0.600	1.013		ORG	1.00	1.000	0.614	1.6	7.2	Meat	4				1.6	Deep	0.0	0.18	0.0200	0.05	0.0050	Note 49
Year	N	43	0	1.6	1.6	0	100	11	0	1	1.2	42	0.5	0.2	0.0	0.0	0.1	43	0.2	0.02	0.04	0.01	0.02	Note 47
3	Vol/NH3	Poultry	NO	0.0	0.4	NON	100.00	WWH	1.000	YES	0.6	Poultry	0.67				0.0	Poultry	0.1	0.01	0.0125	0.01	0.0100	Note 48
	N leach	Deep	0.600	1.013		ORG	1.00	1.000	0.614	0.1	0.6	Meat	4				0.1	Deep	0.0	0.02	0.0200	0.00	0.0050	Note 49
Year	N	43	0	0.1	0.1	0	100	1	0	1	0.1	42	0.0	0.0	0.0	0.0	0.0	43	0.0	0.00	0.00	0.00	0.00	Note 47
4	Vol/NH3	Poultry	NO	0.0	0.0	NON	100.00	SBA	1.000	YES	0.1	Poultry	0.65				0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Deep	0.600	1.013		ORG	1.00	1.000	0.642	0.0	0.1	Meat	4				0.0	Deep	0.0	0.00	0.0200	0.00	0.0050	Note 49
Year	N	43	0	0.0	0.0	0	100	10	0	1	0.0	42	0.0	0.0	0.0	0.0	0.0	43	0.0	0.00	0.00	0.00	0.00	Note 47
5	Vol/NH3	Poultry	NO	0.0	0.0	NON	100.00	WBA	1.000	YES	0.0	Poultry	0.66				0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Deep	0.600	1.013		ORG	1.00	1.000	0.642	0.0	0.0	Meat	4				0.0	Deep	0.0	0.00	0.0200	0.00	0.0050	Note 49
Year	N	43	0	0.0	0.0	0	100	119	0	1	0.0	42	0.0	0.0	0.0	0.0	0.0	43	0.0	0.00	0.00	0.00	0.00	Note 47
6	Vol/NH3	Poultry	NO	0.0	0.0	NON	100.00	WWHB	1.000	YES	0.0	Poultry	0.84				0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Deep	0.600	1.013		ORG	1.00	1.000	0.614	0.0	0.0	Meat	4				0.0	Deep	0.0	0.00	0.0200	0.00	0.0050	Note 49
Year	N	43	0	0.0	0.0	0	100	11	0	1	0.0	42	0.0	0.0	0.0	0.0	0.0	43	0.0	0.00	0.00	0.00	0.00	Note 47
7	Vol/NH3	Poultry	NO	0.0	0.0	NON	100.00	WWH	1.000	YES	0.0	Poultry	0.67				0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Deep	0.600	1.013		ORG	1.00	1.000	0.614	0.0	0.0	Meat	4				0.0	Deep	0.0	0.00	0.0200	0.00	0.0050	Note 49
Year	N	43	0	0.0	0.0	0	100	11	0	1	0.0	42	0.0	0.0	0.0	0.0	0.0	43	0.0	0.00	0.00	0.00	0.00	Note 47
8	Vol/NH3	Poultry	NO	0.0	0.0	NON	100.00	WWH	1.000	YES	0.0	Poultry	0.67				0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Deep	0.600	1.013		ORG	1.00	1.000	0.614	0.0	0.0	Meat	4				0.0	Deep	0.0	0.00	0.0200	0.00	0.0050	Note 49
Year	N	43	0	0.0	0.0	0	100	1	0	1	0.0	42	0.0	0.0	0.0	0.0	0.0	43	0.0	0.00	0.00	0.00	0.00	Note 47
9	Vol/NH3	Poultry	NO	0.0	0.0	NON	100.00	SBA	1.000	YES	0.0	Poultry	0.65				0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Deep	0.600	1.013		ORG	1.00	1.000	0.642	0.0	0.0	Meat	4				0.0	Deep	0.0	0.00	0.0200	0.00	0.0050	Note 49
Year	N	43	0	0.0	0.0	0	100	10	0	1	0.0	42	0.0	0.0	0.0	0.0	0.0	43	0.0	0.00	0.00	0.00	0.00	Note 47
10	Vol/NH3	Poultry	NO	0.0	0.0	NON	100.00	WBA	1.000	YES	0.0	Poultry	0.66				0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Deep	0.600	1.013		ORG	1.00	1.000	0.642	0.0	0.0	Meat	4				0.0	Deep	0.0	0.00	0.0200	0.00	0.0050	Note 49

Year	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year10	Total	Total/year 1	
Area with crop, ha	0.64	0.07	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.71	1.12	Note 50

Possible additional non IPCC N2O-N emissions	Value												Kind of source	Total IPCC and non IPCC N2O		Note 51
N residues emissions, ratio of N2O-N to N:	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Current crops	2.96	1.83	Note 51
Increased soil N emissions, kg N2O-N/ha:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Total anthropogenic	2.96	1.83	Note 51
Natural background emissions, kg N2O-N/ha:	1.00	0.64	0.07	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.71	0.71	Total including natural	3.68	2.55	Note 51

N CHAIN STARTING WITH N FERTILIZER TO PRODUCE WINTER WHEAT FOR BIOETHANOL AND POULTRY MEAT Note 43
AND CONTINUING WITH MANURE FROM SCRAPING POULTRY TO PRODUCE WINTER WHEAT FOR POULTRY MEAT Note 43

Year	Fertlizer/manure # Name	Store 1/0	Amounts Store	Amounts Field	Organic 1/0	Nnorm proportion, %	Crop # Name	Cereal benefit 1/0	Straw used 1/0	Crop use & leach	Use # Name	Fodder: Uses #21-61 Fed	Fodder: Uses #21-61 Food	N crop #71/ #72	Food/ bev #8	Fuel/ other #9	Manure handling # Name	Final N amounts	N2O-N emission IPCC 1996 Each	N2O-N emission IPCC 1996 Total	N2O-N emission IPCC 2006 Each	N2O-N emission IPCC 2006 Total	Note 44 Note 44 Note 44
Total	N		RATIO OF N2O-N TO N IN FIRST CROP				TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED							52.8	52.8				2.56	3.67	2.23	2.60	Note 45
Year	N NH3		ACCORDING TO		IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3							4.8	4.8				0.05		0.05		Note 45
1-10	N leach		FIRST YEAR		0.0343	0.0257	TOTAL N AMOUNTS IN KG AND % LEACHED							42.5	42.5				1.06		0.32		Note 45
			TOTAL		0.0489	0.0346	TOTAL N AMOUNTS IN KG AND %							100.0	100.0								Note 45
N2O-N/N in food/beverage/fuel/other																				0.0696		0.0492	Note 46
Year	N	1	0	100.0	100.0	0	100	119	0	1	97.8	42	64.3	32.8	0.0	0.0	10.8	44	31.5	1.98	2.57	1.74	1.93	Note 47
1	Vol/NH3	N	NO	0.0	2.2	NON	100.00	WWHB	1.000	YES	22.7	Poultry	0.84				0.0	Poultry	0.0	0.02	0.0125	0.02	0.0100	Note 48
	N leach		1.022	1.000		ORG	1.00	1.000	0.343	10.8	22.7	Meat	4				10.6	Scrap	0.0	0.57	0.0200	0.17	0.0200	Note 49
Year	N	44	0	31.5	31.5	0	100	11	0	1	29.3	42	9.1	4.6	0.0	0.0	3.2	44	4.5	0.49	0.94	0.42	0.57	Note 47
2	Vol/NH3	Poultry	NO	0.0	2.2	NON	100.00	WWH	1.000	YES	16.9	Poultry	0.67				0.0	Poultry	0.0	0.02	0.0125	0.02	0.0100	Note 48
	N leach	Scrap	0.484	1.000		ORG	1.00	1.000	0.689	3.2	16.9	Meat	4				3.2	Scrap	0.0	0.42	0.0200	0.13	0.0200	Note 49
Year	N	44	0	4.5	4.5	0	100	11	0	1	4.2	42	1.3	0.7	0.0	0.0	0.5	44	0.6	0.07	0.13	0.06	0.08	Note 47
3	Vol/NH3	Poultry	NO	0.0	0.3	NON	100.00	WWH	1.000	YES	2.4	Poultry	0.67				0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Scrap	0.484	1.000		ORG	1.00	1.000	0.689	0.5	2.4	Meat	4				0.4	Scrap	0.0	0.06	0.0200	0.02	0.0200	Note 49
Year	N	44	0	0.6	0.6	0	100	1	0	1	0.6	42	0.2	0.1	0.0	0.0	0.1	44	0.1	0.01	0.02	0.01	0.01	Note 47
4	Vol/NH3	Poultry	NO	0.0	0.0	NON	100.00	SBA	1.000	YES	0.4	Poultry	0.65				0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Scrap	0.484	1.000		ORG	1.00	1.000	0.711	0.1	0.4	Meat	4				0.1	Scrap	0.0	0.01	0.0200	0.00	0.0200	Note 49
Year	N	44	0	0.1	0.1	0	100	10	0	1	0.1	42	0.0	0.0	0.0	0.0	0.0	44	0.0	0.00	0.00	0.00	0.00	Note 47
5	Vol/NH3	Poultry	NO	0.0	0.0	NON	100.00	WBA	1.000	YES	0.0	Poultry	0.66				0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Scrap	0.484	1.000		ORG	1.00	1.000	0.712	0.0	0.0	Meat	4				0.0	Scrap	0.0	0.00	0.0200	0.00	0.0200	Note 49
Year	N	44	0	0.0	0.0	0	100	119	0	1	0.0	42	0.0	0.0	0.0	0.0	0.0	44	0.0	0.00	0.00	0.00	0.00	Note 47
6	Vol/NH3	Poultry	NO	0.0	0.0	NON	100.00	WWHB	1.000	YES	0.0	Poultry	0.84				0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Scrap	0.484	1.000		ORG	1.00	1.000	0.689	0.0	0.0	Meat	4				0.0	Scrap	0.0	0.00	0.0200	0.00	0.0200	Note 49
Year	N	44	0	0.0	0.0	0	100	11	0	1	0.0	42	0.0	0.0	0.0	0.0	0.0	44	0.0	0.00	0.00	0.00	0.00	Note 47
7	Vol/NH3	Poultry	NO	0.0	0.0	NON	100.00	WWH	1.000	YES	0.0	Poultry	0.67				0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Scrap	0.484	1.000		ORG	1.00	1.000	0.689	0.0	0.0	Meat	4				0.0	Scrap	0.0	0.00	0.0200	0.00	0.0200	Note 49
Year	N	44	0	0.0	0.0	0	100	11	0	1	0.0	42	0.0	0.0	0.0	0.0	0.0	44	0.0	0.00	0.00	0.00	0.00	Note 47
8	Vol/NH3	Poultry	NO	0.0	0.0	NON	100.00	WWH	1.000	YES	0.0	Poultry	0.67				0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Scrap	0.484	1.000		ORG	1.00	1.000	0.689	0.0	0.0	Meat	4				0.0	Scrap	0.0	0.00	0.0200	0.00	0.0200	Note 49
Year	N	44	0	0.0	0.0	0	100	1	0	1	0.0	42	0.0	0.0	0.0	0.0	0.0	44	0.0	0.00	0.00	0.00	0.00	Note 47
9	Vol/NH3	Poultry	NO	0.0	0.0	NON	100.00	SBA	1.000	YES	0.0	Poultry	0.65				0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Scrap	0.484	1.000		ORG	1.00	1.000	0.711	0.0	0.0	Meat	4				0.0	Scrap	0.0	0.00	0.0200	0.00	0.0200	Note 49
Year	N	44	0	0.0	0.0	0	100	10	0	1	0.0	42	0.0	0.0	0.0	0.0	0.0	44	0.0	0.00	0.00	0.00	0.00	Note 47
10	Vol/NH3	Poultry	NO	0.0	0.0	NON	100.00	WBA	1.000	YES	0.0	Poultry	0.66				0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Scrap	0.484	1.000		ORG	1.00	1.000	0.712	0.0	0.0	Meat	4				0.0	Scrap	0.0	0.00	0.0200	0.00	0.0200	Note 49

Year	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year10	Total	Total/year 1	
Area with crop, ha	0.64	0.09	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.75	1.17	Note 50

Possible additional non IPCC N2O-N emissions	Value												Kind of source	Total IPCC and non IPCC N2O		Note 51
N residues emissions, ratio of N2O-N to N:	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Current crops	3.67	2.60	Note 51
Increased soil N emissions, kg N2O-N/ha:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Total anthropogenic	3.67	2.60	Note 51
Natural background emissions, kg N2O-N/ha:	1.00	0.64	0.09	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.75	Total including natural	4.42	3.34	Note 51

N CHAIN STARTING WITH N FERTILIZER TO PRODUCE WINTER WHEAT FOR BIOETHANOL AND POULTRY EGGS Note 43
AND CONTINUING WITH LIQUID POULTRY MANURE TO PRODUCE WINTER WHEAT FOR POULTRY EGGS Note 43

Year	Fertlizer/manure # Name	Store 1/0	Amounts Store	Amounts Field	Organic 1/0	Nnorm proportion, %	Crop # Name	Cereal benefit 1/0	Straw used 1/0	Crop use & leach	Use # Name	Fodder: Uses #21-61 Fed	Fodder: Uses #21-61 Food	N crop #71/ #72	Food/ bev #8	Fuel/ other #9	Manure handling # Name	Final N amounts	N2O-N emission IPCC 1996 Each	N2O-N emission IPCC 1996 Total	N2O-N emission IPCC 2006 Each	N2O-N emission IPCC 2006 Total	Note 44 Note 44 Note 44
Total	N		RATIO OF N2O-N TO N IN FIRST CROP				TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED							37.5	37.5				2.05	3.25	1.94	2.47	Note 45
Year	N NH3		ACCORDING TO		IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3							24.3	24.3				0.24		0.24		Note 45
1-10	N leach		FIRST YEAR		0.0271	0.0209	TOTAL N AMOUNTS IN KG AND % LEACHED							38.1	38.1				0.95		0.29		Note 45
			TOTAL		0.0433	0.0329	TOTAL N AMOUNTS IN KG AND %							100.0	100.0								Note 45

N2O-N/N in food/beverage/fuel/other 0.0866 0.0657 Note 46

Year																									
Year	N	1	0	100.0	100.0	0	100	119	0	1	97.8	43	64.3	15.5	0.0	0.0	10.8	41	48.8	1.40	2.04	1.33	1.57	Note 47
1	Vol/NH3	N	NO	0.0	2.2	NON	100.00	WWHB	1.000	YES	22.7	Poultry	0.84				0.0	Poultry	4.9	0.07	0.0125	0.07	0.0100	Note 48
	N leach		1.022	1.000		ORG	1.00	1.000	0.343	10.8	22.7	Eggs	4				10.6	Liquid	0.0	0.57	0.0010	0.17	0.0050	Note 49
Year	N	41	0	43.9	43.9	0	100	11	0	1	32.9	43	18.3	4.4	0.0	0.0	3.6	41	13.9	0.47	0.87	0.44	0.64	Note 47
2	Vol/NH3	Poultry	NO	0.0	11.0	NON	100.00	WWH	1.000	YES	10.9	Poultry	0.67				0.0	Poultry	1.4	0.12	0.0125	0.12	0.0100	Note 48
	N leach	Liquid	0.867	1.000		ORG	1.00	1.000	0.443	3.6	10.9	Eggs	4				3.6	Liquid	0.0	0.27	0.0010	0.08	0.0050	Note 49
Year	N	41	0	12.5	12.5	0	100	11	0	1	9.4	43	5.2	1.3	0.0	0.0	1.0	41	4.0	0.13	0.25	0.12	0.18	Note 47
3	Vol/NH3	Poultry	NO	0.0	3.1	NON	100.00	WWH	1.000	YES	3.1	Poultry	0.67				0.0	Poultry	0.4	0.04	0.0125	0.04	0.0100	Note 48
	N leach	Liquid	0.867	1.000		ORG	1.00	1.000	0.443	1.0	3.1	Eggs	4				1.0	Liquid	0.0	0.08	0.0010	0.02	0.0050	Note 49
Year	N	41	0	3.6	3.6	0	100	1	0	1	2.7	43	1.4	0.3	0.0	0.0	0.3	41	1.1	0.04	0.07	0.03	0.05	Note 47
4	Vol/NH3	Poultry	NO	0.0	0.9	NON	100.00	SBA	1.000	YES	1.0	Poultry	0.65				0.0	Poultry	0.1	0.01	0.0125	0.01	0.0100	Note 48
	N leach	Liquid	0.867	1.000		ORG	1.00	1.000	0.483	0.3	1.0	Eggs	4				0.2	Liquid	0.0	0.02	0.0010	0.01	0.0050	Note 49
Year	N	41	0	0.9	0.9	0	100	10	0	1	0.7	43	0.4	0.1	0.0	0.0	0.1	41	0.3	0.01	0.02	0.01	0.01	Note 47
5	Vol/NH3	Poultry	NO	0.0	0.2	NON	100.00	WBA	1.000	YES	0.3	Poultry	0.66				0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Liquid	0.867	1.000		ORG	1.00	1.000	0.483	0.1	0.3	Eggs	4				0.1	Liquid	0.0	0.01	0.0010	0.00	0.0050	Note 49
Year	N	41	0	0.3	0.3	0	100	119	0	1	0.2	43	0.1	0.0	0.0	0.0	0.0	41	0.1	0.00	0.00	0.00	0.00	Note 47
6	Vol/NH3	Poultry	NO	0.0	0.1	NON	100.00	WWHB	1.000	YES	0.1	Poultry	0.84				0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Liquid	0.867	1.000		ORG	1.00	1.000	0.443	0.0	0.1	Eggs	4				0.0	Liquid	0.0	0.00	0.0010	0.00	0.0050	Note 49
Year	N	41	0	0.1	0.1	0	100	11	0	1	0.1	43	0.0	0.0	0.0	0.0	0.0	41	0.0	0.00	0.00	0.00	0.00	Note 47
7	Vol/NH3	Poultry	NO	0.0	0.0	NON	100.00	WWH	1.000	YES	0.0	Poultry	0.67				0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Liquid	0.867	1.000		ORG	1.00	1.000	0.443	0.0	0.0	Eggs	4				0.0	Liquid	0.0	0.00	0.0010	0.00	0.0050	Note 49
Year	N	41	0	0.0	0.0	0	100	11	0	1	0.0	43	0.0	0.0	0.0	0.0	0.0	41	0.0	0.00	0.00	0.00	0.00	Note 47
8	Vol/NH3	Poultry	NO	0.0	0.0	NON	100.00	WWH	1.000	YES	0.0	Poultry	0.67				0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Liquid	0.867	1.000		ORG	1.00	1.000	0.443	0.0	0.0	Eggs	4				0.0	Liquid	0.0	0.00	0.0010	0.00	0.0050	Note 49
Year	N	41	0	0.0	0.0	0	100	1	0	1	0.0	43	0.0	0.0	0.0	0.0	0.0	41	0.0	0.00	0.00	0.00	0.00	Note 47
9	Vol/NH3	Poultry	NO	0.0	0.0	NON	100.00	SBA	1.000	YES	0.0	Poultry	0.65				0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Liquid	0.867	1.000		ORG	1.00	1.000	0.483	0.0	0.0	Eggs	4				0.0	Liquid	0.0	0.00	0.0010	0.00	0.0050	Note 49
Year	N	41	0	0.0	0.0	0	100	10	0	1	0.0	43	0.0	0.0	0.0	0.0	0.0	41	0.0	0.00	0.00	0.00	0.00	Note 47
10	Vol/NH3	Poultry	NO	0.0	0.0	NON	100.00	WBA	1.000	YES	0.0	Poultry	0.66				0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Liquid	0.867	1.000		ORG	1.00	1.000	0.483	0.0	0.0	Eggs	4				0.0	Liquid	0.0	0.00	0.0010	0.00	0.0050	Note 49

Year	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year10	Total	Total/year 1	
Area with crop, ha	0.64	0.24	0.07	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.97	1.53	Note 50

Possible additional non IPCC N2O-N emissions	Value												Kind of source	Total IPCC and non IPCC N2O		Note 51
N residues emissions, ratio of N2O-N to N:	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Current crops	3.25	2.47	Note 51
Increased soil N emissions, kg N2O-N/ha:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Total anthropogenic	3.25	2.47	Note 51
Natural background emissions, kg N2O-N/ha:	1.00	0.64	0.24	0.07	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.97	Total including natural	4.22	3.44	Note 51

N CHAIN STARTING WITH N FERTILIZER TO PRODUCE WINTER WHEAT FOR BIOETHANOL AND POULTRY EGGS Note 43
AND CONTINUING WITH SEPARATED POULTRY MANURE TO PRODUCE WINTER WHEAT FOR POULTRY EGGS Note 43

Year	Fertlizer/manure # Name	Store 1/0	Amounts Store	Amounts Field	Organic 1/0	Nnorm proportion, %	Crop # Name	Cereal benefit 1/0	Straw used 1/0	Crop use & leach	Use # Name	Fodder: Uses #21-61 Fed	Fodder: Uses #21-61 Food	N crop #71/ #72	Food/ bev #8	Fuel/ other #9	Manure handling # Name	Final N amounts	N2O-N emission IPCC 1996 Each	N2O-N emission IPCC 1996 Total	N2O-N emission IPCC 2006 Each	N2O-N emission IPCC 2006 Total	Note 44 Note 44 Note 44
Total	N																						Note 45
Year	N NH3																						Note 45
1-10	N leach																						Note 45
																							Note 45

	IPCC 1996	IPCC 2006			
RATIO OF N2O-N TO N IN FIRST CROP			TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED	35.1	35.1
ACCORDING TO	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	30.2	30.2
FIRST YEAR	0.0326	0.0214	TOTAL N AMOUNTS IN KG AND % LEACHED	34.7	34.7
TOTAL	0.0470	0.0309	TOTAL N AMOUNTS IN KG AND %	100.0	100.0

N2O-N/N in food/beverage/fuel/other 0.1005 0.0661 Note 46

Year																										
Year	N	1	0	100.0	100.0	0	100	119	0	1	97.8	43	64.3	15.5	0.0	0.0	10.8	42	48.8	1.74	2.45	1.29	1.61	Note 47
1	Vol/NH3	N	NO	0.0	2.2	NON	100.00	WWHB	1.000	YES	22.7	Poultry	0.84				0.0	Poultry	12.2	0.14	0.0125	0.14	0.0100	Note 48
	N leach		1.022	1.000		ORG	1.00	1.000	0.343	10.8	22.7	Eggs	4				10.6	Sep	0.0	0.57	0.0105	0.17	0.0050	Note 49
Year	N	42	0	36.6	36.6	0	100	11	0	1	27.4	43	15.3	3.7	0.0	0.0	3.0	42	11.6	0.47	0.82	0.35	0.54	Note 47
2	Vol/NH3	Poultry	NO	0.0	9.1	NON	100.00	WWH	1.000	YES	9.1	Poultry	0.67				0.0	Poultry	2.9	0.12	0.0125	0.12	0.0100	Note 48
	N leach	Sep	0.867	1.000		ORG	1.00	1.000	0.443	3.0	9.1	Eggs	4				3.0	Sep	0.0	0.23	0.0105	0.07	0.0050	Note 49
Year	N	42	0	8.7	8.7	0	100	11	0	1	6.5	43	3.6	0.9	0.0	0.0	0.7	42	2.8	0.11	0.19	0.08	0.13	Note 47
3	Vol/NH3	Poultry	NO	0.0	2.2	NON	100.00	WWH	1.000	YES	2.2	Poultry	0.67				0.0	Poultry	0.7	0.03	0.0125	0.03	0.0100	Note 48
	N leach	Sep	0.867	1.000		ORG	1.00	1.000	0.443	0.7	2.2	Eggs	4				0.7	Sep	0.0	0.05	0.0105	0.02	0.0050	Note 49
Year	N	42	0	2.1	2.1	0	100	1	0	1	1.6	43	0.8	0.2	0.0	0.0	0.2	42	0.6	0.03	0.05	0.02	0.03	Note 47
4	Vol/NH3	Poultry	NO	0.0	0.5	NON	100.00	SBA	1.000	YES	0.6	Poultry	0.65				0.0	Poultry	0.2	0.01	0.0125	0.01	0.0100	Note 48
	N leach	Sep	0.867	1.000		ORG	1.00	1.000	0.483	0.2	0.6	Eggs	4				0.1	Sep	0.0	0.01	0.0105	0.00	0.0050	Note 49
Year	N	42	0	0.5	0.5	0	100	10	0	1	0.3	43	0.2	0.0	0.0	0.0	0.0	42	0.1	0.01	0.01	0.00	0.01	Note 47
5	Vol/NH3	Poultry	NO	0.0	0.1	NON	100.00	WBA	1.000	YES	0.1	Poultry	0.66				0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Sep	0.867	1.000		ORG	1.00	1.000	0.483	0.0	0.1	Eggs	4				0.0	Sep	0.0	0.00	0.0105	0.00	0.0050	Note 49
Year	N	42	0	0.1	0.1	0	100	119	0	1	0.1	43	0.0	0.0	0.0	0.0	0.0	42	0.0	0.00	0.00	0.00	0.00	Note 47
6	Vol/NH3	Poultry	NO	0.0	0.0	NON	100.00	WWHB	1.000	YES	0.0	Poultry	0.84				0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Sep	0.867	1.000		ORG	1.00	1.000	0.443	0.0	0.0	Eggs	4				0.0	Sep	0.0	0.00	0.0105	0.00	0.0050	Note 49
Year	N	42	0	0.0	0.0	0	100	11	0	1	0.0	43	0.0	0.0	0.0	0.0	0.0	42	0.0	0.00	0.00	0.00	0.00	Note 47
7	Vol/NH3	Poultry	NO	0.0	0.0	NON	100.00	WWH	1.000	YES	0.0	Poultry	0.67				0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Sep	0.867	1.000		ORG	1.00	1.000	0.443	0.0	0.0	Eggs	4				0.0	Sep	0.0	0.00	0.0105	0.00	0.0050	Note 49
Year	N	42	0	0.0	0.0	0	100	11	0	1	0.0	43	0.0	0.0	0.0	0.0	0.0	42	0.0	0.00	0.00	0.00	0.00	Note 47
8	Vol/NH3	Poultry	NO	0.0	0.0	NON	100.00	WWH	1.000	YES	0.0	Poultry	0.67				0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Sep	0.867	1.000		ORG	1.00	1.000	0.443	0.0	0.0	Eggs	4				0.0	Sep	0.0	0.00	0.0105	0.00	0.0050	Note 49
Year	N	42	0	0.0	0.0	0	100	1	0	1	0.0	43	0.0	0.0	0.0	0.0	0.0	42	0.0	0.00	0.00	0.00	0.00	Note 47
9	Vol/NH3	Poultry	NO	0.0	0.0	NON	100.00	SBA	1.000	YES	0.0	Poultry	0.65				0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Sep	0.867	1.000		ORG	1.00	1.000	0.483	0.0	0.0	Eggs	4				0.0	Sep	0.0	0.00	0.0105	0.00	0.0050	Note 49
Year	N	42	0	0.0	0.0	0	100	10	0	1	0.0	43	0.0	0.0	0.0	0.0	0.0	42	0.0	0.00	0.00	0.00	0.00	Note 47
10	Vol/NH3	Poultry	NO	0.0	0.0	NON	100.00	WBA	1.000	YES	0.0	Poultry	0.66				0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Sep	0.867	1.000		ORG	1.00	1.000	0.483	0.0	0.0	Eggs	4				0.0	Sep	0.0	0.00	0.0105	0.00	0.0050	Note 49

Year	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year10	Total	Total/year 1	
Area with crop, ha	0.64	0.20	0.05	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.90	1.41	Note 50

Possible additional non IPCC N2O-N emissions	Value												Kind of source	Total IPCC and non IPCC N2O		Note 51
N residues emissions, ratio of N2O-N to N:	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Current crops	3.53	2.32	Note 51
Increased soil N emissions, kg N2O-N/ha:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Total anthropogenic	3.53	2.32	Note 51
Natural background emissions, kg N2O-N/ha:	1.00	0.64	0.20	0.05	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.90	Total including natural	4.42	3.22	Note 51

N CHAIN STARTING WITH N FERTILIZER TO PRODUCE WINTER WHEAT FOR BIOETHANOL AND POULTRY EGGS Note 43
AND CONTINUING WITH POULTRY DEEP LITTER TO PRODUCE WINTER WHEAT FOR POULTRY EGGS Note 43

Year		Fertlizer/manure # Name	Store 1/0	Amounts Store	Amounts Field	Organic 1/0	Nnorm proportion, %	Crop # Name	Cereal benefit 1/0	Straw used 1/0	Crop use & leach	Use # Name	Fodder: Uses #21-61 Fed	Fodder: Uses #21-61 Food	N crop #71/ #72	Food/ bev #8	Fuel/ other #9	Manure handling # Name	Final N amounts	N2O-N emission IPCC 1996 Each	N2O-N emission IPCC 1996 Total	N2O-N emission IPCC 2006 Each	N2O-N emission IPCC 2006 Total	Note 44 Note 44 Note 44
Total	N																							Note 45
Year	N NH3																							Note 45
1-10	N leach																							Note 45
																								Note 45

RATIO OF N2O-N TO N IN FIRST CROP		TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED	31.5	31.4	2.39	3.61
ACCORDING TO	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	33.3	33.1	0.33
FIRST YEAR	0.0363	0.0219	TOTAL N AMOUNTS IN KG AND % LEACHED	35.7	35.5	0.89
TOTAL	0.0481	0.0289	TOTAL N AMOUNTS IN KG AND %	100.4	100.0	

N2O-N/N in food/beverage/fuel/other																						0.1145		0.0689	Note 46
Year	N	1	0	100.0	100.0	0	100	119	0	1	97.8	43	64.3	15.5	0.0	0.0	10.8	43	48.8	1.94	2.73	1.26	1.64	Note 47
1	Vol/NH3	N	NO	0.0	2.2	NON	100.00	WWHB	1.000	YES	22.7	Poultry	0.84				0.0	Poultry	19.5	0.22	0.0125	0.22	0.0100	Note 48
	N leach		1.022	1.000		ORG	1.00	1.000	0.343	10.8	22.7	Eggs	4				10.6	Deep	0.0	0.57	0.0200	0.17	0.0050	Note 49
Year	N	43	0	29.6	29.6	0	100	11	0	1	22.2	43	8.6	2.1	0.0	0.0	2.5	43	6.5	0.39	0.77	0.27	0.46	Note 47
2	Vol/NH3	Poultry	NO	0.0	7.4	NON	100.00	WWH	1.000	YES	11.2	Poultry	0.67				0.0	Poultry	2.6	0.10	0.0125	0.10	0.0100	Note 48
	N leach	Deep	0.600	1.013		ORG	1.00	1.000	0.614	2.5	11.2	Eggs	4				2.4	Deep	0.0	0.28	0.0200	0.08	0.0050	Note 49
Year	N	43	0	4.0	4.0	0	100	11	0	1	3.0	43	1.1	0.3	0.0	0.0	0.3	43	0.9	0.05	0.10	0.04	0.06	Note 47
3	Vol/NH3	Poultry	NO	0.0	1.0	NON	100.00	WWH	1.000	YES	1.5	Poultry	0.67				0.0	Poultry	0.3	0.01	0.0125	0.01	0.0100	Note 48
	N leach	Deep	0.600	1.013		ORG	1.00	1.000	0.614	0.3	1.5	Eggs	4				0.3	Deep	0.0	0.04	0.0200	0.01	0.0050	Note 49
Year	N	43	0	0.5	0.5	0	100	1	0	1	0.4	43	0.1	0.0	0.0	0.0	0.0	43	0.1	0.01	0.01	0.00	0.01	Note 47
4	Vol/NH3	Poultry	NO	0.0	0.1	NON	100.00	SBA	1.000	YES	0.2	Poultry	0.65				0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Deep	0.600	1.013		ORG	1.00	1.000	0.642	0.0	0.2	Eggs	4				0.0	Deep	0.0	0.01	0.0200	0.00	0.0050	Note 49
Year	N	43	0	0.1	0.1	0	100	10	0	1	0.0	43	0.0	0.0	0.0	0.0	0.0	43	0.0	0.00	0.00	0.00	0.00	Note 47
5	Vol/NH3	Poultry	NO	0.0	0.0	NON	100.00	WBA	1.000	YES	0.0	Poultry	0.66				0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Deep	0.600	1.013		ORG	1.00	1.000	0.642	0.0	0.0	Eggs	4				0.0	Deep	0.0	0.00	0.0200	0.00	0.0050	Note 49
Year	N	43	0	0.0	0.0	0	100	119	0	1	0.0	43	0.0	0.0	0.0	0.0	0.0	43	0.0	0.00	0.00	0.00	0.00	Note 47
6	Vol/NH3	Poultry	NO	0.0	0.0	NON	100.00	WWHB	1.000	YES	0.0	Poultry	0.84				0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Deep	0.600	1.013		ORG	1.00	1.000	0.614	0.0	0.0	Eggs	4				0.0	Deep	0.0	0.00	0.0200	0.00	0.0050	Note 49
Year	N	43	0	0.0	0.0	0	100	11	0	1	0.0	43	0.0	0.0	0.0	0.0	0.0	43	0.0	0.00	0.00	0.00	0.00	Note 47
7	Vol/NH3	Poultry	NO	0.0	0.0	NON	100.00	WWH	1.000	YES	0.0	Poultry	0.67				0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Deep	0.600	1.013		ORG	1.00	1.000	0.614	0.0	0.0	Eggs	4				0.0	Deep	0.0	0.00	0.0200	0.00	0.0050	Note 49
Year	N	43	0	0.0	0.0	0	100	11	0	1	0.0	43	0.0	0.0	0.0	0.0	0.0	43	0.0	0.00	0.00	0.00	0.00	Note 47
8	Vol/NH3	Poultry	NO	0.0	0.0	NON	100.00	WWH	1.000	YES	0.0	Poultry	0.67				0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Deep	0.600	1.013		ORG	1.00	1.000	0.614	0.0	0.0	Eggs	4				0.0	Deep	0.0	0.00	0.0200	0.00	0.0050	Note 49
Year	N	43	0	0.0	0.0	0	100	1	0	1	0.0	43	0.0	0.0	0.0	0.0	0.0	43	0.0	0.00	0.00	0.00	0.00	Note 47
9	Vol/NH3	Poultry	NO	0.0	0.0	NON	100.00	SBA	1.000	YES	0.0	Poultry	0.65				0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Deep	0.600	1.013		ORG	1.00	1.000	0.642	0.0	0.0	Eggs	4				0.0	Deep	0.0	0.00	0.0200	0.00	0.0050	Note 49
Year	N	43	0	0.0	0.0	0	100	10	0	1	0.0	43	0.0	0.0	0.0	0.0	0.0	43	0.0	0.00	0.00	0.00	0.00	Note 47
10	Vol/NH3	Poultry	NO	0.0	0.0	NON	100.00	WBA	1.000	YES	0.0	Poultry	0.66				0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Deep	0.600	1.013		ORG	1.00	1.000	0.642	0.0	0.0	Eggs	4				0.0	Deep	0.0	0.00	0.0200	0.00	0.0050	Note 49

Year	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year10	Total	Total/year 1	
Area with crop, ha	0.64	0.11	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.76	1.20	Note 50

Possible additional non IPCC N2O-N emissions	Value												Kind of source	Total IPCC and non IPCC N2O		Note 51
N residues emissions, ratio of N2O-N to N:	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Current crops	3.61	2.17	Note 51
Increased soil N emissions, kg N2O-N/ha:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Total anthropogenic	3.61	2.17	Note 51
Natural background emissions, kg N2O-N/ha:	1.00	0.64	0.11	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.76	Total including natural	4.37	2.93	Note 51

N CHAIN STARTING WITH N FERTILIZER TO PRODUCE WINTER WHEAT FOR BIOETHANOL AND POULTRY EGGS Note 43
AND CONTINUING WITH MANURE FROM SCRAPING POULTRY TO PRODUCE WINTER WHEAT FOR POULTRY EGGS Note 43

Year	Fertlizer/manure # Name	Store 1/0	Amounts Store	Amounts Field	Or-ganic 1/0	Nnorm propor tion, %	Crop # Name	Cereal benefit 1/0	Straw used 1/0	Crop use & leach	Use # Name	Fodder: Uses #21-61 Fed	Fodder: Uses #21-61 Food	N crop #71/ #72	Food/ bev #8	Fuel/ other #9	Manure handling # Name	Final N a-mounts	N2O-N emission IPCC 1996 Each	N2O-N emission IPCC 1996 Total	N2O-N emission IPCC 2006 Each	N2O-N emission IPCC 2006 Total	Note 44 Note 44 Note 44
Total	N																						Note 45
Year	N NH3																						Note 45
1-10	N leach																						Note 45
																							Note 45

RATIO OF N2O-N TO N IN FIRST CROP		TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED	37.1	37.1	3.41	4.88	3.02	3.51
ACCORDING TO	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	6.6	6.6	0.07	0.07
FIRST YEAR	0.0389	0.0303	TOTAL N AMOUNTS IN KG AND % LEACHED	56.4	56.4	1.41	0.42
TOTAL	0.0650	0.0467	TOTAL N AMOUNTS IN KG AND %	100.0	100.0		

N2O-N/N in food/beverage/fuel/other 0.1317 0.0946 Note 46

Year																									
Year	N	1	0	100.0	100.0	0	100	119	0	1	97.8	43	64.3	15.5	0.0	0.0	10.8	44	48.8	2.33	2.92	2.09	2.28	Note 47
1	Vol/NH3	N	NO	0.0	2.2	NON	100.00	WWHB	1.000	YES	22.7	Poultry	0.84				0.0	Poultry	0.0	0.02	0.0125	0.02	0.0100	Note 48
	N leach		1.022	1.000		ORG	1.00	1.000	0.343	10.8	22.7	Eggs	4				10.6	Scrap	0.0	0.57	0.0200	0.17	0.0200	Note 49
Year	N	44	0	48.8	48.8	0	100	11	0	1	45.4	43	14.1	3.4	0.0	0.0	5.0	44	10.7	0.84	1.53	0.73	0.96	Note 47
2	Vol/NH3	Poultry	NO	0.0	3.4	NON	100.00	WWH	1.000	YES	26.2	Poultry	0.67				0.0	Poultry	0.0	0.03	0.0125	0.03	0.0100	Note 48
	N leach	Scrap	0.484	1.000		ORG	1.00	1.000	0.689	5.0	26.2	Eggs	4				4.9	Scrap	0.0	0.66	0.0200	0.20	0.0200	Note 49
Year	N	44	0	10.7	10.7	0	100	11	0	1	10.0	43	3.1	0.7	0.0	0.0	1.1	44	2.4	0.18	0.34	0.16	0.21	Note 47
3	Vol/NH3	Poultry	NO	0.0	0.7	NON	100.00	WWH	1.000	YES	5.8	Poultry	0.67				0.0	Poultry	0.0	0.01	0.0125	0.01	0.0100	Note 48
	N leach	Scrap	0.484	1.000		ORG	1.00	1.000	0.689	1.1	5.8	Eggs	4				1.1	Scrap	0.0	0.14	0.0200	0.04	0.0200	Note 49
Year	N	44	0	2.4	2.4	0	100	1	0	1	2.2	43	0.6	0.2	0.0	0.0	0.3	44	0.5	0.04	0.07	0.03	0.05	Note 47
4	Vol/NH3	Poultry	NO	0.0	0.2	NON	100.00	SBA	1.000	YES	1.3	Poultry	0.65				0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Scrap	0.484	1.000		ORG	1.00	1.000	0.711	0.3	1.3	Eggs	4				0.2	Scrap	0.0	0.03	0.0200	0.01	0.0200	Note 49
Year	N	44	0	0.5	0.5	0	100	10	0	1	0.4	43	0.1	0.0	0.0	0.0	0.1	44	0.1	0.01	0.01	0.01	0.01	Note 47
5	Vol/NH3	Poultry	NO	0.0	0.0	NON	100.00	WBA	1.000	YES	0.3	Poultry	0.66				0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Scrap	0.484	1.000		ORG	1.00	1.000	0.712	0.1	0.3	Eggs	4				0.0	Scrap	0.0	0.01	0.0200	0.00	0.0200	Note 49
Year	N	44	0	0.1	0.1	0	100	119	0	1	0.1	43	0.0	0.0	0.0	0.0	0.0	44	0.0	0.00	0.00	0.00	0.00	Note 47
6	Vol/NH3	Poultry	NO	0.0	0.0	NON	100.00	WWHB	1.000	YES	0.1	Poultry	0.84				0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Scrap	0.484	1.000		ORG	1.00	1.000	0.689	0.0	0.1	Eggs	4				0.0	Scrap	0.0	0.00	0.0200	0.00	0.0200	Note 49
Year	N	44	0	0.0	0.0	0	100	11	0	1	0.0	43	0.0	0.0	0.0	0.0	0.0	44	0.0	0.00	0.00	0.00	0.00	Note 47
7	Vol/NH3	Poultry	NO	0.0	0.0	NON	100.00	WWH	1.000	YES	0.0	Poultry	0.67				0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Scrap	0.484	1.000		ORG	1.00	1.000	0.689	0.0	0.0	Eggs	4				0.0	Scrap	0.0	0.00	0.0200	0.00	0.0200	Note 49
Year	N	44	0	0.0	0.0	0	100	11	0	1	0.0	43	0.0	0.0	0.0	0.0	0.0	44	0.0	0.00	0.00	0.00	0.00	Note 47
8	Vol/NH3	Poultry	NO	0.0	0.0	NON	100.00	WWH	1.000	YES	0.0	Poultry	0.67				0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Scrap	0.484	1.000		ORG	1.00	1.000	0.689	0.0	0.0	Eggs	4				0.0	Scrap	0.0	0.00	0.0200	0.00	0.0200	Note 49
Year	N	44	0	0.0	0.0	0	100	1	0	1	0.0	43	0.0	0.0	0.0	0.0	0.0	44	0.0	0.00	0.00	0.00	0.00	Note 47
9	Vol/NH3	Poultry	NO	0.0	0.0	NON	100.00	SBA	1.000	YES	0.0	Poultry	0.65				0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Scrap	0.484	1.000		ORG	1.00	1.000	0.711	0.0	0.0	Eggs	4				0.0	Scrap	0.0	0.00	0.0200	0.00	0.0200	Note 49
Year	N	44	0	0.0	0.0	0	100	10	0	1	0.0	43	0.0	0.0	0.0	0.0	0.0	44	0.0	0.00	0.00	0.00	0.00	Note 47
10	Vol/NH3	Poultry	NO	0.0	0.0	NON	100.00	WBA	1.000	YES	0.0	Poultry	0.66				0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Scrap	0.484	1.000		ORG	1.00	1.000	0.712	0.0	0.0	Eggs	4				0.0	Scrap	0.0	0.00	0.0200	0.00	0.0200	Note 49

Year	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year10	Total	Total/year 1	
Area with crop, ha	0.64	0.15	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.83	1.30	Note 50

Possible additional non IPCC N2O-N emissions	Value												Kind of source	Total IPCC and non IPCC N2O	Note 51
N residues emissions, ratio of N2O-N to N:	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Current crops	4.88	3.51 Note 51
Increased soil N emissions, kg N2O-N/ha:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Total anthropogenic	4.88	3.51 Note 51
Natural background emissions, kg N2O-N/ha:	1.00	0.64	0.15	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.83	Total including natural	5.71	4.33 Note 51

N CHAIN STARTING WITH N FERTILIZER TO PRODUCE WINTER WHEAT FOR BIOETHANOL AND SHEEP MILK/MUTTON Note 43
AND CONTINUING WITH SHEEP DEEP LITTER TO PRODUCE WINTER WHEAT FOR SHEEP MILK/MUTTON Note 43

Year	Fertlizer/manure # Name	Store 1/0	Amounts Store	Amounts Field	Or-ganic 1/0	Nnorm propor tion, %	Crop # Name	Cereal benefit 1/0	Straw used 1/0	Crop use & leach	Use # Name	Fodder: Uses #21-61 Fed	Fodder: Uses #21-61 Food	N crop #71/ #72	Food/ bev #8	Fuel/ other #9	Manure handling # Name	Final N a-mounts	N2O-N emission IPCC 1996 Each	N2O-N emission IPCC 1996 Total	N2O-N emission IPCC 2006 Each	N2O-N emission IPCC 2006 Total	Note 44 Note 44 Note 44
Total	N																						Note 45
Year	N NH3																						Note 45
1-10	N leach																						Note 45
																							Note 45

RATIO OF N2O-N TO N IN FIRST CROP		TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED	33.3	29.9
ACCORDING TO	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	14.4	13.0
FIRST YEAR	0.0395	0.0216	TOTAL N AMOUNTS IN KG AND % LEACHED	63.5	57.1
TOTAL	0.0745	0.0398	TOTAL N AMOUNTS IN KG AND %	111.2	100.0

N2O-N/N in food/beverage/fuel/other 0.1680 0.0899 Note 46

Year																									
Year	N	1	0	100.0	100.0	0	100	119	0	1	97.8	51	64.3	9.1	0.0	0.0	10.8	53	55.1	2.29	2.96	1.34	1.62	Note 47
1	Vol/NH3	N	NO	0.0	2.2	NON	100.00	WWHB	1.000	YES	22.7	Sheep	0.84				0.0	Sheep	8.3	0.10	0.0125	0.10	0.0100	Note 48
	N leach		1.022	1.000		ORG	1.00	1.000	0.343	10.8	22.7	Milk/mutt	5				10.6	Deep	0.0	0.57	0.0200	0.17	0.0050	Note 49
Year	N	53	0	54.5	54.5	0	100	11	0	1	54.5	51	21.0	3.0	0.0	0.0	6.0	53	18.0	1.06	1.77	0.69	0.93	Note 47
2	Vol/NH3	Sheep	NO	0.0	0.0	NON	100.00	WWH	1.000	YES	27.4	Sheep	0.67				0.0	Sheep	2.7	0.03	0.0125	0.03	0.0100	Note 48
	N leach	Deep	0.600	1.162		ORG	1.00	1.000	0.614	6.0	27.4	Milk/mutt	5				5.9	Deep	0.0	0.69	0.0200	0.21	0.0050	Note 49
Year	N	53	0	17.8	17.8	0	100	11	0	1	17.8	51	6.9	1.0	0.0	0.0	2.0	53	5.9	0.35	0.58	0.23	0.30	Note 47
3	Vol/NH3	Sheep	NO	0.0	0.0	NON	100.00	WWH	1.000	YES	9.0	Sheep	0.67				0.0	Sheep	0.9	0.01	0.0125	0.01	0.0100	Note 48
	N leach	Deep	0.600	1.162		ORG	1.00	1.000	0.614	2.0	9.0	Milk/mutt	5				1.9	Deep	0.0	0.22	0.0200	0.07	0.0050	Note 49
Year	N	53	0	5.8	5.8	0	100	1	0	1	5.8	51	2.1	0.3	0.0	0.0	0.7	53	1.8	0.11	0.19	0.07	0.10	Note 47
4	Vol/NH3	Sheep	NO	0.0	0.0	NON	100.00	SBA	1.000	YES	3.1	Sheep	0.65				0.0	Sheep	0.3	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Deep	0.600	1.162		ORG	1.00	1.000	0.642	0.7	3.1	Milk/mutt	5				0.5	Deep	0.0	0.08	0.0200	0.02	0.0050	Note 49
Year	N	53	0	1.8	1.8	0	100	10	0	1	1.8	51	0.6	0.1	0.0	0.0	0.2	53	0.5	0.03	0.06	0.02	0.03	Note 47
5	Vol/NH3	Sheep	NO	0.0	0.0	NON	100.00	WBA	1.000	YES	0.9	Sheep	0.66				0.0	Sheep	0.1	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Deep	0.600	1.162		ORG	1.00	1.000	0.642	0.2	0.9	Milk/mutt	5				0.1	Deep	0.0	0.02	0.0200	0.01	0.0050	Note 49
Year	N	53	0	0.5	0.5	0	100	119	0	1	0.5	51	0.2	0.0	0.0	0.0	0.1	53	0.2	0.01	0.02	0.01	0.01	Note 47
6	Vol/NH3	Sheep	NO	0.0	0.0	NON	100.00	WWHB	1.000	YES	0.3	Sheep	0.84				0.0	Sheep	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Deep	0.600	1.162		ORG	1.00	1.000	0.614	0.1	0.3	Milk/mutt	5				0.1	Deep	0.0	0.01	0.0200	0.00	0.0050	Note 49
Year	N	53	0	0.2	0.2	0	100	11	0	1	0.2	51	0.1	0.0	0.0	0.0	0.0	53	0.1	0.00	0.01	0.00	0.00	Note 47
7	Vol/NH3	Sheep	NO	0.0	0.0	NON	100.00	WWH	1.000	YES	0.1	Sheep	0.67				0.0	Sheep	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Deep	0.600	1.162		ORG	1.00	1.000	0.614	0.0	0.1	Milk/mutt	5				0.0	Deep	0.0	0.00	0.0200	0.00	0.0050	Note 49
Year	N	53	0	0.1	0.1	0	100	11	0	1	0.1	51	0.0	0.0	0.0	0.0	0.0	53	0.0	0.00	0.00	0.00	0.00	Note 47
8	Vol/NH3	Sheep	NO	0.0	0.0	NON	100.00	WWH	1.000	YES	0.0	Sheep	0.67				0.0	Sheep	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Deep	0.600	1.162		ORG	1.00	1.000	0.614	0.0	0.0	Milk/mutt	5				0.0	Deep	0.0	0.00	0.0200	0.00	0.0050	Note 49
Year	N	53	0	0.0	0.0	0	100	1	0	1	0.0	51	0.0	0.0	0.0	0.0	0.0	53	0.0	0.00	0.00	0.00	0.00	Note 47
9	Vol/NH3	Sheep	NO	0.0	0.0	NON	100.00	SBA	1.000	YES	0.0	Sheep	0.65				0.0	Sheep	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Deep	0.600	1.162		ORG	1.00	1.000	0.642	0.0	0.0	Milk/mutt	5				0.0	Deep	0.0	0.00	0.0200	0.00	0.0050	Note 49
Year	N	53	0	0.0	0.0	0	100	10	0	1	0.0	51	0.0	0.0	0.0	0.0	0.0	53	0.0	0.00	0.00	0.00	0.00	Note 47
10	Vol/NH3	Sheep	NO	0.0	0.0	NON	100.00	WBA	1.000	YES	0.0	Sheep	0.66				0.0	Sheep	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Deep	0.600	1.162		ORG	1.00	1.000	0.642	0.0	0.0	Milk/mutt	5				0.0	Deep	0.0	0.00	0.0200	0.00	0.0050	Note 49

Year	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year10	Total	Total/year 1	
Area with crop, ha	0.64	0.20	0.07	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.95	1.49	Note 50

Possible additional non IPCC N2O-N emissions	Value												Kind of source	Total IPCC and non IPCC N2O		Note 51
N residues emissions, ratio of N2O-N to N:	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Current crops	5.59	2.99	Note 51
Increased soil N emissions, kg N2O-N/ha:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Total anthropogenic	5.59	2.99	Note 51
Natural background emissions, kg N2O-N/ha:	1.00	0.64	0.20	0.07	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.95	Total including natural	6.54	3.94	Note 51

N CHAIN STARTING WITH N FERTILIZER TO PRODUCE WINTER WHEAT FOR BIOETHANOL AND SHEEP MILK/MUTTON Note 43
AND CONTINUING WITH MANURE FROM GRAZING SHEEP TO PRODUCE WINTER WHEAT FOR SHEEP MILK/MUTTON Note 43

Year	Fertlizer/manure # Name	Store 1/0	Amounts Store	Amounts Field	Or-ganic 1/0	Nnorm propor tion, %	Crop # Name	Cereal benefit 1/0	Straw used 1/0	Crop use & leach	Use # Name	Fodder: Uses #21-61 Fed	Fodder: Uses #21-61 Food	N crop #71/ #72	Food/ bev #8	Fuel/ other #9	Manure handling # Name	Final N a-mounts	N2O-N emission IPCC 1996 Each	N2O-N emission IPCC 1996 Total	N2O-N emission IPCC 2006 Each	N2O-N emission IPCC 2006 Total	Note 44 Note 44 Note 44
Total	N																						Note 45
Year	N NH3																						Note 45
1-10	N leach																						Note 45
																							Note 45
N2O-N/N in food/beverage/fuel/other																				0.1769		0.0795	Note 46
Year	N		1	0	100.0	100.0	0	100	119	0	1	97.8	51	64.3	9.1	0.0	0.0	10.8	54	55.1	2.46	3.05	1.11	1.30	Note 47
1	Vol/NH3	N		NO	0.0	2.2	NON	100.00	WWHB	1.000	YES	22.7	Sheep	0.84				0.0	Sheep	0.0	0.02	0.0125	0.02	0.0100	Note 48
	N leach			1.022	1.000		ORG	1.00	1.000	0.343	10.8	22.7	Milk/mutt	5				10.6	Graz	0.0	0.57	0.0200	0.17	0.0000	Note 49
Year	N		54	0	55.1	55.1	0	100	11	0	1	51.3	51	15.9	2.3	0.0	0.0	5.7	54	13.7	0.98	1.76	0.58	0.84	Note 47
2	Vol/NH3	Sheep		NO	0.0	3.9	NON	100.00	WWH	1.000	YES	29.7	Sheep	0.67				0.0	Sheep	0.0	0.04	0.0125	0.04	0.0100	Note 48
	N leach	Graz		0.484	1.000		ORG	1.00	1.000	0.689	5.7	29.7	Milk/mutt	5				5.5	Graz	0.0	0.74	0.0200	0.22	0.0000	Note 49
Year	N		54	0	13.7	13.7	0	100	11	0	1	12.7	51	4.0	0.6	0.0	0.0	1.4	54	3.4	0.24	0.44	0.14	0.21	Note 47
3	Vol/NH3	Sheep		NO	0.0	1.0	NON	100.00	WWH	1.000	YES	7.4	Sheep	0.67				0.0	Sheep	0.0	0.01	0.0125	0.01	0.0100	Note 48
	N leach	Graz		0.484	1.000		ORG	1.00	1.000	0.689	1.4	7.4	Milk/mutt	5				1.4	Graz	0.0	0.18	0.0200	0.06	0.0000	Note 49
Year	N		54	0	3.4	3.4	0	100	1	0	1	3.2	51	0.9	0.1	0.0	0.0	0.4	54	0.8	0.06	0.11	0.04	0.05	Note 47
4	Vol/NH3	Sheep		NO	0.0	0.2	NON	100.00	SBA	1.000	YES	1.9	Sheep	0.65				0.0	Sheep	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Graz		0.484	1.000		ORG	1.00	1.000	0.711	0.4	1.9	Milk/mutt	5				0.3	Graz	0.0	0.05	0.0200	0.01	0.0000	Note 49
Year	N		54	0	0.8	0.8	0	100	10	0	1	0.7	51	0.2	0.0	0.0	0.0	0.1	54	0.2	0.01	0.02	0.01	0.01	Note 47
5	Vol/NH3	Sheep		NO	0.0	0.1	NON	100.00	WBA	1.000	YES	0.4	Sheep	0.66				0.0	Sheep	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Graz		0.484	1.000		ORG	1.00	1.000	0.712	0.1	0.4	Milk/mutt	5				0.1	Graz	0.0	0.01	0.0200	0.00	0.0000	Note 49
Year	N		54	0	0.2	0.2	0	100	119	0	1	0.2	51	0.1	0.0	0.0	0.0	0.0	54	0.0	0.00	0.01	0.00	0.00	Note 47
6	Vol/NH3	Sheep		NO	0.0	0.0	NON	100.00	WWHB	1.000	YES	0.1	Sheep	0.84				0.0	Sheep	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Graz		0.484	1.000		ORG	1.00	1.000	0.689	0.0	0.1	Milk/mutt	5				0.0	Graz	0.0	0.00	0.0200	0.00	0.0000	Note 49
Year	N		54	0	0.0	0.0	0	100	11	0	1	0.0	51	0.0	0.0	0.0	0.0	0.0	54	0.0	0.00	0.00	0.00	0.00	Note 47
7	Vol/NH3	Sheep		NO	0.0	0.0	NON	100.00	WWH	1.000	YES	0.0	Sheep	0.67				0.0	Sheep	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Graz		0.484	1.000		ORG	1.00	1.000	0.689	0.0	0.0	Milk/mutt	5				0.0	Graz	0.0	0.00	0.0200	0.00	0.0000	Note 49
Year	N		54	0	0.0	0.0	0	100	11	0	1	0.0	51	0.0	0.0	0.0	0.0	0.0	54	0.0	0.00	0.00	0.00	0.00	Note 47
8	Vol/NH3	Sheep		NO	0.0	0.0	NON	100.00	WWH	1.000	YES	0.0	Sheep	0.67				0.0	Sheep	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Graz		0.484	1.000		ORG	1.00	1.000	0.689	0.0	0.0	Milk/mutt	5				0.0	Graz	0.0	0.00	0.0200	0.00	0.0000	Note 49
Year	N		54	0	0.0	0.0	0	100	1	0	1	0.0	51	0.0	0.0	0.0	0.0	0.0	54	0.0	0.00	0.00	0.00	0.00	Note 47
9	Vol/NH3	Sheep		NO	0.0	0.0	NON	100.00	SBA	1.000	YES	0.0	Sheep	0.65				0.0	Sheep	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Graz		0.484	1.000		ORG	1.00	1.000	0.711	0.0	0.0	Milk/mutt	5				0.0	Graz	0.0	0.00	0.0200	0.00	0.0000	Note 49
Year	N		54	0	0.0	0.0	0	100	10	0	1	0.0	51	0.0	0.0	0.0	0.0	0.0	54	0.0	0.00	0.00	0.00	0.00	Note 47
10	Vol/NH3	Sheep		NO	0.0	0.0	NON	100.00	WBA	1.000	YES	0.0	Sheep	0.66				0.0	Sheep	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Graz		0.484	1.000		ORG	1.00	1.000	0.712	0.0	0.0	Milk/mutt	5				0.0	Graz	0.0	0.00	0.0200	0.00	0.0000	Note 49

RATIO OF N2O-N TO N IN FIRST CROP — TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED 30.5 30.5

		IPCC 1996	IPCC 2006			
ACCORDING TO				TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	7.3	7.3
FIRST YEAR		0.0406	0.0174	TOTAL N AMOUNTS IN KG AND % LEACHED	62.2	62.2
TOTAL		0.0718	0.0323	TOTAL N AMOUNTS IN KG AND %	100.0	100.0

Year	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year10	Total	Total/year 1	
Area with crop, ha	0.64	0.17	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.86	1.35	Note 50

Possible additional non IPCC N2O-N emissions	Value												Kind of source	Total IPCC and non IPCC N2O		Note 51
N residues emissions, ratio of N2O-N to N:	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Current crops	5.39	2.42	Note 51
Increased soil N emissions, kg N2O-N/ha:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Total anthropogenic	5.39	2.42	Note 51
Natural background emissions, kg N2O-N/ha:	1.00	0.64	0.17	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.86	Total including natural	6.25	3.28	Note 51

N CHAIN STARTING WITH N FERTILIZER TO PRODUCE WINTER WHEAT FOR BIOETHANOL AND GOAT MILK/MEAT Note 43
AND CONTINUING WITH GOAT DEEP LITTER TO PRODUCE WINTER WHEAT FOR GOAT MILK/MEAT Note 43

Year	Fertlizer/manure # Name	Store 1/0	Amounts Store	Amounts Field	Organic 1/0	Nnorm proportion, %	Crop # Name	Cereal benefit 1/0	Straw used 1/0	Crop use & leach	Use # Name	Fodder: Uses #21-61 Fed	Fodder: Uses #21-61 Food	N crop #71/ #72	Food/ bev #8	Fuel/ other #9	Manure handling # Name	Final N amounts	N2O-N emission IPCC 1996 Each	N2O-N emission IPCC 1996 Total	N2O-N emission IPCC 2006 Each	N2O-N emission IPCC 2006 Total	Note 44 Note 44 Note 44
Total	N																						Note 45
Year	N NH3																						Note 45
1-10	N leach																						Note 45
																							Note 45

RATIO OF N2O-N TO N IN FIRST CROP		TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED	25.5	23.0
ACCORDING TO IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	33.2	30.0
FIRST YEAR 0.0402	0.0218	TOTAL N AMOUNTS IN KG AND % LEACHED	52.0	46.9
TOTAL 0.0682	0.0376	TOTAL N AMOUNTS IN KG AND %	110.8	100.0

N2O-N/N in food/beverage/fuel/other 0.2005 0.1105 Note 46

Year	N	1	0	100.0	100.0	0	100	119	0	1	97.8	61	64.3	6.2	0.0	0.0	10.8	63	58.1	2.34	3.02	1.36	1.64	Note 47
1	Vol/NH3	N	NO	0.0	2.2	NON	100.00	WWHB	1.000	YES	22.7	Goat	0.84				0.0	Goat	8.7	0.11	0.0125	0.11	0.0100	Note 48
	N leach		1.022	1.000		ORG	1.00	1.000	0.343	10.8	22.7	Milk/meat	6				10.6	Deep	0.0	0.57	0.0200	0.17	0.0050	Note 49
Year	N	63	0	57.4	57.4	0	100	11	0	1	43.0	61	16.6	1.6	0.0	0.0	4.8	63	15.0	0.85	1.56	0.55	0.88	Note 47
2	Vol/NH3	Goat	NO	0.0	14.3	NON	100.00	WWH	1.000	YES	21.7	Goat	0.67				0.0	Goat	2.3	0.17	0.0125	0.17	0.0100	Note 48
	N leach	Deep	0.600	1.162		ORG	1.00	1.000	0.614	4.8	21.7	Milk/meat	6				4.7	Deep	0.0	0.54	0.0200	0.16	0.0050	Note 49
Year	N	63	0	14.8	14.8	0	100	11	0	1	11.1	61	4.3	0.4	0.0	0.0	1.2	63	3.9	0.22	0.40	0.14	0.23	Note 47
3	Vol/NH3	Goat	NO	0.0	3.7	NON	100.00	WWH	1.000	YES	5.6	Goat	0.67				0.0	Goat	0.6	0.04	0.0125	0.04	0.0100	Note 48
	N leach	Deep	0.600	1.162		ORG	1.00	1.000	0.614	1.2	5.6	Milk/meat	6				1.2	Deep	0.0	0.14	0.0200	0.04	0.0050	Note 49
Year	N	63	0	3.8	3.8	0	100	1	0	1	2.9	61	1.0	0.1	0.0	0.0	0.3	63	0.9	0.05	0.10	0.04	0.06	Note 47
4	Vol/NH3	Goat	NO	0.0	1.0	NON	100.00	SBA	1.000	YES	1.5	Goat	0.65				0.0	Goat	0.1	0.01	0.0125	0.01	0.0100	Note 48
	N leach	Deep	0.600	1.162		ORG	1.00	1.000	0.642	0.3	1.5	Milk/meat	6				0.3	Deep	0.0	0.04	0.0200	0.01	0.0050	Note 49
Year	N	63	0	0.9	0.9	0	100	10	0	1	0.7	61	0.2	0.0	0.0	0.0	0.1	63	0.2	0.01	0.02	0.01	0.01	Note 47
5	Vol/NH3	Goat	NO	0.0	0.2	NON	100.00	WBA	1.000	YES	0.4	Goat	0.66				0.0	Goat	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Deep	0.600	1.162		ORG	1.00	1.000	0.642	0.1	0.4	Milk/meat	6				0.1	Deep	0.0	0.01	0.0200	0.00	0.0050	Note 49
Year	N	63	0	0.2	0.2	0	100	119	0	1	0.2	61	0.1	0.0	0.0	0.0	0.0	63	0.1	0.00	0.01	0.00	0.00	Note 47
6	Vol/NH3	Goat	NO	0.0	0.1	NON	100.00	WWHB	1.000	YES	0.1	Goat	0.84				0.0	Goat	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Deep	0.600	1.162		ORG	1.00	1.000	0.614	0.0	0.1	Milk/meat	6				0.0	Deep	0.0	0.00	0.0200	0.00	0.0050	Note 49
Year	N	63	0	0.1	0.1	0	100	11	0	1	0.0	61	0.0	0.0	0.0	0.0	0.0	63	0.0	0.00	0.00	0.00	0.00	Note 47
7	Vol/NH3	Goat	NO	0.0	0.0	NON	100.00	WWH	1.000	YES	0.0	Goat	0.67				0.0	Goat	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Deep	0.600	1.162		ORG	1.00	1.000	0.614	0.0	0.0	Milk/meat	6				0.0	Deep	0.0	0.00	0.0200	0.00	0.0050	Note 49
Year	N	63	0	0.0	0.0	0	100	11	0	1	0.0	61	0.0	0.0	0.0	0.0	0.0	63	0.0	0.00	0.00	0.00	0.00	Note 47
8	Vol/NH3	Goat	NO	0.0	0.0	NON	100.00	WWH	1.000	YES	0.0	Goat	0.67				0.0	Goat	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Deep	0.600	1.162		ORG	1.00	1.000	0.614	0.0	0.0	Milk/meat	6				0.0	Deep	0.0	0.00	0.0200	0.00	0.0050	Note 49
Year	N	63	0	0.0	0.0	0	100	1	0	1	0.0	61	0.0	0.0	0.0	0.0	0.0	63	0.0	0.00	0.00	0.00	0.00	Note 47
9	Vol/NH3	Goat	NO	0.0	0.0	NON	100.00	SBA	1.000	YES	0.0	Goat	0.65				0.0	Goat	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Deep	0.600	1.162		ORG	1.00	1.000	0.642	0.0	0.0	Milk/meat	6				0.0	Deep	0.0	0.00	0.0200	0.00	0.0050	Note 49
Year	N	63	0	0.0	0.0	0	100	10	0	1	0.0	61	0.0	0.0	0.0	0.0	0.0	63	0.0	0.00	0.00	0.00	0.00	Note 47
10	Vol/NH3	Goat	NO	0.0	0.0	NON	100.00	WBA	1.000	YES	0.0	Goat	0.66				0.0	Goat	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Deep	0.600	1.162		ORG	1.00	1.000	0.642	0.0	0.0	Milk/meat	6				0.0	Deep	0.0	0.00	0.0200	0.00	0.0050	Note 49

Year	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year10	Total	Total/year 1	
Area with crop, ha	0.64	0.21	0.06	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.93	1.46	Note 50

Possible additional non IPCC N2O-N emissions	Value												Kind of source	Total IPCC and non IPCC N2O		Note 51
N residues emissions, ratio of N2O-N to N:	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Current crops	5.12	2.82	Note 51
Increased soil N emissions, kg N2O-N/ha:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Total anthropogenic	5.12	2.82	Note 51
Natural background emissions, kg N2O-N/ha:	1.00	0.64	0.21	0.06	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.93	Total including natural	6.05	3.75	Note 51

N CHAIN STARTING WITH N FERTILIZER TO PRODUCE WINTER WHEAT FOR BIOETHANOL AND GOAT MILK/MEAT Note 43
AND CONTINUING WITH MANURE FROM GRAZING GOATS TO PRODUCE WINTER WHEAT FOR GOAT MILK/MEAT Note 43

Year	Fertlizer/manure # Name	Store 1/0	Amounts Store	Amounts Field	Organic 1/0	Nnorm proportion, %	Crop # Name	Cereal benefit 1/0	Straw used 1/0	Crop use & leach	Use # Name	Fodder: Uses #21-61 Fed	Fodder: Uses #21-61 Food	N crop #71/ #72	Food/ bev #8	Fuel/ other #9	Manure handling # Name	Final N amounts	N2O-N emission IPCC 1996 Each	N2O-N emission IPCC 1996 Total	N2O-N emission IPCC 2006 Each	N2O-N emission IPCC 2006 Total	Note 44 Note 44 Note 44
Total	N																						Note 45
Year	N NH3																						Note 45
1-10	N leach																						Note 45
																							Note 45

RATIO OF N2O-N TO N IN FIRST CROP		TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED	27.2	27.2	
ACCORDING TO	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	7.7	7.7
FIRST YEAR	0.0414	0.0251	TOTAL N AMOUNTS IN KG AND % LEACHED	65.1	65.1
TOTAL	0.0751	0.0438	TOTAL N AMOUNTS IN KG AND %	100.0	100.0

N2O-N/N in food/beverage/fuel/other 0.2070 0.1207 Note 46

Year	N	1	0	100.0	100.0	0	100	119	0	1	97.8	61	64.3	6.2	0.0	0.0	10.8	64	58.1	2.52	3.11	1.69	1.88	Note 47
1	Vol/NH3	N	NO	0.0	2.2	NON	100.00	WWHB	1.000	YES	22.7	Goat	0.84				0.0	Goat	0.0	0.02	0.0125	0.02	0.0100	Note 48
	N leach		1.022	1.000		ORG	1.00	1.000	0.343	10.8	22.7	Milk/meat	6				10.6	Graz	0.0	0.57	0.0200	0.17	0.0100	Note 49
Year	N	64	0	58.1	58.1	0	100	11	0	1	54.0	61	16.8	1.6	0.0	0.0	6.0	64	15.2	1.05	1.87	0.77	1.04	Note 47
2	Vol/NH3	Goat	NO	0.0	4.1	NON	100.00	WWH	1.000	YES	31.3	Goat	0.67				0.0	Goat	0.0	0.04	0.0125	0.04	0.0100	Note 48
	N leach	Graz	0.484	1.000		ORG	1.00	1.000	0.689	6.0	31.3	Milk/meat	6				5.8	Graz	0.0	0.78	0.0200	0.23	0.0100	Note 49
Year	N	64	0	15.2	15.2	0	100	11	0	1	14.1	61	4.4	0.4	0.0	0.0	1.6	64	4.0	0.28	0.49	0.20	0.27	Note 47
3	Vol/NH3	Goat	NO	0.0	1.1	NON	100.00	WWH	1.000	YES	8.2	Goat	0.67				0.0	Goat	0.0	0.01	0.0125	0.01	0.0100	Note 48
	N leach	Graz	0.484	1.000		ORG	1.00	1.000	0.689	1.6	8.2	Milk/meat	6				1.5	Graz	0.0	0.20	0.0200	0.06	0.0100	Note 49
Year	N	64	0	4.0	4.0	0	100	1	0	1	3.7	61	1.1	0.1	0.0	0.0	0.4	64	1.0	0.07	0.13	0.05	0.07	Note 47
4	Vol/NH3	Goat	NO	0.0	0.3	NON	100.00	SBA	1.000	YES	2.2	Goat	0.65				0.0	Goat	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Graz	0.484	1.000		ORG	1.00	1.000	0.711	0.4	2.2	Milk/meat	6				0.3	Graz	0.0	0.06	0.0200	0.02	0.0100	Note 49
Year	N	64	0	1.0	1.0	0	100	10	0	1	0.9	61	0.3	0.0	0.0	0.0	0.1	64	0.2	0.02	0.03	0.01	0.02	Note 47
5	Vol/NH3	Goat	NO	0.0	0.1	NON	100.00	WBA	1.000	YES	0.5	Goat	0.66				0.0	Goat	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Graz	0.484	1.000		ORG	1.00	1.000	0.712	0.1	0.5	Milk/meat	6				0.1	Graz	0.0	0.01	0.0200	0.00	0.0100	Note 49
Year	N	64	0	0.2	0.2	0	100	119	0	1	0.2	61	0.1	0.0	0.0	0.0	0.0	64	0.1	0.00	0.01	0.00	0.00	Note 47
6	Vol/NH3	Goat	NO	0.0	0.0	NON	100.00	WWHB	1.000	YES	0.1	Goat	0.84				0.0	Goat	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Graz	0.484	1.000		ORG	1.00	1.000	0.689	0.0	0.1	Milk/meat	6				0.0	Graz	0.0	0.00	0.0200	0.00	0.0100	Note 49
Year	N	64	0	0.1	0.1	0	100	11	0	1	0.1	61	0.0	0.0	0.0	0.0	0.0	64	0.0	0.00	0.00	0.00	0.00	Note 47
7	Vol/NH3	Goat	NO	0.0	0.0	NON	100.00	WWH	1.000	YES	0.0	Goat	0.67				0.0	Goat	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Graz	0.484	1.000		ORG	1.00	1.000	0.689	0.0	0.0	Milk/meat	6				0.0	Graz	0.0	0.00	0.0200	0.00	0.0100	Note 49
Year	N	64	0	0.0	0.0	0	100	11	0	1	0.0	61	0.0	0.0	0.0	0.0	0.0	64	0.0	0.00	0.00	0.00	0.00	Note 47
8	Vol/NH3	Goat	NO	0.0	0.0	NON	100.00	WWH	1.000	YES	0.0	Goat	0.67				0.0	Goat	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Graz	0.484	1.000		ORG	1.00	1.000	0.689	0.0	0.0	Milk/meat	6				0.0	Graz	0.0	0.00	0.0200	0.00	0.0100	Note 49
Year	N	64	0	0.0	0.0	0	100	1	0	1	0.0	61	0.0	0.0	0.0	0.0	0.0	64	0.0	0.00	0.00	0.00	0.00	Note 47
9	Vol/NH3	Goat	NO	0.0	0.0	NON	100.00	SBA	1.000	YES	0.0	Goat	0.65				0.0	Goat	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Graz	0.484	1.000		ORG	1.00	1.000	0.711	0.0	0.0	Milk/meat	6				0.0	Graz	0.0	0.00	0.0200	0.00	0.0100	Note 49
Year	N	64	0	0.0	0.0	0	100	10	0	1	0.0	61	0.0	0.0	0.0	0.0	0.0	64	0.0	0.00	0.00	0.00	0.00	Note 47
10	Vol/NH3	Goat	NO	0.0	0.0	NON	100.00	WBA	1.000	YES	0.0	Goat	0.66				0.0	Goat	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Graz	0.484	1.000		ORG	1.00	1.000	0.712	0.0	0.0	Milk/meat	6				0.0	Graz	0.0	0.00	0.0200	0.00	0.0100	Note 49

Year	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year10	Total	Total/year 1	
Area with crop, ha	0.64	0.17	0.05	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.88	1.38	Note 50

Possible additional non IPCC N2O-N emissions	Value												Kind of source	Total IPCC and non IPCC N2O		Note 51
N residues emissions, ratio of N2O-N to N:	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Current crops	5.64	3.29	Note 51
Increased soil N emissions, kg N2O-N/ha:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Total anthropogenic	5.64	3.29	Note 51
Natural background emissions, kg N2O-N/ha:	1.00	0.64	0.17	0.05	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.88	Total including natural	6.52	4.17	Note 51

N CHAIN STARTING WITH N FERTILIZER TO PRODUCE WINTER WHEAT FOR BIOETHANOL AND HIGH N CROP Note 43
AND CONTINUING WITH GREEN MANURE HIGH N TO PRODUCE WINTER WHEAT FOR CATTLE DAIRY Note 43

Year	Fertlizer/manure # Name	Store 1/0	Amounts Store	Amounts Field	Organic 1/0	Nnorm proportion, %	Crop # Name	Cereal benefit 1/0	Straw used 1/0	Crop use & leach	Use # Name	Fodder: Uses #21-61 Fed	Fodder: Uses #21-61 Food	N crop #71/ #72	Food/ bev #8	Fuel/ other #9	Manure handling # Name	Final N amounts	N2O-N emission IPCC 1996 Each	N2O-N emission IPCC 1996 Total	N2O-N emission IPCC 2006 Each	N2O-N emission IPCC 2006 Total	Note 44 Note 44 Note 44

Total	N	RATIO OF N2O-N TO N IN FIRST CROP		TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED														28.5	28.4	2.36	3.74	2.06	2.67	Note 45
Year	N NH3	ACCORDING TO	IPCC 1996	IPCC 2006								TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3						28.4	28.3	0.28		0.28		Note 45
1-10	N leach	FIRST YEAR	0.0259	0.0174								TOTAL N AMOUNTS IN KG AND % LEACHED						43.5	43.3	1.09		0.33		Note 45
		TOTAL	0.0498	0.0356								TOTAL N AMOUNTS IN KG AND %						100.5	100.0					Note 45

N2O-N/N in food/beverage/fuel/other 0.1309 0.0936 Note 46

Year	N	1	0	100.0	100.0	0	100	119	0	1	97.8	71	0.0	0.0	64.3	0.0	10.8	71	64.3	1.35	1.94	1.11	1.30	Note 47
1	Vol/NH3	N	NO	0.0	2.2	NON	100.00	WWHB	1.000	YES	22.7	N crop	0.84				0.0	Green	0.0	0.02	0.0125	0.02	0.0100	Note 48
	N leach		1.022	1.000		ORG	1.00	1.000	0.343	10.8	22.7	high N	71				10.6	High	0.0	0.57	0.0000	0.17	0.0000	Note 49
Year	N	71	0	64.3	64.3	0	100	11	0	1	48.2	21	28.9	6.8	0.0	0.0	5.3	21	22.1	0.69	1.22	0.65	0.93	Note 47
2	Vol/NH3	Green	NO	0.0	16.1	NON	100.00	WWH	1.000	YES	14.0	Cattle	0.67				0.0	Cattle	1.8	0.18	0.0125	0.18	0.0100	Note 48
	N leach	High	0.933	1.000		ORG	1.00	1.000	0.400	5.3	14.0	Dairy	2				5.2	Liquid	0.0	0.35	0.0010	0.10	0.0050	Note 49
Year	N	21	0	20.7	20.7	0	100	11	0	1	15.5	21	9.3	2.2	0.0	0.0	1.7	21	7.1	0.22	0.39	0.21	0.30	Note 47
3	Vol/NH3	Cattle	NO	0.0	5.2	NON	100.00	WWH	1.000	YES	4.5	Cattle	0.67				0.0	Cattle	0.6	0.06	0.0125	0.06	0.0100	Note 48
	N leach	Liquid	0.933	1.016		ORG	1.00	1.000	0.400	1.7	4.5	Dairy	2				1.7	Liquid	0.0	0.11	0.0010	0.03	0.0050	Note 49
Year	N	21	0	6.6	6.6	0	100	1	0	1	5.0	21	2.8	0.6	0.0	0.0	0.6	21	2.1	0.07	0.13	0.07	0.10	Note 47
4	Vol/NH3	Cattle	NO	0.0	1.7	NON	100.00	SBA	1.000	YES	1.6	Cattle	0.65				0.0	Cattle	0.2	0.02	0.0125	0.02	0.0100	Note 48
	N leach	Liquid	0.933	1.016		ORG	1.00	1.000	0.443	0.6	1.6	Dairy	2				0.4	Liquid	0.0	0.04	0.0010	0.01	0.0050	Note 49
Year	N	21	0	2.0	2.0	0	100	10	0	1	1.5	21	0.8	0.2	0.0	0.0	0.2	21	0.6	0.02	0.04	0.02	0.03	Note 47
5	Vol/NH3	Cattle	NO	0.0	0.5	NON	100.00	WBA	1.000	YES	0.5	Cattle	0.66				0.0	Cattle	0.1	0.01	0.0125	0.01	0.0100	Note 48
	N leach	Liquid	0.933	1.016		ORG	1.00	1.000	0.444	0.2	0.5	Dairy	2				0.1	Liquid	0.0	0.01	0.0010	0.00	0.0050	Note 49
Year	N	21	0	0.6	0.6	0	100	119	0	1	0.4	71	0.0	0.0	0.3	0.0	0.0	71	0.3	0.01	0.01	0.01	0.01	Note 47
6	Vol/NH3	Cattle	NO	0.0	0.1	NON	100.00	WWHB	1.000	YES	0.1	N crop	0.84				0.0	Green	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Liquid	0.933	1.016		ORG	1.00	1.000	0.400	0.0	0.1	high N	71				0.0	High	0.0	0.00	0.0000	0.00	0.0000	Note 49
Year	N	71	0	0.3	0.3	0	100	11	0	1	0.2	21	0.1	0.0	0.0	0.0	0.0	21	0.1	0.00	0.01	0.00	0.00	Note 47
7	Vol/NH3	Green	NO	0.0	0.1	NON	100.00	WWH	1.000	YES	0.1	Cattle	0.67				0.0	Cattle	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	High	0.933	1.000		ORG	1.00	1.000	0.400	0.0	0.1	Dairy	2				0.0	Liquid	0.0	0.00	0.0010	0.00	0.0050	Note 49
Year	N	21	0	0.1	0.1	0	100	11	0	1	0.1	21	0.0	0.0	0.0	0.0	0.0	21	0.0	0.00	0.00	0.00	0.00	Note 47
8	Vol/NH3	Cattle	NO	0.0	0.0	NON	100.00	WWH	1.000	YES	0.0	Cattle	0.67				0.0	Cattle	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Liquid	0.933	1.016		ORG	1.00	1.000	0.400	0.0	0.0	Dairy	2				0.0	Liquid	0.0	0.00	0.0010	0.00	0.0050	Note 49
Year	N	21	0	0.0	0.0	0	100	1	0	1	0.0	21	0.0	0.0	0.0	0.0	0.0	21	0.0	0.00	0.00	0.00	0.00	Note 47
9	Vol/NH3	Cattle	NO	0.0	0.0	NON	100.00	SBA	1.000	YES	0.0	Cattle	0.65				0.0	Cattle	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Liquid	0.933	1.016		ORG	1.00	1.000	0.443	0.0	0.0	Dairy	2				0.0	Liquid	0.0	0.00	0.0010	0.00	0.0050	Note 49
Year	N	21	0	0.0	0.0	0	100	10	0	1	0.0	21	0.0	0.0	0.0	0.0	0.0	21	0.0	0.00	0.00	0.00	0.00	Note 47
10	Vol/NH3	Cattle	NO	0.0	0.0	NON	100.00	WBA	1.000	YES	0.0	Cattle	0.66				0.0	Cattle	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Liquid	0.933	1.016		ORG	1.00	1.000	0.444	0.0	0.0	Dairy	2				0.0	Liquid	0.0	0.00	0.0010	0.00	0.0050	Note 49

Year	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year10	Total	Total/year 1	
Area with crop, ha	0.64	0.37	0.12	0.05	0.01	0.00	0.00	0.00	0.00	0.00	1.20	1.88	Note 50

Possible additional non IPCC N2O-N emissions	Value												Kind of source	Total IPCC and non IPCC N2O		Note 51
N residues emissions, ratio of N2O-N to N:	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Current crops	3.74	2.67	Note 51
Increased soil N emissions, kg N2O-N/ha:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Total anthropogenic	3.74	2.67	Note 51
Natural background emissions, kg N2O-N/ha:	1.00	0.64	0.37	0.12	0.05	0.01	0.00	0.00	0.00	0.00	0.00	1.20	Total including natural	4.94	3.87	Note 51

N CHAIN STARTING WITH N FERTILIZER TO PRODUCE WINTER WHEAT FOR BIOETHANOL AND LOW N CROP Note 43
AND CONTINUING WITH GREEN MANURE LOW N TO PRODUCE WINTER WHEAT FOR CATTLE DAIRY Note 43

Year	Fertlizer/manure # Name	Store 1/0	Amounts Store	Amounts Field	Organic 1/0	Nnorm proportion, %	Crop # Name	Cereal benefit 1/0	Straw used 1/0	Crop use & leach	Use # Name	Fodder: Uses #21-61 Fed	Fodder: Uses #21-61 Food	N crop #71/ #72	Food/ bev #8	Fuel/ other #9	Manure handling # Name	Final N amounts	N2O-N emission IPCC 1996 Each	N2O-N emission IPCC 1996 Total	N2O-N emission IPCC 2006 Each	N2O-N emission IPCC 2006 Total	Note 44 Note 44 Note 44
Total	N																						Note 45
Year	N NH3																						Note 45
1-10	N leach																						Note 45

RATIO OF N2O-N TO N IN FIRST CROP	TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED	23.2	23.1	
ACCORDING TO IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	24.1	24.0
FIRST YEAR 0.0259	0.0174	TOTAL N AMOUNTS IN KG AND % LEACHED	53.0	52.9
TOTAL 0.0504	0.0336	TOTAL N AMOUNTS IN KG AND %	100.3	100.0

N2O-N/N in food/beverage/fuel/other																						0.1630		0.1088	Note 46
Year	N	1	0	100.0	100.0	0	100	119	0	1	97.8	72	0.0	0.0	64.3	0.0	10.8	72	64.3	1.35	1.94	1.11	1.30	Note 47
1	Vol/NH3	N	NO	0.0	2.2	NON	100.00	WWHB	1.000	YES	22.7	N crop	0.84				0.0	Green	0.0	0.02	0.0125	0.02	0.0100	Note 48
	N leach		1.022	1.000		ORG	1.00	1.000	0.343	10.8	22.7	low N	72				10.6	Low	0.0	0.57	0.0000	0.17	0.0000	Note 49
Year	N	72	0	64.3	64.3	0	100	11	0	1	48.2	21	16.5	3.9	0.0	0.0	5.3	21	12.6	0.68	1.51	0.61	0.97	Note 47
2	Vol/NH3	Green	NO	0.0	16.1	NON	100.00	WWH	1.000	YES	26.4	Cattle	0.67				0.0	Cattle	1.0	0.17	0.0125	0.17	0.0100	Note 48
	N leach	Low	0.533	1.000		ORG	1.00	1.000	0.657	5.3	26.4	Dairy	2				5.2	Liquid	0.0	0.66	0.0010	0.20	0.0050	Note 49
Year	N	21	0	11.8	11.8	0	100	11	0	1	8.9	21	5.3	1.3	0.0	0.0	1.0	21	4.1	0.13	0.22	0.12	0.17	Note 47
3	Vol/NH3	Cattle	NO	0.0	3.0	NON	100.00	WWH	1.000	YES	2.6	Cattle	0.67				0.0	Cattle	0.3	0.03	0.0125	0.03	0.0100	Note 48
	N leach	Liquid	0.933	1.016		ORG	1.00	1.000	0.400	1.0	2.6	Dairy	2				1.0	Liquid	0.0	0.06	0.0010	0.02	0.0050	Note 49
Year	N	21	0	3.8	3.8	0	100	1	0	1	2.8	21	1.6	0.4	0.0	0.0	0.3	21	1.2	0.04	0.07	0.04	0.05	Note 47
4	Vol/NH3	Cattle	NO	0.0	0.9	NON	100.00	SBA	1.000	YES	0.9	Cattle	0.65				0.0	Cattle	0.1	0.01	0.0125	0.01	0.0100	Note 48
	N leach	Liquid	0.933	1.016		ORG	1.00	1.000	0.443	0.3	0.9	Dairy	2				0.3	Liquid	0.0	0.02	0.0010	0.01	0.0050	Note 49
Year	N	21	0	1.1	1.1	0	100	10	0	1	0.9	21	0.5	0.1	0.0	0.0	0.1	21	0.4	0.01	0.02	0.01	0.02	Note 47
5	Vol/NH3	Cattle	NO	0.0	0.3	NON	100.00	WBA	1.000	YES	0.3	Cattle	0.66				0.0	Cattle	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Liquid	0.933	1.016		ORG	1.00	1.000	0.444	0.1	0.3	Dairy	2				0.1	Liquid	0.0	0.01	0.0010	0.00	0.0050	Note 49
Year	N	21	0	0.3	0.3	0	100	119	0	1	0.3	72	0.0	0.0	0.2	0.0	0.0	72	0.2	0.00	0.01	0.00	0.00	Note 47
6	Vol/NH3	Cattle	NO	0.0	0.1	NON	100.00	WWHB	1.000	YES	0.1	N crop	0.84				0.0	Green	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Liquid	0.933	1.016		ORG	1.00	1.000	0.400	0.0	0.1	low N	72				0.0	Low	0.0	0.00	0.0000	0.00	0.0000	Note 49
Year	N	72	0	0.2	0.2	0	100	11	0	1	0.1	21	0.0	0.0	0.0	0.0	0.0	21	0.0	0.00	0.00	0.00	0.00	Note 47
7	Vol/NH3	Green	NO	0.0	0.0	NON	100.00	WWH	1.000	YES	0.1	Cattle	0.67				0.0	Cattle	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Low	0.533	1.000		ORG	1.00	1.000	0.657	0.0	0.1	Dairy	2				0.0	Liquid	0.0	0.00	0.0010	0.00	0.0050	Note 49
Year	N	21	0	0.0	0.0	0	100	11	0	1	0.0	21	0.0	0.0	0.0	0.0	0.0	21	0.0	0.00	0.00	0.00	0.00	Note 47
8	Vol/NH3	Cattle	NO	0.0	0.0	NON	100.00	WWH	1.000	YES	0.0	Cattle	0.67				0.0	Cattle	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Liquid	0.933	1.016		ORG	1.00	1.000	0.400	0.0	0.0	Dairy	2				0.0	Liquid	0.0	0.00	0.0010	0.00	0.0050	Note 49
Year	N	21	0	0.0	0.0	0	100	1	0	1	0.0	21	0.0	0.0	0.0	0.0	0.0	21	0.0	0.00	0.00	0.00	0.00	Note 47
9	Vol/NH3	Cattle	NO	0.0	0.0	NON	100.00	SBA	1.000	YES	0.0	Cattle	0.65				0.0	Cattle	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Liquid	0.933	1.016		ORG	1.00	1.000	0.443	0.0	0.0	Dairy	2				0.0	Liquid	0.0	0.00	0.0010	0.00	0.0050	Note 49
Year	N	21	0	0.0	0.0	0	100	10	0	1	0.0	21	0.0	0.0	0.0	0.0	0.0	21	0.0	0.00	0.00	0.00	0.00	Note 47
10	Vol/NH3	Cattle	NO	0.0	0.0	NON	100.00	WBA	1.000	YES	0.0	Cattle	0.66				0.0	Cattle	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Liquid	0.933	1.016		ORG	1.00	1.000	0.444	0.0	0.0	Dairy	2				0.0	Liquid	0.0	0.00	0.0010	0.00	0.0050	Note 49

Year	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year10	Total	Total/year 1	
Area with crop, ha	0.64	0.21	0.07	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.96	1.50	Note 50

Possible additional non IPCC N2O-N emissions	Value												Kind of source	Total IPCC and non IPCC N2O		Note 51
N residues emissions, ratio of N2O-N to N:	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Current crops	3.78	2.53	Note 51
Increased soil N emissions, kg N2O-N/ha:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Total anthropogenic	3.78	2.53	Note 51
Natural background emissions, kg N2O-N/ha:	1.00	0.64	0.21	0.07	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.96	Total including natural	4.74	3.48	Note 51

N CHAIN STARTING WITH	N FERTILIZER	TO PRODUCE	WINTER WHEAT FOR BIOETHANOL AND	FOOD	Note 43
AND CONTINUING WITH	NO MANURE	TO PRODUCE	NOTHING FOR	FOOD	Note 43

Year	Fertlizer/manure # Name	Store 1/0	Amounts Store	Amounts Field	Organic 1/0	Nnorm proportion, %	Crop # Name	Cereal benefit 1/0	Straw used 1/0	Crop use & leach	Use # Name	Fodder: Uses #21-61 Fed	Fodder: Uses #21-61 Food	N crop #71/ #72	Food/ bev #8	Fuel/ other #9	Manure handling # Name	Final N amounts	N2O-N emission IPCC 1996 Each	N2O-N emission IPCC 1996 Total	N2O-N emission IPCC 2006 Each	N2O-N emission IPCC 2006 Total	Note 44 Note 44 Note 44
Total	N																						
Year	N NH3																						
1-10	N leach																						

RATIO OF N2O-N TO N IN FIRST CROP												TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED						75.1	75.1	1.35	1.94	1.11	1.30	Note 45
ACCORDING TO					IPCC 1996		IPCC 2006					TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3						2.2	2.2	0.02		0.02		Note 45
FIRST YEAR					0.0259		0.0174					TOTAL N AMOUNTS IN KG AND % LEACHED						22.7	22.7	0.57		0.17		Note 45
TOTAL					0.0259		0.0174					TOTAL N AMOUNTS IN KG AND %						100.0	100.0					Note 45

N2O-N/N in food/beverage/fuel/other 0.0259 0.0174 Note 46

Year	N	1	0	100.0	100.0	0	100	119	0	1	97.8	8	0.0	0.0	0.0	64.3	10.8	0	0.0	1.35	1.94	1.11	1.30	Note 47
1	Vol/NH3	N	NO	0.0	2.2	NON	100.00	WWHB	1.000	YES	22.7	Food/	0.84				0.0	NONE	0.0	0.02	0.0125	0.02	0.0100	Note 48
	N leach		1.022	1.000		ORG	1.00	1.000	0.343	10.8	22.7	beverage	8				10.6		0.0	0.57	0.0000	0.17	0.0000	Note 49
Year	N	0	0	0.0	0.0	0	100	11	0	1	0.0	8	0.0	0.0	0.0	0.0	0.0	0	0.0	0.00	0.00	0.00	0.00	Note 47
2	Vol/NH3	None	NO	0.0	0.0	NON	100.00	NO	1.000	YES	0.0	Food/	0.67				0.0	NONE	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach		1.000	1.000		ORG	1.00	1.000	0.357	0.0	0.0	beverage	8				0.0		0.0	0.00	0.0000	0.00	0.0000	Note 49
Year	N	0	0	0.0	0.0	0	100	11	0	1	0.0	8	0.0	0.0	0.0	0.0	0.0	0	0.0	0.00	0.00	0.00	0.00	Note 47
3	Vol/NH3	None	NO	0.0	0.0	NON	100.00	NO	1.000	YES	0.0	Food/	0.67				0.0	NONE	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach		1.000	1.000		ORG	1.00	1.000	0.357	0.0	0.0	beverage	8				0.0		0.0	0.00	0.0000	0.00	0.0000	Note 49
Year	N	0	0	0.0	0.0	0	100	1	0	1	0.0	8	0.0	0.0	0.0	0.0	0.0	0	0.0	0.00	0.00	0.00	0.00	Note 47
4	Vol/NH3	None	NO	0.0	0.0	NON	100.00	NO	1.000	YES	0.0	Food/	0.65				0.0	NONE	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach		1.000	1.000		ORG	1.00	1.000	0.403	0.0	0.0	beverage	8				0.0		0.0	0.00	0.0000	0.00	0.0000	Note 49
Year	N	0	0	0.0	0.0	0	100	10	0	1	0.0	8	0.0	0.0	0.0	0.0	0.0	0	0.0	0.00	0.00	0.00	0.00	Note 47
5	Vol/NH3	None	NO	0.0	0.0	NON	100.00	NO	1.000	YES	0.0	Food/	0.66				0.0	NONE	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach		1.000	1.000		ORG	1.00	1.000	0.404	0.0	0.0	beverage	8				0.0		0.0	0.00	0.0000	0.00	0.0000	Note 49
Year	N	0	0	0.0	0.0	0	100	119	0	1	0.0	8	0.0	0.0	0.0	0.0	0.0	0	0.0	0.00	0.00	0.00	0.00	Note 47
6	Vol/NH3	None	NO	0.0	0.0	NON	100.00	NO	1.000	YES	0.0	Food/	0.84				0.0	NONE	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach		1.000	1.000		ORG	1.00	1.000	0.357	0.0	0.0	beverage	8				0.0		0.0	0.00	0.0000	0.00	0.0000	Note 49
Year	N	0	0	0.0	0.0	0	100	11	0	1	0.0	8	0.0	0.0	0.0	0.0	0.0	0	0.0	0.00	0.00	0.00	0.00	Note 47
7	Vol/NH3	None	NO	0.0	0.0	NON	100.00	NO	1.000	YES	0.0	Food/	0.67				0.0	NONE	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach		1.000	1.000		ORG	1.00	1.000	0.357	0.0	0.0	beverage	8				0.0		0.0	0.00	0.0000	0.00	0.0000	Note 49
Year	N	0	0	0.0	0.0	0	100	11	0	1	0.0	8	0.0	0.0	0.0	0.0	0.0	0	0.0	0.00	0.00	0.00	0.00	Note 47
8	Vol/NH3	None	NO	0.0	0.0	NON	100.00	NO	1.000	YES	0.0	Food/	0.67				0.0	NONE	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach		1.000	1.000		ORG	1.00	1.000	0.357	0.0	0.0	beverage	8				0.0		0.0	0.00	0.0000	0.00	0.0000	Note 49
Year	N	0	0	0.0	0.0	0	100	1	0	1	0.0	8	0.0	0.0	0.0	0.0	0.0	0	0.0	0.00	0.00	0.00	0.00	Note 47
9	Vol/NH3	None	NO	0.0	0.0	NON	100.00	NO	1.000	YES	0.0	Food/	0.65				0.0	NONE	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach		1.000	1.000		ORG	1.00	1.000	0.403	0.0	0.0	beverage	8				0.0		0.0	0.00	0.0000	0.00	0.0000	Note 49
Year	N	0	0	0.0	0.0	0	100	10	0	1	0.0	8	0.0	0.0	0.0	0.0	0.0	0	0.0	0.00	0.00	0.00	0.00	Note 47
10	Vol/NH3	None	NO	0.0	0.0	NON	100.00	NO	1.000	YES	0.0	Food/	0.66				0.0	NONE	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach		1.000	1.000		ORG	1.00	1.000	0.404	0.0	0.0	beverage	8				0.0		0.0	0.00	0.0000	0.00	0.0000	Note 49

Year	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year10	Total	Total/year 1	
Area with crop, ha	0.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.64	1.00	Note 50

Possible additional non IPCC N2O-N emissions	Value												Kind of source	Total IPCC and non IPCC N2O		Note 51
N residues emissions, ratio of N2O-N to N:	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Current crops	1.94	1.30	Note 51
Increased soil N emissions, kg N2O-N/ha:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Total anthropogenic	1.94	1.30	Note 51
Natural background emissions, kg N2O-N/ha:	1.00	0.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.64	Total including natural	2.58	1.94	Note 51

N CHAIN STARTING WITH	N FERTILIZER	TO PRODUCE	WINTER WHEAT FOR BIOETHANOL AND	FUEL	Note 43
AND CONTINUING WITH	NO MANURE	TO PRODUCE	NOTHING FOR	FUEL	Note 43

Year		Fertlizer/manure # Name	Store 1/0	Amounts Store	Amounts Field	Organic 1/0	Nnorm proportion, %	Crop # Name	Cereal benefit 1/0	Straw used 1/0	Crop use & leach	Use # Name	Fodder: Uses #21-61 Fed	Fodder: Uses #21-61 Food	N crop #71/ #72	Food/ bev #8	Fuel/ other #9	Manure handling # Name	Final N amounts	N2O-N emission IPCC 1996 Each	N2O-N emission IPCC 1996 Total	N2O-N emission IPCC 2006 Each	N2O-N emission IPCC 2006 Total	Note 44 Note 44 Note 44
Total	N																							Note 45
Year	N NH3																							Note 45
1-10	N leach																							Note 45
																								Note 45

RATIO OF N2O-N TO N IN FIRST CROP	TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED	75.1	75.1	1.35	1.94	1.11	1.30
ACCORDING TO IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	2.2	2.2	0.02	0.02
FIRST YEAR 0.0259	0.0174	TOTAL N AMOUNTS IN KG AND % LEACHED	22.7	22.7	0.57	0.17
TOTAL 0.0259	0.0174	TOTAL N AMOUNTS IN KG AND %	100.0	100.0		

N2O-N/N in food/beverage/fuel/other 0.0259 0.0174 Note 46

Year	N	1	0	100.0	100.0	0	100	119	0	1	97.8	9	0.0	0.0	0.0	0.0	75.1	0	0.0	1.35	1.94	1.11	1.30	Note 47
1	Vol/NH3	N	NO	0.0	2.2	NON	100.00	WWHB	1.000	YES	22.7	Fuel/	0.84				0.0	NONE	0.0	0.02	0.0125	0.02	0.0100	Note 48
	N leach		1.022	1.000		ORG	1.00	1.000	0.343	10.8	22.7	other	9				10.6		0.0	0.57	0.0000	0.17	0.0000	Note 49
Year	N	0	0	0.0	0.0	0	100	11	0	1	0.0	9	0.0	0.0	0.0	0.0	0.0	0	0.0	0.00	0.00	0.00	0.00	Note 47
2	Vol/NH3	None	NO	0.0	0.0	NON	100.00	NO	1.000	YES	0.0	Fuel/	0.67				0.0	NONE	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach		1.000	1.000		ORG	1.00	1.000	0.357	0.0	0.0	other	9				0.0		0.0	0.00	0.0000	0.00	0.0000	Note 49
Year	N	0	0	0.0	0.0	0	100	11	0	1	0.0	9	0.0	0.0	0.0	0.0	0.0	0	0.0	0.00	0.00	0.00	0.00	Note 47
3	Vol/NH3	None	NO	0.0	0.0	NON	100.00	NO	1.000	YES	0.0	Fuel/	0.67				0.0	NONE	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach		1.000	1.000		ORG	1.00	1.000	0.357	0.0	0.0	other	9				0.0		0.0	0.00	0.0000	0.00	0.0000	Note 49
Year	N	0	0	0.0	0.0	0	100	1	0	1	0.0	9	0.0	0.0	0.0	0.0	0.0	0	0.0	0.00	0.00	0.00	0.00	Note 47
4	Vol/NH3	None	NO	0.0	0.0	NON	100.00	NO	1.000	YES	0.0	Fuel/	0.65				0.0	NONE	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach		1.000	1.000		ORG	1.00	1.000	0.403	0.0	0.0	other	9				0.0		0.0	0.00	0.0000	0.00	0.0000	Note 49
Year	N	0	0	0.0	0.0	0	100	10	0	1	0.0	9	0.0	0.0	0.0	0.0	0.0	0	0.0	0.00	0.00	0.00	0.00	Note 47
5	Vol/NH3	None	NO	0.0	0.0	NON	100.00	NO	1.000	YES	0.0	Fuel/	0.66				0.0	NONE	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach		1.000	1.000		ORG	1.00	1.000	0.404	0.0	0.0	other	9				0.0		0.0	0.00	0.0000	0.00	0.0000	Note 49
Year	N	0	0	0.0	0.0	0	100	119	0	1	0.0	9	0.0	0.0	0.0	0.0	0.0	0	0.0	0.00	0.00	0.00	0.00	Note 47
6	Vol/NH3	None	NO	0.0	0.0	NON	100.00	NO	1.000	YES	0.0	Fuel/	0.84				0.0	NONE	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach		1.000	1.000		ORG	1.00	1.000	0.357	0.0	0.0	other	9				0.0		0.0	0.00	0.0000	0.00	0.0000	Note 49
Year	N	0	0	0.0	0.0	0	100	11	0	1	0.0	9	0.0	0.0	0.0	0.0	0.0	0	0.0	0.00	0.00	0.00	0.00	Note 47
7	Vol/NH3	None	NO	0.0	0.0	NON	100.00	NO	1.000	YES	0.0	Fuel/	0.67				0.0	NONE	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach		1.000	1.000		ORG	1.00	1.000	0.357	0.0	0.0	other	9				0.0		0.0	0.00	0.0000	0.00	0.0000	Note 49
Year	N	0	0	0.0	0.0	0	100	11	0	1	0.0	9	0.0	0.0	0.0	0.0	0.0	0	0.0	0.00	0.00	0.00	0.00	Note 47
8	Vol/NH3	None	NO	0.0	0.0	NON	100.00	NO	1.000	YES	0.0	Fuel/	0.67				0.0	NONE	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach		1.000	1.000		ORG	1.00	1.000	0.357	0.0	0.0	other	9				0.0		0.0	0.00	0.0000	0.00	0.0000	Note 49
Year	N	0	0	0.0	0.0	0	100	1	0	1	0.0	9	0.0	0.0	0.0	0.0	0.0	0	0.0	0.00	0.00	0.00	0.00	Note 47
9	Vol/NH3	None	NO	0.0	0.0	NON	100.00	NO	1.000	YES	0.0	Fuel/	0.65				0.0	NONE	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach		1.000	1.000		ORG	1.00	1.000	0.403	0.0	0.0	other	9				0.0		0.0	0.00	0.0000	0.00	0.0000	Note 49
Year	N	0	0	0.0	0.0	0	100	10	0	1	0.0	9	0.0	0.0	0.0	0.0	0.0	0	0.0	0.00	0.00	0.00	0.00	Note 47
10	Vol/NH3	None	NO	0.0	0.0	NON	100.00	NO	1.000	YES	0.0	Fuel/	0.66				0.0	NONE	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach		1.000	1.000		ORG	1.00	1.000	0.404	0.0	0.0	other	9				0.0		0.0	0.00	0.0000	0.00	0.0000	Note 49

Year	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year10	Total	Total/year 1	
Area with crop, ha	0.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.64	1.00	Note 50

Possible additional non IPCC N2O-N emissions	Value												Kind of source	Total IPCC and non IPCC N2O		Note 51
N residues emissions, ratio of N2O-N to N:	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Current crops	1.94	1.30	Note 51
Increased soil N emissions, kg N2O-N/ha:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Total anthropogenic	1.94	1.30	Note 51
Natural background emissions, kg N2O-N/ha:	1.00	0.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.64	Total including natural	2.58	1.94	Note 51

C2 N CHAIN CALCULATIONS SHEET C: N CHAINS BASED UPON DANISH VALUES CALCULATIONS By Jacob Bugge Available at www.ppo.bugge.com C2

N CHAIN STARTING WITH N FERTILIZER TO PRODUCE WINTER WHEAT FOR BIOETHANOL AND WASTE DUMPED ELSEWHERE WITHOUT LEACHING Note 43
AND CONTINUING WITH NO MANURE TO PRODUCE NOTHING FOR WASTE, DUMPED ELSEWHERE Note 43

Year	Fertlizer/manure # Name	Store 1/0	Amounts Store	Amounts Field	Or-ganic 1/0	Nnorm propor tion, %	Crop # Name	Cereal benefit 1/0	Straw used 1/0	Crop use & leach	Use # Name	Fodder: Uses #21-61 Fed	Fodder: Uses #21-61 Food	N crop #71/ #72	Food/ bev #8	Fuel/ other #9	Manure handling # Name	Final N a-mounts	N2O-N emission IPCC 1996 Each	N2O-N emission IPCC 1996 Total	N2O-N emission IPCC 2006 Each	N2O-N emission IPCC 2006 Total	Note 44 Note 44 Note 44
Total	N																						Note 45
Year	N NH3																						Note 45
1-10	N leach																						Note 45
																							Note 45

RATIO OF N2O-N TO N IN FIRST CROP		TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED	75.1	75.1	
ACCORDING TO	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	2.2	2.2
FIRST YEAR	0.0259	0.0174	TOTAL N AMOUNTS IN KG AND % LEACHED	22.7	22.7
TOTAL	0.0259	0.0174	TOTAL N AMOUNTS IN KG AND %	100.0	100.0

N2O-N/N in food/beverage/fuel/other 0.1800 0.1205 Note 46

Year	N	1	0	100.0	100.0	0	100	119	0	1	97.8	-1	0.0	0.0	0.0	0.0	10.8	0	0.0	1.35	1.94	1.11	1.30	Note 47
1	Vol/NH3	N	NO	0.0	2.2	NON	100.00	WWHB	1.000	YES	22.7	Waste	0.84				0.0	None	0.0	0.02	0.0125	0.02	0.0100	Note 48
	N leach		1.022	1.000		ORG	1.00	1.000	0.343	10.8	22.7	moved	0				10.6		0.0	0.57	0.0000	0.17	0.0000	Note 49
Year	N	0	0	0.0	0.0	0	100	11	0	1	0.0	-1	0.0	0.0	0.0	0.0	0.0	0	0.0	0.00	0.00	0.00	0.00	Note 47
2	Vol/NH3	None	NO	0.0	0.0	NON	100.00	NO	1.000	YES	0.0	Waste	0.67				0.0	None	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach		1.000	1.000		ORG	1.00	1.000	0.357	0.0	0.0	moved	0				0.0		0.0	0.00	0.0000	0.00	0.0000	Note 49
Year	N	0	0	0.0	0.0	0	100	11	0	1	0.0	-1	0.0	0.0	0.0	0.0	0.0	0	0.0	0.00	0.00	0.00	0.00	Note 47
3	Vol/NH3	None	NO	0.0	0.0	NON	100.00	NO	1.000	YES	0.0	Waste	0.67				0.0	None	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach		1.000	1.000		ORG	1.00	1.000	0.357	0.0	0.0	moved	0				0.0		0.0	0.00	0.0000	0.00	0.0000	Note 49
Year	N	0	0	0.0	0.0	0	100	1	0	1	0.0	-1	0.0	0.0	0.0	0.0	0.0	0	0.0	0.00	0.00	0.00	0.00	Note 47
4	Vol/NH3	None	NO	0.0	0.0	NON	100.00	NO	1.000	YES	0.0	Waste	0.65				0.0	None	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach		1.000	1.000		ORG	1.00	1.000	0.403	0.0	0.0	moved	0				0.0		0.0	0.00	0.0000	0.00	0.0000	Note 49
Year	N	0	0	0.0	0.0	0	100	10	0	1	0.0	-1	0.0	0.0	0.0	0.0	0.0	0	0.0	0.00	0.00	0.00	0.00	Note 47
5	Vol/NH3	None	NO	0.0	0.0	NON	100.00	NO	1.000	YES	0.0	Waste	0.66				0.0	None	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach		1.000	1.000		ORG	1.00	1.000	0.404	0.0	0.0	moved	0				0.0		0.0	0.00	0.0000	0.00	0.0000	Note 49
Year	N	0	0	0.0	0.0	0	100	119	0	1	0.0	-1	0.0	0.0	0.0	0.0	0.0	0	0.0	0.00	0.00	0.00	0.00	Note 47
6	Vol/NH3	None	NO	0.0	0.0	NON	100.00	NO	1.000	YES	0.0	Waste	0.84				0.0	None	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach		1.000	1.000		ORG	1.00	1.000	0.357	0.0	0.0	moved	0				0.0		0.0	0.00	0.0000	0.00	0.0000	Note 49
Year	N	0	0	0.0	0.0	0	100	11	0	1	0.0	-1	0.0	0.0	0.0	0.0	0.0	0	0.0	0.00	0.00	0.00	0.00	Note 47
7	Vol/NH3	None	NO	0.0	0.0	NON	100.00	NO	1.000	YES	0.0	Waste	0.67				0.0	None	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach		1.000	1.000		ORG	1.00	1.000	0.357	0.0	0.0	moved	0				0.0		0.0	0.00	0.0000	0.00	0.0000	Note 49
Year	N	0	0	0.0	0.0	0	100	11	0	1	0.0	-1	0.0	0.0	0.0	0.0	0.0	0	0.0	0.00	0.00	0.00	0.00	Note 47
8	Vol/NH3	None	NO	0.0	0.0	NON	100.00	NO	1.000	YES	0.0	Waste	0.67				0.0	None	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach		1.000	1.000		ORG	1.00	1.000	0.357	0.0	0.0	moved	0				0.0		0.0	0.00	0.0000	0.00	0.0000	Note 49
Year	N	0	0	0.0	0.0	0	100	1	0	1	0.0	-1	0.0	0.0	0.0	0.0	0.0	0	0.0	0.00	0.00	0.00	0.00	Note 47
9	Vol/NH3	None	NO	0.0	0.0	NON	100.00	NO	1.000	YES	0.0	Waste	0.65				0.0	None	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach		1.000	1.000		ORG	1.00	1.000	0.403	0.0	0.0	moved	0				0.0		0.0	0.00	0.0000	0.00	0.0000	Note 49
Year	N	0	0	0.0	0.0	0	100	10	0	1	0.0	-1	0.0	0.0	0.0	0.0	0.0	0	0.0	0.00	0.00	0.00	0.00	Note 47
10	Vol/NH3	None	NO	0.0	0.0	NON	100.00	NO	1.000	YES	0.0	Waste	0.66				0.0	None	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach		1.000	1.000		ORG	1.00	1.000	0.404	0.0	0.0	moved	0				0.0		0.0	0.00	0.0000	0.00	0.0000	Note 49

Year	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year10	Total	Total/year 1	
Area with crop, ha	0.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.64	1.00	Note 50

Possible additional non IPCC N2O-N emissions	Value												Kind of source	Total IPCC and non IPCC N2O		Note 51
N residues emissions, ratio of N2O-N to N:	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Current crops	1.94	1.30	Note 51
Increased soil N emissions, kg N2O-N/ha:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Total anthropogenic	1.94	1.30	Note 51
Natural background emissions, kg N2O-N/ha:	1.00	0.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.64	Total including natural	2.58	1.94	Note 51

C2 N CHAIN CALCULATIONS SHEET C: N CHAINS BASED UPON DANISH VALUES CALCULATIONS By Jacob Bugge Available at www.ppo.bugge.com C2

N CHAIN STARTING WITH N FERTILIZER TO PRODUCE WINTER WHEAT FOR BIOETHANOL AND WASTE DUMPED IN FIELD AND LOST TO LEACH Note 43
AND CONTINUING WITH NO MANURE TO PRODUCE NOTHING FOR WASTE DUMPED IN FIELD Note 43

Year	Fertlizer/manure # Name	Store 1/0	Amounts Store	Amounts Field	Organic 1/0	Nnorm proportion, %	Crop # Name	Cereal benefit 1/0	Straw used 1/0	Crop use & leach	Use # Name	Fodder: Uses #21-61 Fed	Fodder: Uses #21-61 Food	N crop #71/ #72	Food/ bev #8	Fuel/ other #9	Manure handling # Name	Final N amounts	N2O-N emission IPCC 1996 Each	N2O-N emission IPCC 1996 Total	N2O-N emission IPCC 2006 Each	N2O-N emission IPCC 2006 Total	Note 44 Note 44 Note 44
Total	N																						
Year	N NH3																						
1-10	N leach																						

RATIO OF N2O-N TO N IN FIRST CROP												TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED						10.8	10.8	1.35	3.55	1.11	1.78	Note 45
ACCORDING TO				IPCC 1996		IPCC 2006						TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3						2.2	2.2	0.02		0.02		Note 45
FIRST YEAR				0.0473		0.0238						TOTAL N AMOUNTS IN KG AND % LEACHED						87.0	87.0	2.17		0.65		Note 45
TOTAL				0.0473		0.0238						TOTAL N AMOUNTS IN KG AND %						100.0	100.0					Note 45

N2O-N/N in food/beverage/fuel/other 0.3286 0.1651 Note 46

Year	N	1	0	100.0	100.0	0	100	119	0	1	97.8	0	0.0	0.0	0.0	0.0	10.8	0	64.3	1.35	3.55	1.11	1.78	Note 47
1	Vol/NH3	N	NO	0.0	2.2	NON	100.00	WWHB	1.000	YES	22.7	Waste	0.84				0.0	None	0.0	0.02	0.0125	0.02	0.0100	Note 48
	N leach		1.022	1.000		ORG	1.00	1.000	0.343	10.8	22.7	in field	0				10.6		64.3	2.17	0.0000	0.65	0.0000	Note 49
Year	N	0	0	0.0	0.0	0	100	11	0	1	0.0	0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.00	0.00	0.00	0.00	Note 47
2	Vol/NH3	None	NO	0.0	0.0	NON	100.00	NO	1.000	YES	0.0	Waste	0.67				0.0	None	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach		1.000	1.000		ORG	1.00	1.000	0.357	0.0	0.0	in field	0				0.0		0.0	0.00	0.0000	0.00	0.0000	Note 49
Year	N	0	0	0.0	0.0	0	100	11	0	1	0.0	0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.00	0.00	0.00	0.00	Note 47
3	Vol/NH3	None	NO	0.0	0.0	NON	100.00	NO	1.000	YES	0.0	Waste	0.67				0.0	None	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach		1.000	1.000		ORG	1.00	1.000	0.357	0.0	0.0	in field	0				0.0		0.0	0.00	0.0000	0.00	0.0000	Note 49
Year	N	0	0	0.0	0.0	0	100	1	0	1	0.0	0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.00	0.00	0.00	0.00	Note 47
4	Vol/NH3	None	NO	0.0	0.0	NON	100.00	NO	1.000	YES	0.0	Waste	0.65				0.0	None	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach		1.000	1.000		ORG	1.00	1.000	0.403	0.0	0.0	in field	0				0.0		0.0	0.00	0.0000	0.00	0.0000	Note 49
Year	N	0	0	0.0	0.0	0	100	10	0	1	0.0	0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.00	0.00	0.00	0.00	Note 47
5	Vol/NH3	None	NO	0.0	0.0	NON	100.00	NO	1.000	YES	0.0	Waste	0.66				0.0	None	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach		1.000	1.000		ORG	1.00	1.000	0.404	0.0	0.0	in field	0				0.0		0.0	0.00	0.0000	0.00	0.0000	Note 49
Year	N	0	0	0.0	0.0	0	100	119	0	1	0.0	0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.00	0.00	0.00	0.00	Note 47
6	Vol/NH3	None	NO	0.0	0.0	NON	100.00	NO	1.000	YES	0.0	Waste	0.84				0.0	None	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach		1.000	1.000		ORG	1.00	1.000	0.357	0.0	0.0	in field	0				0.0		0.0	0.00	0.0000	0.00	0.0000	Note 49
Year	N	0	0	0.0	0.0	0	100	11	0	1	0.0	0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.00	0.00	0.00	0.00	Note 47
7	Vol/NH3	None	NO	0.0	0.0	NON	100.00	NO	1.000	YES	0.0	Waste	0.67				0.0	None	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach		1.000	1.000		ORG	1.00	1.000	0.357	0.0	0.0	in field	0				0.0		0.0	0.00	0.0000	0.00	0.0000	Note 49
Year	N	0	0	0.0	0.0	0	100	11	0	1	0.0	0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.00	0.00	0.00	0.00	Note 47
8	Vol/NH3	None	NO	0.0	0.0	NON	100.00	NO	1.000	YES	0.0	Waste	0.67				0.0	None	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach		1.000	1.000		ORG	1.00	1.000	0.357	0.0	0.0	in field	0				0.0		0.0	0.00	0.0000	0.00	0.0000	Note 49
Year	N	0	0	0.0	0.0	0	100	1	0	1	0.0	0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.00	0.00	0.00	0.00	Note 47
9	Vol/NH3	None	NO	0.0	0.0	NON	100.00	NO	1.000	YES	0.0	Waste	0.65				0.0	None	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach		1.000	1.000		ORG	1.00	1.000	0.403	0.0	0.0	in field	0				0.0		0.0	0.00	0.0000	0.00	0.0000	Note 49
Year	N	0	0	0.0	0.0	0	100	10	0	1	0.0	0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.00	0.00	0.00	0.00	Note 47
10	Vol/NH3	None	NO	0.0	0.0	NON	100.00	NO	1.000	YES	0.0	Waste	0.66				0.0	None	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach		1.000	1.000		ORG	1.00	1.000	0.404	0.0	0.0	in field	0				0.0		0.0	0.00	0.0000	0.00	0.0000	Note 49

Year	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year10	Total	Total/year 1	
Area with crop, ha	0.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.64	1.00	Note 50

Possible additional non IPCC N2O-N emissions	Value												Kind of source	Total IPCC and non IPCC N2O		Note 51
N residues emissions, ratio of N2O-N to N:	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Current crops	3.55	1.78	Note 51
Increased soil N emissions, kg N2O-N/ha:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Total anthropogenic	3.55	1.78	Note 51
Natural background emissions, kg N2O-N/ha:	1.00	0.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.64	Total including natural	4.19	2.42	Note 51

SUMMARY CATTLE DAIRY

N CHAIN STARTING WITH	N FERTILIZER			TO PRODUCE	WINTER WHEAT FOR BIOETHANOL AND		CATTLE DAIRY					Note 43
AND CONTINUING WITH	LIQUID CATTLE MANURE			TO PRODUCE	WINTER WHEAT FOR		CATTLE DAIRY					Note 43
Total N	RATIO OF N2O-N TO N IN FIRST CROP			TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED			41.50	41.09	2.06	3.20	1.94	2.45 Note 45
Year N NH3	ACCORDING TO	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3			23.08	22.86	0.23		0.23	Note 45
1-10 N leach	FIRST YEAR	0.0269	0.0206	TOTAL N AMOUNTS IN KG AND % LEACHED			36.40	36.05	0.91		0.27	Note 45
	TOTAL	0.0426	0.0326	TOTAL N AMOUNTS IN KG AND %			100.98	100.00				Note 45
N2O-N/N in food/beverage/fuel/other										0.0772		0.0590 Note 46
							Total/year 1					
Area with crop, ha						1.01	1.58					Note 50
Natural background emissions, kg N2O-N/ha:						1.01				4.21		3.46 Note 51
N CHAIN STARTING WITH	N FERTILIZER			TO PRODUCE	WINTER WHEAT FOR BIOETHANOL AND		CATTLE DAIRY					Note 43
AND CONTINUING WITH	SEPARATED CATTLE MANURE			TO PRODUCE	WINTER WHEAT FOR		CATTLE DAIRY					Note 43
Total N	RATIO OF N2O-N TO N IN FIRST CROP			TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED			41.18	40.78	2.66	3.84	1.96	2.46 Note 45
Year N NH3	ACCORDING TO	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3			21.23	21.02	0.21		0.21	Note 45
1-10 N leach	FIRST YEAR	0.0322	0.0205	TOTAL N AMOUNTS IN KG AND % LEACHED			38.59	38.21	0.96		0.29	Note 45
	TOTAL	0.0511	0.0327	TOTAL N AMOUNTS IN KG AND %			100.99	100.00				Note 45
N2O-N/N in food/beverage/fuel/other										0.0932		0.0597 Note 46
							Total/year 1					
Area with crop, ha						0.98	1.55					Note 50
Natural background emissions, kg N2O-N/ha:						0.98				4.82		3.44 Note 51
N CHAIN STARTING WITH	N FERTILIZER			TO PRODUCE	WINTER WHEAT FOR BIOETHANOL AND		CATTLE DAIRY					Note 43
AND CONTINUING WITH	CATTLE DEEP LITTER			TO PRODUCE	WINTER WHEAT FOR		CATTLE DAIRY					Note 43
Total N	RATIO OF N2O-N TO N IN FIRST CROP			TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED			39.57	36.34	3.15	4.55	1.94	2.52 Note 45
Year N NH3	ACCORDING TO	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3			22.01	20.21	0.22		0.22	Note 45
1-10 N leach	FIRST YEAR	0.0376	0.0205	TOTAL N AMOUNTS IN KG AND % LEACHED			47.32	43.45	1.18		0.35	Note 45
	TOTAL	0.0606	0.0335	TOTAL N AMOUNTS IN KG AND %			108.91	100.00				Note 45
N2O-N/N in food/beverage/fuel/other										0.1150		0.0636 Note 46
							Total/year 1					
Area with crop, ha						0.88	1.39					Note 50
Natural background emissions, kg N2O-N/ha:						0.88				5.43		3.40 Note 51
N CHAIN STARTING WITH	N FERTILIZER			TO PRODUCE	WINTER WHEAT FOR BIOETHANOL AND		CATTLE DAIRY					Note 43
AND CONTINUING WITH	MANURE FROM GRAZING CATTLE			TO PRODUCE	WINTER WHEAT FOR		CATTLE DAIRY					Note 43
Total N	RATIO OF N2O-N TO N IN FIRST CROP			TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED			39.70	39.70	3.26	4.68	2.89	3.35 Note 45
Year N NH3	ACCORDING TO	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3			6.27	6.27	0.06		0.06	Note 45
1-10 N leach	FIRST YEAR	0.0380	0.0294	TOTAL N AMOUNTS IN KG AND % LEACHED			54.03	54.03	1.35		0.41	Note 45
	TOTAL	0.0623	0.0447	TOTAL N AMOUNTS IN KG AND %			100.00	100.00				Note 45
N2O-N/N in food/beverage/fuel/other										0.1178		0.0845 Note 46
							Total/year 1					
Area with crop, ha						0.81	1.28					Note 50
Natural background emissions, kg N2O-N/ha:						0.81				5.49		4.17 Note 51

SUMMARY CATTLE BEEF

N CHAIN STARTING WITH	N FERTILIZER			TO PRODUCE	WINTER WHEAT FOR BIOETHANOL AND		CATTLE BEEF					Note 43
AND CONTINUING WITH	LIQUID CATTLE MANURE			TO PRODUCE	WINTER WHEAT FOR		CATTLE BEEF					Note 43
Total N	RATIO OF N2O-N TO N IN FIRST CROP			TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED			39.22	38.81	2.11	3.29	2.00	2.53 Note 45
Year N NH3	ACCORDING TO	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3			24.49	24.24	0.24		0.24	Note 45
1-10 N leach	FIRST YEAR	0.0270	0.0208	TOTAL N AMOUNTS IN KG AND % LEACHED			37.34	36.95	0.93		0.28	Note 45
	TOTAL	0.0438	0.0336	TOTAL N AMOUNTS IN KG AND %			101.04	100.00				Note 45
N2O-N/N in food/beverage/fuel/other										0.0838		0.0644 Note 46
							Total/year 1					
Area with crop, ha						1.03	1.62					Note 50
Natural background emissions, kg N2O-N/ha:						1.03				4.32		3.56 Note 51
N CHAIN STARTING WITH	N FERTILIZER			TO PRODUCE	WINTER WHEAT FOR BIOETHANOL AND		CATTLE BEEF					Note 43
AND CONTINUING WITH	SEPARATED CATTLE MANURE			TO PRODUCE	WINTER WHEAT FOR		CATTLE BEEF					Note 43
Total N	RATIO OF N2O-N TO N IN FIRST CROP			TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED			38.92	38.51	2.75	3.96	2.01	2.53 Note 45
Year N NH3	ACCORDING TO	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3			22.49	22.25	0.22		0.22	Note 45
1-10 N leach	FIRST YEAR	0.0325	0.0207	TOTAL N AMOUNTS IN KG AND % LEACHED			39.65	39.23	0.99		0.30	Note 45
	TOTAL	0.0528	0.0338	TOTAL N AMOUNTS IN KG AND %			101.06	100.00				Note 45
N2O-N/N in food/beverage/fuel/other										0.1018		0.0651 Note 46
							Total/year 1					
Area with crop, ha						1.01	1.58					Note 50
Natural background emissions, kg N2O-N/ha:						0.88				4.97		3.54 Note 51
N CHAIN STARTING WITH	N FERTILIZER			TO PRODUCE	WINTER WHEAT FOR BIOETHANOL AND		CATTLE BEEF					Note 43
AND CONTINUING WITH	CATTLE DEEP LITTER			TO PRODUCE	WINTER WHEAT FOR		CATTLE BEEF					Note 43
Total N	RATIO OF N2O-N TO N IN FIRST CROP			TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED			37.38	34.15	3.26	4.71	1.99	2.59 Note 45
Year N NH3	ACCORDING TO	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3			23.23	21.22	0.23		0.23	Note 45
1-10 N leach	FIRST YEAR	0.0382	0.0207	TOTAL N AMOUNTS IN KG AND % LEACHED			48.84	44.62	1.22		0.37	Note 45
	TOTAL	0.0628	0.0345	TOTAL N AMOUNTS IN KG AND %			109.46	100.00				Note 45
N2O-N/N in food/beverage/fuel/other										0.1261		0.0693 Note 46
							Total/year 1					
Area with crop, ha						0.90	1.41					Note 50
Natural background emissions, kg N2O-N/ha:						0.90				5.61		3.49 Note 51
N CHAIN STARTING WITH	N FERTILIZER			TO PRODUCE	WINTER WHEAT FOR BIOETHANOL AND		CATTLE BEEF					Note 43
AND CONTINUING WITH	MANURE FROM GRAZING CATTLE			TO PRODUCE	WINTER WHEAT FOR		CATTLE BEEF					Note 43
Total N	RATIO OF N2O-N TO N IN FIRST CROP			TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED			37.56	37.56	3.38	4.84	2.99	3.48 Note 45
Year N NH3	ACCORDING TO	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3			6.51	6.51	0.07		0.07	Note 45
1-10 N leach	FIRST YEAR	0.0386	0.0300	TOTAL N AMOUNTS IN KG AND % LEACHED			55.92	55.92	1.40		0.42	Note 45
	TOTAL	0.0645	0.0463	TOTAL N AMOUNTS IN KG AND %			100.00	100.00				Note 45
N2O-N/N in food/beverage/fuel/other										0.1289		0.0926 Note 46
							Total/year 1					
Area with crop, ha						0.82	1.30					Note 50
Natural background emissions, kg N2O-N/ha:						0.82				5.67		4.30 Note 51

SUMMARY PIG PORK

N CHAIN STARTING WITH	N FERTILIZER			TO PRODUCE	WINTER WHEAT FOR BIOETHANOL AND	PIG PORK						Note 43
AND CONTINUING WITH	LIQUID PIG MANURE			TO PRODUCE	WINTER WHEAT FOR	PIG PORK						Note 43
Total N	RATIO OF N2O-N TO N IN FIRST CROP			TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED		49.69	49.69	1.84	2.80	1.68	2.11	Note 45
Year N NH3	ACCORDING TO	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3		19.68	19.68	0.20		0.20		Note 45
1-10 N leach	FIRST YEAR	0.0270	0.0202	TOTAL N AMOUNTS IN KG AND % LEACHED		30.63	30.63	0.77		0.23		Note 45
	TOTAL	0.0373	0.0281	TOTAL N AMOUNTS IN KG AND %		100.00	100.00					Note 45
N2O-N/N in food/beverage/fuel/other									0.0563		0.0424	Note 46
							Total/year 1					
Area with crop, ha						0.90	1.42					Note 50
Natural background emissions, kg N2O-N/ha:						0.90			3.70		3.01	Note 51
N CHAIN STARTING WITH	N FERTILIZER			TO PRODUCE	WINTER WHEAT FOR BIOETHANOL AND	PIG PORK						Note 43
AND CONTINUING WITH	SEPARATED PIG MANURE			TO PRODUCE	WINTER WHEAT FOR	PIG PORK						Note 43
Total N	RATIO OF N2O-N TO N IN FIRST CROP			TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED		47.81	47.37	2.17	3.19	1.64	2.09	Note 45
Year N NH3	ACCORDING TO	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3		20.51	20.33	0.21		0.21		Note 45
1-10 N leach	FIRST YEAR	0.0311	0.0203	TOTAL N AMOUNTS IN KG AND % LEACHED		32.60	32.30	0.81		0.24		Note 45
	TOTAL	0.0425	0.0278	TOTAL N AMOUNTS IN KG AND %		100.92	100.00					Note 45
N2O-N/N in food/beverage/fuel/other									0.0667		0.0437	Note 46
							Total/year 1					
Area with crop, ha						0.85	1.34					Note 50
Natural background emissions, kg N2O-N/ha:						0.85			4.04		2.94	Note 51
N CHAIN STARTING WITH	N FERTILIZER			TO PRODUCE	WINTER WHEAT FOR BIOETHANOL AND	PIG PORK						Note 43
AND CONTINUING WITH	PIG DEEP LITTER			TO PRODUCE	WINTER WHEAT FOR	PIG PORK						Note 43
Total N	RATIO OF N2O-N TO N IN FIRST CROP			TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED		47.90	45.84	2.47	3.53	1.62	2.11	Note 45
Year N NH3	ACCORDING TO	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3		23.90	22.88	0.24		0.24		Note 45
1-10 N leach	FIRST YEAR	0.0346	0.0205	TOTAL N AMOUNTS IN KG AND % LEACHED		32.68	31.28	0.82		0.25		Note 45
	TOTAL	0.0470	0.0281	TOTAL N AMOUNTS IN KG AND %		104.48	100.00					Note 45
N2O-N/N in food/beverage/fuel/other									0.0737		0.0440	Note 46
							Total/year 1					
Area with crop, ha						0.85	1.34					Note 50
Natural background emissions, kg N2O-N/ha:						0.85			4.38		2.96	Note 51
N CHAIN STARTING WITH	N FERTILIZER			TO PRODUCE	WINTER WHEAT FOR BIOETHANOL AND	PIG PORK						Note 43
AND CONTINUING WITH	MANURE FROM ROOTING PIGS			TO PRODUCE	WINTER WHEAT FOR	PIG PORK						Note 43
Total N	RATIO OF N2O-N TO N IN FIRST CROP			TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED		51.34	51.34	2.98	4.11	2.62	3.00	Note 45
Year N NH3	ACCORDING TO	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3		5.66	5.66	0.06		0.06		Note 45
1-10 N leach	FIRST YEAR	0.0359	0.0273	TOTAL N AMOUNTS IN KG AND % LEACHED		43.00	43.00	1.08		0.32		Note 45
	TOTAL	0.0547	0.0399	TOTAL N AMOUNTS IN KG AND %		100.00	100.00					Note 45
N2O-N/N in food/beverage/fuel/other									0.0800		0.0584	Note 46
							Total/year 1					
Area with crop, ha						0.85	1.34					Note 50
Natural background emissions, kg N2O-N/ha:						0.85			4.96		3.85	Note 51

SUMMARY POULTRY MEAT

N CHAIN STARTING WITH	N FERTILIZER			TO PRODUCE	WINTER WHEAT FOR BIOETHANOL AND		POULTRY MEAT					Note 43
AND CONTINUING WITH	LIQUID POULTRY MANURE			TO PRODUCE	WINTER WHEAT FOR		POULTRY MEAT					Note 43
Total N	RATIO OF N2O-N TO N IN FIRST CROP			TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED		53.85	53.85	1.75	2.68	1.58	1.96	Note 45
Year N NH3	ACCORDING TO	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3		14.74	14.74	0.15		0.15		Note 45
1-10 N leach	FIRST YEAR	0.0267	0.0197	TOTAL N AMOUNTS IN KG AND % LEACHED		31.41	31.41	0.79		0.24		Note 45
	TOTAL	0.0357	0.0261	TOTAL N AMOUNTS IN KG AND %		100.00	100.00					Note 45
N2O-N/N in food/beverage/fuel/other									0.0498		0.0364	Note 46
							Total/year 1					
Area with crop, ha					0.83		1.30					Note 50
Natural background emissions, kg N2O-N/ha:					0.83				3.51		2.79	Note 51
N CHAIN STARTING WITH	N FERTILIZER			TO PRODUCE	WINTER WHEAT FOR BIOETHANOL AND		POULTRY MEAT					Note 43
AND CONTINUING WITH	SEPARATED POULTRY MANURE			TO PRODUCE	WINTER WHEAT FOR		POULTRY MEAT					Note 43
Total N	RATIO OF N2O-N TO N IN FIRST CROP			TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED		51.83	51.83	1.94	2.86	1.49	1.89	Note 45
Year N NH3	ACCORDING TO	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3		18.47	18.47	0.18		0.18		Note 45
1-10 N leach	FIRST YEAR	0.0303	0.0200	TOTAL N AMOUNTS IN KG AND % LEACHED		29.70	29.70	0.74		0.22		Note 45
	TOTAL	0.0382	0.0252	TOTAL N AMOUNTS IN KG AND %		100.00	100.00					Note 45
N2O-N/N in food/beverage/fuel/other									0.0553		0.0366	Note 46
							Total/year 1					
Area with crop, ha					0.79		1.24					Note 50
Natural background emissions, kg N2O-N/ha:					0.79				3.65		2.68	Note 51
N CHAIN STARTING WITH	N FERTILIZER			TO PRODUCE	WINTER WHEAT FOR BIOETHANOL AND		POULTRY MEAT					Note 43
AND CONTINUING WITH	POULTRY DEEP LITTER			TO PRODUCE	WINTER WHEAT FOR		POULTRY MEAT					Note 43
Total N	RATIO OF N2O-N TO N IN FIRST CROP			TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED		48.41	48.28	1.99	2.96	1.39	1.83	Note 45
Year N NH3	ACCORDING TO	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3		21.22	21.16	0.21		0.21		Note 45
1-10 N leach	FIRST YEAR	0.0326	0.0203	TOTAL N AMOUNTS IN KG AND % LEACHED		30.64	30.56	0.77		0.23		Note 45
	TOTAL	0.0395	0.0244	TOTAL N AMOUNTS IN KG AND %		100.27	100.00					Note 45
N2O-N/N in food/beverage/fuel/other									0.0612		0.0379	Note 46
							Total/year 1					
Area with crop, ha					0.71		1.12					Note 50
Natural background emissions, kg N2O-N/ha:					0.71				3.68		2.55	Note 51
N CHAIN STARTING WITH	N FERTILIZER			TO PRODUCE	WINTER WHEAT FOR BIOETHANOL AND		POULTRY MEAT					Note 43
AND CONTINUING WITH	MANURE FROM SCRAPING POULTRY			TO PRODUCE	WINTER WHEAT FOR		POULTRY MEAT					Note 43
Total N	RATIO OF N2O-N TO N IN FIRST CROP			TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED		52.76	52.76	2.56	3.67	2.23	2.60	Note 45
Year N NH3	ACCORDING TO	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3		4.77	4.77	0.05		0.05		Note 45
1-10 N leach	FIRST YEAR	0.0343	0.0257	TOTAL N AMOUNTS IN KG AND % LEACHED		42.47	42.47	1.06		0.32		Note 45
	TOTAL	0.0489	0.0346	TOTAL N AMOUNTS IN KG AND %		100.00	100.00					Note 45
N2O-N/N in food/beverage/fuel/other									0.0696		0.0492	Note 46
Area with crop, ha	Total/year 1				0.75		1.17					Note 50
Natural background emissions, kg N2O-N/ha:					0.75				4.42		3.34	Note 51

SUMMARY POULTRY EGGS

N CHAIN STARTING WITH	N FERTILIZER			TO PRODUCE	WINTER WHEAT FOR BIOETHANOL AND	POULTRY EGGS						Note 43
AND CONTINUING WITH	LIQUID POULTRY MANURE			TO PRODUCE	WINTER WHEAT FOR	POULTRY EGGS						Note 43
Total N	RATIO OF N2O-N TO N IN FIRST CROP			TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED		37.53	37.53	2.05	3.25	1.94	2.47	Note 45
Year N NH3	ACCORDING TO	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3		24.34	24.34	0.24		0.24		Note 45
1-10 N leach	FIRST YEAR	0.0271	0.0209	TOTAL N AMOUNTS IN KG AND % LEACHED		38.13	38.13	0.95		0.29		Note 45
	TOTAL	0.0433	0.0329	TOTAL N AMOUNTS IN KG AND %		100.00	100.00					Note 45
N2O-N/N in food/beverage/fuel/other									0.0866		0.0657	Note 46
							Total/year 1					
Area with crop, ha						0.97	1.53					Note 50
Natural background emissions, kg N2O-N/ha:						0.97			4.22		3.44	Note 51
N CHAIN STARTING WITH	N FERTILIZER			TO PRODUCE	WINTER WHEAT FOR BIOETHANOL AND	POULTRY EGGS						Note 43
AND CONTINUING WITH	SEPARATED POULTRY MANURE			TO PRODUCE	WINTER WHEAT FOR	POULTRY EGGS						Note 43
Total N	RATIO OF N2O-N TO N IN FIRST CROP			TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED		35.09	35.09	2.36	3.53	1.76	2.32	Note 45
Year N NH3	ACCORDING TO	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3		30.17	30.17	0.30		0.30		Note 45
1-10 N leach	FIRST YEAR	0.0326	0.0214	TOTAL N AMOUNTS IN KG AND % LEACHED		34.75	34.75	0.87		0.26		Note 45
	TOTAL	0.0470	0.0309	TOTAL N AMOUNTS IN KG AND %		100.00	100.00					Note 45
N2O-N/N in food/beverage/fuel/other									0.1005		0.0661	Note 46
							Total/year 1					
Area with crop, ha						0.90	1.41					Note 50
Natural background emissions, kg N2O-N/ha:						0.90			4.42		3.22	Note 51
N CHAIN STARTING WITH	N FERTILIZER			TO PRODUCE	WINTER WHEAT FOR BIOETHANOL AND	POULTRY EGGS						Note 43
AND CONTINUING WITH	POULTRY DEEP LITTER			TO PRODUCE	WINTER WHEAT FOR	POULTRY EGGS						Note 43
Total N	RATIO OF N2O-N TO N IN FIRST CROP			TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED		31.51	31.38	2.39	3.61	1.57	2.17	Note 45
Year N NH3	ACCORDING TO	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3		33.26	33.12	0.33		0.33		Note 45
1-10 N leach	FIRST YEAR	0.0363	0.0219	TOTAL N AMOUNTS IN KG AND % LEACHED		35.66	35.50	0.89		0.27		Note 45
	TOTAL	0.0481	0.0289	TOTAL N AMOUNTS IN KG AND %		100.44	100.00					Note 45
N2O-N/N in food/beverage/fuel/other									0.1145		0.0689	Note 46
							Total/year 1					
Area with crop, ha						0.76	1.20					Note 50
Natural background emissions, kg N2O-N/ha:						0.76			4.37		2.93	Note 51
N CHAIN STARTING WITH	N FERTILIZER			TO PRODUCE	WINTER WHEAT FOR BIOETHANOL AND	POULTRY EGGS						Note 43
AND CONTINUING WITH	MANURE FROM SCRAPING POULTRY			TO PRODUCE	WINTER WHEAT FOR	POULTRY EGGS						Note 43
Total N	RATIO OF N2O-N TO N IN FIRST CROP			TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED		37.06	37.06	3.41	4.88	3.02	3.51	Note 45
Year N NH3	ACCORDING TO	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3		6.57	6.57	0.07		0.07		Note 45
1-10 N leach	FIRST YEAR	0.0389	0.0303	TOTAL N AMOUNTS IN KG AND % LEACHED		56.36	56.36	1.41		0.42		Note 45
	TOTAL	0.0650	0.0467	TOTAL N AMOUNTS IN KG AND %		100.00	100.00					Note 45
N2O-N/N in food/beverage/fuel/other									0.1317		0.0946	Note 46
							Total/year 1					
Area with crop, ha						0.83	1.30					Note 50
Natural background emissions, kg N2O-N/ha:						0.83			5.71		4.33	Note 51

SUMMARY SHEEP AND GOATS

N CHAIN STARTING WITH	N FERTILIZER			TO PRODUCE	WINTER WHEAT FOR BIOETHANOL AND		SHEEP MILK/MUTTON					Note 43
AND CONTINUING WITH	SHEEP DEEP LITTER			TO PRODUCE	WINTER WHEAT FOR		SHEEP MILK/MUTTON					Note 43
Total N	RATIO OF N2O-N TO N IN FIRST CROP			TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED		33.27	29.91	3.86	5.59	2.37	2.99	Note 45
Year N NH3	ACCORDING TO	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3		14.45	12.99	0.14		0.14		Note 45
1-10 N leach	FIRST YEAR	0.0395	0.0216	TOTAL N AMOUNTS IN KG AND % LEACHED		63.53	57.11	1.59		0.48		Note 45
	TOTAL	0.0745	0.0398	TOTAL N AMOUNTS IN KG AND %		111.24	100.00					Note 45
N2O-N/N in food/beverage/fuel/other									0.1680		0.0899	Note 46
							Total/year 1					
Area with crop, ha					0.95	1.49						Note 50
Natural background emissions, kg N2O-N/ha:					0.95				6.54		3.94	Note 51
N CHAIN STARTING WITH	N FERTILIZER			TO PRODUCE	WINTER WHEAT FOR BIOETHANOL AND		SHEEP MILK/MUTTON					Note 43
AND CONTINUING WITH	MANURE FROM GRAZING SHEEP			TO PRODUCE	WINTER WHEAT FOR		SHEEP MILK/MUTTON					Note 43
Total N	RATIO OF N2O-N TO N IN FIRST CROP			TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED		30.48	30.48	3.76	5.39	1.88	2.42	Note 45
Year N NH3	ACCORDING TO	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3		7.33	7.33	0.07		0.07		Note 45
1-10 N leach	FIRST YEAR	0.0406	0.0174	TOTAL N AMOUNTS IN KG AND % LEACHED		62.20	62.20	1.55		0.47		Note 45
	TOTAL	0.0718	0.0323	TOTAL N AMOUNTS IN KG AND %		100.00	100.00					Note 45
N2O-N/N in food/beverage/fuel/other									0.1769		0.0795	Note 46
							Total/year 1					
Area with crop, ha					0.86	1.35						Note 50
Natural background emissions, kg N2O-N/ha:					0.86				6.25		3.28	Note 51
N CHAIN STARTING WITH	N FERTILIZER			TO PRODUCE	WINTER WHEAT FOR BIOETHANOL AND		GOAT MILK/MEAT					Note 43
AND CONTINUING WITH	GOAT DEEP LITTER			TO PRODUCE	WINTER WHEAT FOR		GOAT MILK/MEAT					Note 43
Total N	RATIO OF N2O-N TO N IN FIRST CROP			TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED		25.53	23.05	3.49	5.12	2.10	2.82	Note 45
Year N NH3	ACCORDING TO	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3		33.24	30.01	0.33		0.33		Note 45
1-10 N leach	FIRST YEAR	0.0402	0.0218	TOTAL N AMOUNTS IN KG AND % LEACHED		52.00	46.94	1.30		0.39		Note 45
	TOTAL	0.0682	0.0376	TOTAL N AMOUNTS IN KG AND %		110.77	100.00					Note 45
N2O-N/N in food/beverage/fuel/other									0.2005		0.1105	Note 46
							Total/year 1					
Area with crop, ha					0.93	1.46						Note 50
Natural background emissions, kg N2O-N/ha:					0.93				6.05		3.75	Note 51
N CHAIN STARTING WITH	N FERTILIZER			TO PRODUCE	WINTER WHEAT FOR BIOETHANOL AND		GOAT MILK/MEAT					Note 43
AND CONTINUING WITH	MANURE FROM GRAZING GOATS			TO PRODUCE	WINTER WHEAT FOR		GOAT MILK/MEAT					Note 43
Total N	RATIO OF N2O-N TO N IN FIRST CROP			TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED		27.24	27.24	3.94	5.64	2.72	3.29	Note 45
Year N NH3	ACCORDING TO	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3		7.70	7.70	0.08		0.08		Note 45
1-10 N leach	FIRST YEAR	0.0414	0.0251	TOTAL N AMOUNTS IN KG AND % LEACHED		65.06	65.06	1.63		0.49		Note 45
	TOTAL	0.0751	0.0438	TOTAL N AMOUNTS IN KG AND %		100.00	100.00					Note 45
N2O-N/N in food/beverage/fuel/other									0.2070		0.1207	Note 46
							Total/year 1					
Area with crop, ha					0.88	1.38						Note 50
Natural background emissions, kg N2O-N/ha:					0.88				6.52		4.17	Note 51

SUMMARY N CROP

N CHAIN STARTING WITH	N FERTILIZER			TO PRODUCE	WINTER WHEAT FOR BIOETHANOL AND		HIGH N CROP						Note 43
AND CONTINUING WITH	GREEN MANURE HIGH N			TO PRODUCE	WINTER WHEAT FOR		CATTLE DAIRY						Note 43
Total N	RATIO OF N2O-N TO N IN FIRST CROP			TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED			28.54	28.41	2.36	3.74	2.06	2.67	Note 45
Year N NH3	ACCORDING TO	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3			28.41	28.28	0.28		0.28		Note 45
1-10 N leach	FIRST YEAR	0.0259	0.0174	TOTAL N AMOUNTS IN KG AND % LEACHED			43.52	43.31	1.09		0.33		Note 45
	TOTAL	0.0498	0.0356	TOTAL N AMOUNTS IN KG AND %			100.47	100.00					Note 45
N2O-N/N in food/beverage/fuel/other										0.1309		0.0936	Note 46
							Total/year 1						
Area with crop, ha						1.20	1.88						Note 50
Natural background emissions, kg N2O-N/ha:						1.20				4.94		3.87	Note 51

N amount in reference crop year 2 after use of N crop as green manure, kg	28.91	Note 47
N amount in reference crop year 1 after synthetic N fertilizer, kg	64.27	Note 47
Relative value of green manure, %	44.99	

N CHAIN STARTING WITH	N FERTILIZER			TO PRODUCE	WINTER WHEAT FOR BIOETHANOL AND		LOW N CROP						Note 43
AND CONTINUING WITH	GREEN MANURE LOW N			TO PRODUCE	WINTER WHEAT FOR		CATTLE DAIRY						Note 43
Total N	RATIO OF N2O-N TO N IN FIRST CROP			TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED			23.21	23.15	2.22	3.78	1.89	2.53	Note 45
Year N NH3	ACCORDING TO	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3			24.05	23.99	0.24		0.24		Note 45
1-10 N leach	FIRST YEAR	0.0259	0.0174	TOTAL N AMOUNTS IN KG AND % LEACHED			53.00	52.86	1.33		0.40		Note 45
	TOTAL	0.0504	0.0336	TOTAL N AMOUNTS IN KG AND %			100.27	100.00					Note 45
N2O-N/N in food/beverage/fuel/other										0.1630		0.1088	Note 46
							Total/year 1						
Area with crop, ha						0.96	1.50						Note 50
Natural background emissions, kg N2O-N/ha:						0.96				4.74		3.48	Note 51

N amount in reference crop year 2 after use of N crop as green manure, kg	16.52	Note 47
N amount in reference crop year 1 after synthetic N fertilizer, kg	64.27	Note 47
Relative value of green manure, %	25.71	

SUMMARY FOOD, FUEL, AND WASTE

N CHAIN STARTING WITH	N FERTILIZER			TO PRODUCE	WINTER WHEAT FOR BIOETHANOL AND	FOOD						Note 43
AND CONTINUING WITH	NO MANURE			TO PRODUCE	NOTHING FOR	FOOD						Note 43
Total N	RATIO OF N2O-N TO N IN FIRST CROP			TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED		75.08	75.08	1.35	1.94	1.11	1.30	Note 45
Year N NH3	ACCORDING TO	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3		2.20	2.20	0.02		0.02		Note 45
1-10 N leach	FIRST YEAR	0.0259	0.0174	TOTAL N AMOUNTS IN KG AND % LEACHED		22.72	22.72	0.57		0.17		Note 45
	TOTAL	0.0259	0.0174	TOTAL N AMOUNTS IN KG AND %		100.00	100.00					Note 45
N2O-N/N in food/beverage/fuel/other									0.0259		0.0174	Note 46
							Total/year 1					
Area with crop, ha						0.64	1.00					Note 50
Natural background emissions, kg N2O-N/ha:						0.64			2.58		1.94	Note 51
N CHAIN STARTING WITH	N FERTILIZER			TO PRODUCE	WINTER WHEAT FOR BIOETHANOL AND	FUEL						Note 43
AND CONTINUING WITH	NO MANURE			TO PRODUCE	NOTHING FOR	FUEL						Note 43
Total N	RATIO OF N2O-N TO N IN FIRST CROP			TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED		75.08	75.08	1.35	1.94	1.11	1.30	Note 45
Year N NH3	ACCORDING TO	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3		2.20	2.20	0.02		0.02		Note 45
1-10 N leach	FIRST YEAR	0.0259	0.0174	TOTAL N AMOUNTS IN KG AND % LEACHED		22.72	22.72	0.57		0.17		Note 45
	TOTAL	0.0259	0.0174	TOTAL N AMOUNTS IN KG AND %		100.00	100.00					Note 45
N2O-N/N in food/beverage/fuel/other									0.0259		0.0174	Note 46
							Total/year 1					
Area with crop, ha						0.64	1.00					Note 50
Natural background emissions, kg N2O-N/ha:						0.64			2.58		1.94	Note 51
N CHAIN STARTING WITH	N FERTILIZER			TO PRODUCE	WINTER WHEAT FOR BIOETHANOL AND	WASTE DUMPED ELSEWHERE WITHOUT LEACHING						Note 43
AND CONTINUING WITH	NO MANURE			TO PRODUCE	NOTHING FOR	WASTE, DUMPED ELSEWHERE						Note 43
Total N	RATIO OF N2O-N TO N IN FIRST CROP			TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED		75.08	75.08	1.35	1.94	1.11	1.30	Note 45
Year N NH3	ACCORDING TO	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3		2.20	2.20	0.02		0.02		Note 45
1-10 N leach	FIRST YEAR	0.0259	0.0174	TOTAL N AMOUNTS IN KG AND % LEACHED		22.72	22.72	0.57		0.17		Note 45
	TOTAL	0.0259	0.0174	TOTAL N AMOUNTS IN KG AND %		100.00	100.00					Note 45
N2O-N/N in food/beverage/fuel/other									0.1800		0.1205	Note 46
							Total/year 1					
Area with crop, ha						0.64	1.00					Note 50
Natural background emissions, kg N2O-N/ha:						0.64			2.58		1.94	Note 51
N CHAIN STARTING WITH	N FERTILIZER			TO PRODUCE	WINTER WHEAT FOR BIOETHANOL AND	WASTE DUMPED IN FIELD AND LOST TO LEACH						Note 43
AND CONTINUING WITH	NO MANURE			TO PRODUCE	NOTHING FOR	WASTE DUMPED IN FIELD						Note 43
Total N	RATIO OF N2O-N TO N IN FIRST CROP			TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED		10.81	10.81	1.35	3.55	1.11	1.78	Note 45
Year N NH3	ACCORDING TO	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3		2.20	2.20	0.02		0.02		Note 45
1-10 N leach	FIRST YEAR	0.0473	0.0238	TOTAL N AMOUNTS IN KG AND % LEACHED		86.99	86.99	2.17		0.65		Note 45
	TOTAL	0.0473	0.0238	TOTAL N AMOUNTS IN KG AND %		100.00	100.00					Note 45
N2O-N/N in food/beverage/fuel/other									0.3286		0.1651	Note 46
							Total/year 1					
Area with crop, ha						0.64	1.00					Note 50
Natural background emissions, kg N2O-N/ha:						0.64			4.19		2.42	Note 51

SUMMARY CATTLE

RATIO OF N2O-N TO N IN FIRST CROP ACCORDING TO	IPCC 1996 MIN	IPCC 1996 MAX	IPCC 2006 MIN	IPCC 2006 MAX	N2O-N emission IPCC 1996 MIN	N2O-N emission IPCC 1996 MAX	N2O-N emission IPCC 2006 MIN	N2O-N emission IPCC 2006 MAX
FIRST YEAR	0.0269	0.0386	0.0205	0.0300	3.20	4.84	2.45	3.48
TOTAL	0.0426	0.0645	0.0326	0.0463				

	MIN	MAX	MIN	MAX
N2O-N/N in food/beverage/fuel/other	0.0772	0.1289	0.0590	0.0926

	MIN	MAX	MIN	MAX				
Natural background emissions in kg N2O-N/ha, area with crop in ha, and total emissions in kg N2O-N/ha:	0.81	1.03	0.81	1.30	4.21	5.67	3.40	4.30

SUMMARY PIGS

RATIO OF N2O-N TO N IN FIRST CROP ACCORDING TO	IPCC 1996 MIN	IPCC 1996 MAX	IPCC 2006 MIN	IPCC 2006 MAX	N2O-N emission IPCC 1996 MIN	N2O-N emission IPCC 1996 MAX	N2O-N emission IPCC 2006 MIN	N2O-N emission IPCC 2006 MAX
FIRST YEAR	0.0270	0.0359	0.0202	0.0273	2.8	4.11	2.09	3
TOTAL	0.0373	0.0547	0.0278	0.0399				

	MIN	MAX	MIN	MAX
N2O-N/N in food/beverage/fuel/other	0.0563	0.0800	0.0424	0.0584

	MIN	MAX	MIN	MAX				
Natural background emissions in kg N2O-N/ha, area with crop in ha, and total emissions in kg N2O-N/ha:	0.85	0.90	0.85	0.90	3.70	4.96	2.94	3.85

SUMMARY POULTRY

RATIO OF N2O-N TO N IN FIRST CROP ACCORDING TO	IPCC 1996 MIN	IPCC 1996 MAX	IPCC 2006 MIN	IPCC 2006 MAX	N2O-N emission IPCC 1996 MIN	N2O-N emission IPCC 1996 MAX	N2O-N emission IPCC 2006 MIN	N2O-N emission IPCC 2006 MAX
FIRST YEAR	0.0267	0.0389	0.0197	0.0303	2.68	4.88	1.83	3.51
TOTAL	0.0357	0.0650	0.0244	0.0467				

	MIN	MAX	MIN	MAX
N2O-N/N in food/beverage/fuel/other	0.0498	0.1317	0.0364	0.0946

	MIN	MAX	MIN	MAX				
Natural background emissions in kg N2O-N/ha, area with crop in ha, and total emissions in kg N2O-N/ha:	0.71	0.97	0.71	0.97	3.51	5.71	2.55	4.33

SUMMARY SHEEP AND GOATS

RATIO OF N2O-N TO N IN FIRST CROP ACCORDING TO	IPCC 1996 MIN	IPCC 1996 MAX	IPCC 2006 MIN	IPCC 2006 MAX	N2O-N emission IPCC 1996 MIN	N2O-N emission IPCC 1996 MAX	N2O-N emission IPCC 2006 MIN	N2O-N emission IPCC 2006 MAX
FIRST YEAR	0.0395	0.0414	0.0174	0.0251	5.12	5.64	2.42	3.29
TOTAL	0.0682	0.0751	0.0323	0.0438				

	MIN	MAX	MIN	MAX
N2O-N/N in food/beverage/fuel/other	0.1680	0.2070	0.0795	0.1207

	MIN	MAX	MIN	MAX				
Natural background emissions in kg N2O-N/ha, area with crop in ha, and total emissions in kg N2O-N/ha:	0.86	0.95	0.86	0.95	6.05	6.54	3.28	4.17

SUMMARY FODDER

RATIO OF N2O-N TO N IN FIRST CROP ACCORDING TO	IPCC 1996 MIN	IPCC 1996 MAX	IPCC 2006 MIN	IPCC 2006 MAX	N2O-N emission IPCC 1996 MIN	N2O-N emission IPCC 1996 MAX	N2O-N emission IPCC 2006 MIN	N2O-N emission IPCC 2006 MAX
FIRST YEAR	0.0267	0.0414	0.0174	0.0303	2.68	5.64	1.83	3.51
TOTAL	0.0357	0.0751	0.0244	0.0467				

	MIN	MAX	MIN	MAX
N2O-N/N in food/beverage/fuel/other	0.0498	0.2070	0.0364	0.1207

	MIN	MAX	MIN	MAX				
Natural background emissions in kg N2O-N/ha, area with crop in ha, and total emissions in kg N2O-N/ha:	0.71	1.03	0.71	1.30	3.51	6.54	2.55	4.33