

Organic fertilizers emissions

SimaPro 9.0.0.49

Project

Impact assessme Date: 15.11.2019 Time: 19:43

UZEI_pouze export

Calculation:

Compare

Results:

Impact assessment

Product 1:

1 kg Manure, solid, cattle {GLO}| market for | APOS, S (of project Ecoinvent 3 - allocation at point of substitution - system)

Product 2:

1 kg Manure, liquid, cattle {GLO}| market for | APOS, S (of project Ecoinvent 3 - allocation at point of substitution - system)

Product 3:

1 kg Manure, liquid, swine {GLO}| market for | APOS, S (of project Ecoinvent 3 - allocation at point of substitution - system)

Product 4:

1 kg Poultry manure, dried {GLO}| market for | APOS, S (of project Ecoinvent 3 - allocation at point of substitution - system)

Product 5:

1 kg Poultry manure, fresh {GLO}| market for | APOS, S (of project Ecoinvent 3 - allocation at point of substitution - system)

Product 6:

1 ha Green manure, organic, until April {GLO}| market for | APOS, S (of project Ecoinvent 3 - allocation at point of substitution - system)

Product 7:

1 ha Green manure, organic, until January {GLO}| market for | APOS, S (of project Ecoinvent 3 - allocation at point of substitution - system)

Product 8:

1 ha Green manure, organic, until March {GLO}| market for | APOS, S (of project Ecoinvent 3 - allocation at point of substitution - system)

Method:

ReCiPe 2016 Endpoint (H) V1.03 / World (2010) H/A

Indicator:

Characterisation

Skip categories:

Never

Exclude infrastructure processes:

No

Exclude long-term emissions:

No

Sorted on item:

Impact category

Sort order:

Ascending

ENDPOINT

Impact category	Unit	Manure, solid, cattle {GLO} market for APOS, S	Manure, liquid, swine {GLO} market for APOS, S	Poultry manure, dried {GLO} market for APOS, S	Poultry manure, fresh {GLO} market for APOS, S	Green manure, organic, until April {GLO} market for APOS, S	Green manure, organic, until January {GLO} market for APOS, S	Green manure, organic, until March {GLO} market for APOS, S	
Global warming, Human health	DALY	2.5E-08	2.21431E-08	6.13E-09	4.51E-07	1.32E-07	0.000503	0.000482	0.000489

Global warming, Terrestrial ecosystems	species.yr	7.55E-11	6.67519E-11	1.85E-11	1.36E-09	3.99E-10	1.52E-06	1.45E-06	1.47E-06
Global warming, Freshwater ecosystems	species.yr	2.06E-15	1.82362E-15	5.05E-16	3.72E-14	1.09E-14	4.14E-11	3.97E-11	4.03E-11
Stratospheric ozone depletion	DALY	8.43E-11	8.35966E-11	1.12E-11	1.72E-09	7.45E-10	8.92E-06	8.47E-06	8.62E-06
Ionizing radiation	DALY	3.37E-12	2.70564E-12	2.21E-12	1.89E-10	4.09E-11	2.33E-08	2.33E-08	2.33E-08
Ozone formation, Human health	DALY	3.85E-11	2.17125E-11	1.12E-11	8.3E-10	2.5E-10	9.26E-07	9.11E-07	9.16E-07
Fine particulate matter formation	DALY	2.01E-08	1.70476E-08	9.64E-09	8.02E-07	2.61E-07	0.000203	0.000202	0.000202
Ozone formation, Terrestrial ecosystems	species.yr	5.62E-12	3.19776E-12	1.63E-12	1.21E-10	3.65E-11	1.33E-07	1.31E-07	1.32E-07
Terrestrial acidification	species.yr	2.62E-11	2.38209E-11	1.23E-11	1.23E-09	4.66E-10	2.35E-07	2.34E-07	2.35E-07
Freshwater eutrophication	species.yr	2.43E-12	2.18184E-12	1.25E-12	1.15E-10	2.89E-11	1.96E-07	1.43E-07	1.82E-07
Marine eutrophication	species.yr	5.28E-14	5.27863E-14	9.71E-15	1.14E-12	5E-13	1.32E-08	9.9E-09	1.1E-08
Terrestrial ecotoxicity	species.yr	7.02E-13	2.67556E-13	1.43E-13	7.87E-12	2.33E-12	3.38E-09	3.38E-09	3.38E-09
Freshwater ecotoxicity	species.yr	2.33E-13	1.99955E-13	1.11E-13	7.31E-12	1.54E-12	1.43E-09	1.43E-09	1.43E-09
Marine ecotoxicity	species.yr	4.44E-14	3.55273E-14	2.17E-14	1.36E-12	2.64E-13	3.12E-10	3.12E-10	3.12E-10
Human carcinogenic toxicity	DALY	1.29E-09	9.59785E-10	1.1E-09	4.13E-08	9.75E-09	1.43E-05	1.43E-05	1.43E-05
Human non-carcinogenic toxicity	DALY	8.65E-10	4.45831E-10	5.63E-10	3.89E-08	7.44E-09	8.42E-05	8.42E-05	8.42E-05
Land use	species.yr	1.61E-10	1.5954E-10	3.63E-11	2.9E-09	1.26E-09	6.39E-05	4.17E-05	5.65E-05
Mineral resource scarcity	USD2013	8.57E-06	6.79779E-06	7.95E-06	0.000168	5.87E-05	0.177425	0.177425	0.177425
Fossil resource scarcity	USD2013	0.000839	0.000400649	0.000231	0.018191	0.005157	9.340718	9.340718	9.340718
Water consumption, Human health	DALY	2.65E-10	2.46837E-10	1.78E-10	1.29E-08	5.35E-09	2.86E-07	2.86E-07	2.86E-07
Water consumption, Terrestrial ecosystem	species.yr	2.31E-12	2.20227E-12	1.58E-12	1.43E-10	6.1E-11	4.8E-09	4.8E-09	4.8E-09
Water consumption, Aquatic ecosystems	species.yr	1.1E-15	1.09605E-15	7.28E-16	1.03E-13	4.51E-14	2.77E-12	2.77E-12	2.77E-12

MIDPOINT

Impact category	Unit	Manure, solid, cattle {GLO} market for APOS, S	Manure, liquid, swine {GLO} market for APOS, S	Manure, cattle {GLO} market for APOS, S	Poultry manure, dried {GLO} market for APOS, S	Poultry manure, fresh {GLO} market for APOS, S	Green manure, organic, until April {GLO} market for APOS, S	Green manure, organic, until January {GLO} market for APOS, S	Green manure, organic, until March {GLO} market for APOS, S
Global warming	kg CO2 eq	0.026949	0.00660425	0.023841	0.486332	0.142603	541.3496	518.3326	526.1963
Stratospheric ozone depletion	kg CFC11 eq	1.59E-07	2.11049E-08	1.57E-07	3.23E-06	1.4E-06	0.016803	0.015954	0.016244

Ionizing radiation	kBq Co-60 eq	0.000397	0.000260676	0.000319	0.022311	0.004821	2.748939	2.748939	2.748939
Ozone formation, Human health	kg NOx eq	4.23E-05	1.23557E-05	2.39E-05	0.000912	0.000275	1.017678	1.001457	1.006999
Fine particulate matter formation	kg PM2.5 eq	3.2E-05	1.53239E-05	2.71E-05	0.001275	0.000415	0.322439	0.320654	0.321264
Ozone formation, Terrestrial ecosystems	kg NOx eq	4.35E-05	1.26734E-05	2.48E-05	0.000935	0.000283	1.032139	1.015919	1.021461
Terrestrial acidification	kg SO2 eq	0.000123	5.79173E-05	0.000112	0.005789	0.002196	1.109554	1.103714	1.105709
Freshwater eutrophication	kg P eq	3.62E-06	1.86241E-06	3.26E-06	0.000171	4.31E-05	0.291917	0.212884	0.271268
Marine eutrophication	kg N eq	3.11E-05	5.71811E-06	3.11E-05	0.000672	0.000294	7.773679	5.826441	6.49207
Terrestrial ecotoxicity	kg 1,4-DCB	0.061536	0.012540469	0.023448	0.689846	0.203928	296.0373	296.0373	296.0373
Freshwater ecotoxicity	kg 1,4-DCB	0.000337	0.000160967	0.000289	0.010555	0.002217	2.06602	2.06602	2.06602
Marine ecotoxicity	kg 1,4-DCB	0.000422	0.00020684	0.000338	0.012985	0.002515	2.974604	2.974604	2.974604
Human carcinogenic toxicity	kg 1,4-DCB	0.000387	0.000331185	0.000289	0.012434	0.002936	4.311339	4.311339	4.311339
Human non-carcinogenic toxicity	kg 1,4-DCB	0.00379	0.002469764	0.001954	0.170405	0.032614	369.2032	369.2032	369.2032
Land use	m2a crop eq	0.018141	0.004094792	0.01798	0.326346	0.141895	7193.304	4693.305	6360.004
Mineral resource scarcity	kg Cu eq	3.85E-05	3.47816E-05	3.08E-05	0.000765	0.00027	0.76815	0.76815	0.76815
Fossil resource scarcity	kg oil eq	0.002368	0.000896599	0.001317	0.080093	0.019318	25.2339	25.2339	25.2339
Water consumption	m3	0.000464	0.000310979	0.000454	0.037318	0.016156	1.142732	1.142731	1.142717