

Certificate

MPS-ECAS awards this certificate in accordance with the certification scheme MPS ABC version 15 080217, to:

**Sher Ethiopia Plc.
P.O. Box 120963
ADDIS ABABA
Ethiopia
MPS-number: 802685**

Applicable to environmental clusters:
ROSE

Validity: **10-8-2020 until 1-11-2020**
Total points: **100,0**
Qualification: **A**

Kind regards,
MPS-ECAS

Signature:

Date of issue:
24-7-2020



Ing. C. Maas

N.B.: This certificate is only valid for the period specified above.

MPS-ECAS
Certification



QUALIFICATION AND PERIOD GRAPHS

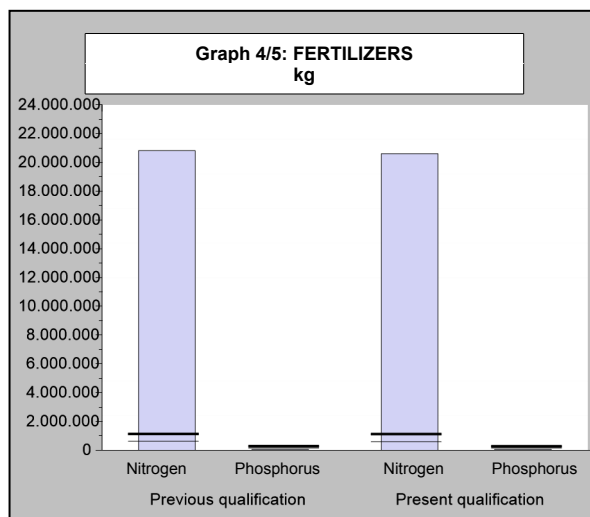
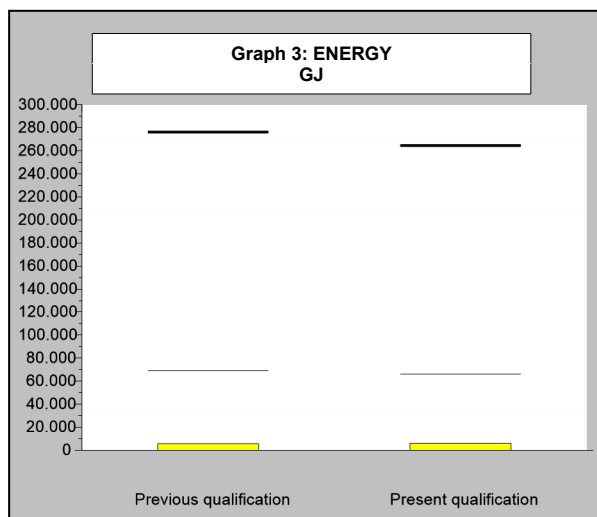
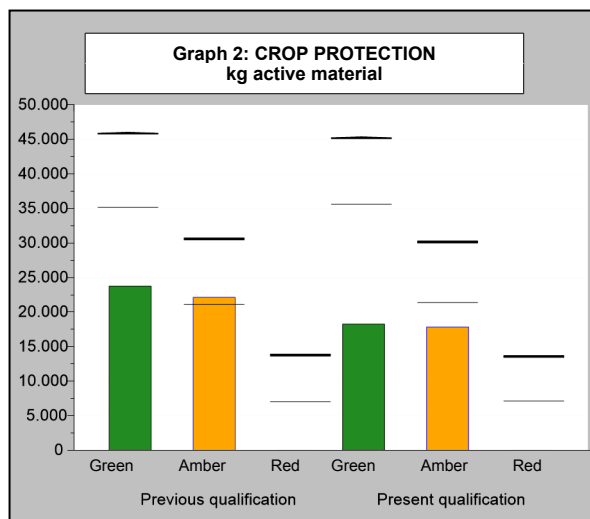
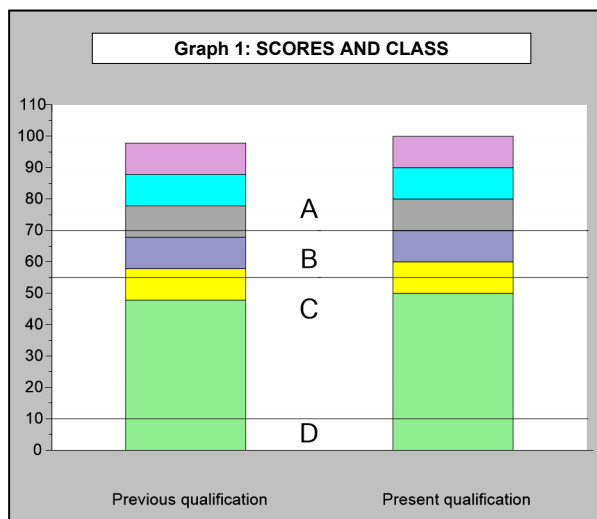
MPS company number: **802685/01**
Company name: Sher Ethiopia Plc. (total)

Valid: Period 8-2019 until Period 7-2020
Version: 24-7-2020

Table 1: DATA QUALIFICATIONS

SUBJECT		Uw Company standard	Uw use	Uw points	max. points	A+ standard	A+ score	Obtained
		Lower- Upper limit						
Crop protection	Green	35614,6-45248,1 kg	18269,9	15	15			
	Amber	21368,8-30165,4 kg	17838,3	20	20			
	Red	7122,9-13574,6 kg	17,8	15	15			
total				50	50	85 %	100 %	yes
Energy total		66169,2-264676,9 GJ	6092,3	10	10	75 %	100 %	yes
Fertilizers	Nitrogen	597469,2-1124876,9 kg	20612090,9	0	10			
	Phosphorus	151800-274407,7 kg	59944,5	10	10			
total				10	20	75 %	50 %	no
Waste		0-130	130	10	10			
Water		0-130	130	10	10			
Certified parental material				10	10			
Total score (points)				100	110	90	100	yes
COMPANY QUALIFICATION				A				

COMPANY USAGE PER 13 PERIODS
<-----> = Upper limit <.....> = Lower limit

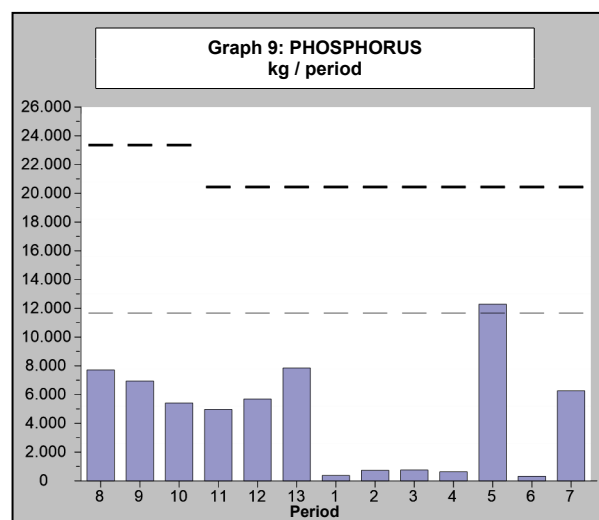
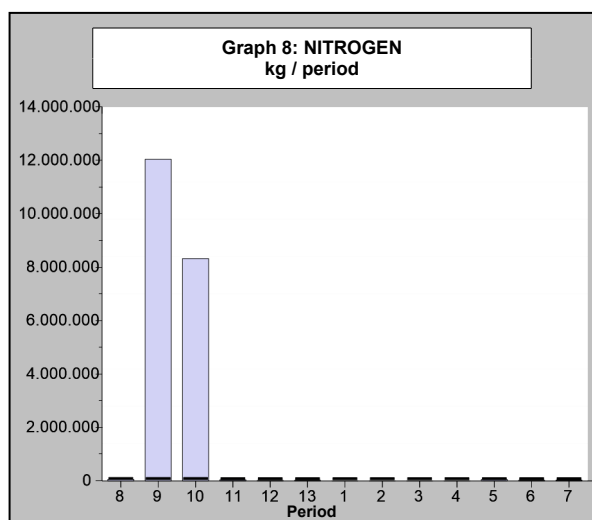
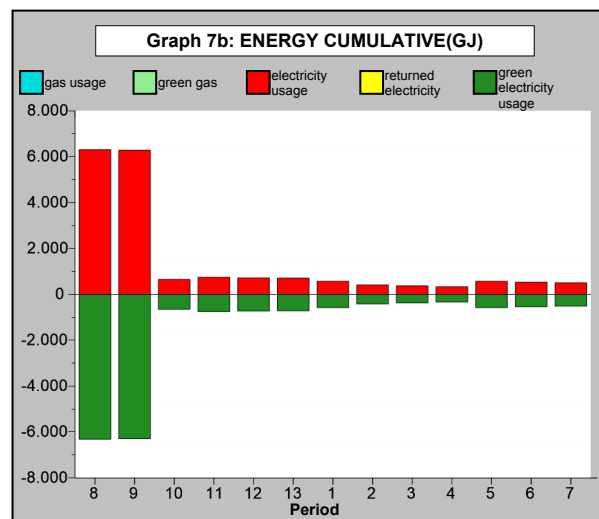
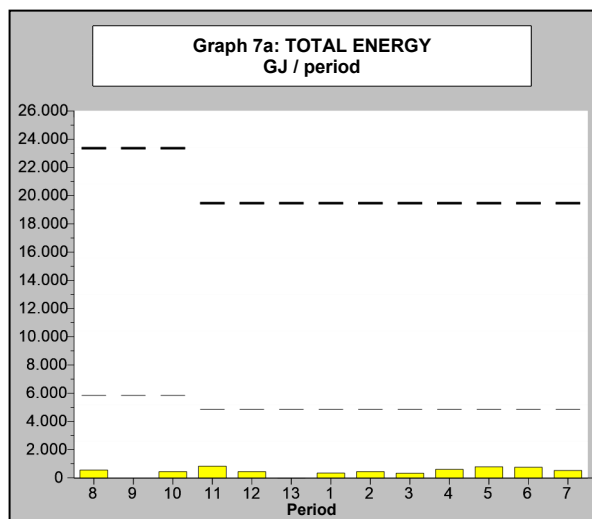
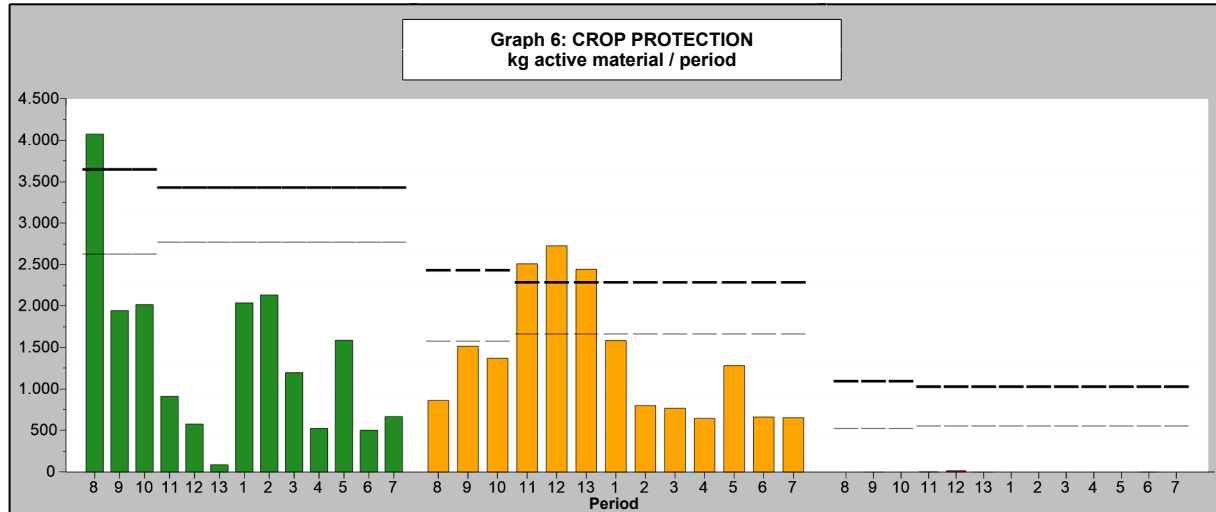


QUALIFICATION AND PERIOD GRAPHS

MPS company number: **802685/01**
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<-----> = Upperlimit <-----> = Lowerlimit



MPS-Overview Composition of Qualification

MPS company number: **802685/01**
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Composition of points MPS environmentally certified parental material

Certified parental material	(Average) area	Your Points	Max points
Total cultivated area 1)	5060000 m2		
Area certified parental material MPS-ABC	5060000 m2	10	10
Area certified parental material GLOBALGAP	0 m2	0	5
Total points for Certified parental material		10	10

1) Total means: the total area covered and uncovered cultivation and the second crop layer. Not included is the uncultivated area.

Overview Environmental zones

Period	8	9	10	11	12	13	1	2	3	4	5	6	7
Environmental	Zone 3	Zone 3	Zone 3	Zone 3	Zone 3	Zone 3	Zone 3	Zone 3	Zone 3	Zone 3	Zone 3	Zone 3	Zone 3

Company usage of MPS-MIND

Pesticide	Indicator color	active ingredient	Annual company use of active substance		
			Green	Amber	Red
Addit	○	vegetable oil			
AGS Propamocarb	●	propamocarb	128,588		
Belt SC 480	●	flubendiamide	954,284		
Chess 50 WG	●	pymetrozine		62,745	
Collis	●	boscalid	212,580		
	●	kresoxim-methyl	106,290		
Conserve	●	spinosad	22,674		
Crop Guard 80	●	furfural		972,506	
Dipel DF	○	bacillus thuringiensis			
Equation Pro DF	●	cymoxanil	210,683		
	●	famoxadone		158,012	
Flipper	○	potassium salts and fatty acids			
Floramite 240 SC	●	bifenazate	147,371		
Flower DS 4%	●	pyrethrins			8,731
Fostonic 80 WP	●	fosetyl-aluminium	8339,160		
Game 5% EC	●	lufenuron			9,111
Goldazim	●	carbendazim		10,000	
Impulse	●	spiroxamine		11783,668	
Impulse Extend	●	spiroxamine		298,260	
Lecatech	○	fungus			
Luna Tranquility	●	fluopyram	425,665		
	●	pyrimethanil		1273,229	
Mancozeb	●	mancozeb	1720,817		
Meltatox 40 EC	●	dodemorph	3058,880		
Microthiol Special Disperss 80 WG	○	sulfur/sulphur			
Mycotal	○	verticillium lecanii / lecanicillium s			
Mytech WP	○	paecilomyces lilacinus			
NEMguard	○	garlic extract			
Pymet 50 WG	●	pymetrozine		2769,842	
Rift 20% SL	●	acetamiprid	1525,134		
Rodimus	○	plant extract			
Runner	●	methoxyfenozide	20,976		
Siliconi	○	wetting/sticker agents other			
Sivanto Prime SL 200	●	flupyradifurone		342,096	
Solucion	○	wetting/sticker agents other			
Sulfolac 80 WG	○	sulfur/sulphur			
Sulfur	○	sulfur/sulphur			

MPS-Overview Composition of Qualification

MPS company number: **802685/01**
 Company name: Sher Ethiopia Plc. (total)

Valid: Period 8-2019 until Period 7-2020
 Version: 24-7-2020

Company usage of MPS-MIND

Pesticide	Indicator color	active ingredient	Annual company use of active substance		
			Green	Amber	Red
Swift 500 SC	●	carbendazim		5,000	
Switch 62.5 WG	●	cyprodinil		162,911	
	●	fludioxonil	110,075		
Teflu 150 SC	●	teflubenzuron	323,416		
Teppeki 50 WG	●	flonicamid	847,630		
Tracer 480 SC	●	spinosad	65,667		
Trianum-P WP 1.15%	○	trichoderma harzianum			
Velum SC 500	●	fluopyram	50,000		
Vidi Parva	○	plant extract			
Annual company use of active substance			18269,890	17838,268	17,842

OVERVIEW RECORDED DATA

MPS company number: **802685/01**

Company name: Sher Ethiopia Plc. (total)

Valid: Period 8-2019 until Period 7-2020

Version: 24-7-2020

Code	Description	Unit	Period 1	Period 2	Period 3	Period 4	Period 5	Period 6	Period 7	Subtotal	Year total
FORM RECEIVED			yes	yes	yes	yes	yes	yes	yes		
CROP PROTECTION AGENTS											
3868	Addit	ml	267750	586700	1295500	1268850	143400	1202500	747200	5511900	7987942
4076	AGS Propamocarb	ml									178100
4156	Belt SC 480	ml	90500	199300	62750	73900	114100	108500	55000	704050	1988092
3340	Chess 50 WG	gram			65489	60000				125489	125489
3167	Collis	ml									1062900
3226	Conserve	ml	46850	8000	11900	35700	1000	46100	38000	187550	188950
4064	Crop Guard 80	ml			95632	100000	900000	120000		1215632	1215632
4168	Dipel DF	gram									19300
3093	Equation Pro DF	gram	157075	19300			151500	214500	138400	680775	702277
4221	Flipper	ml		4508600	1542800	632100	1576200	2973200	953000	12185900	32947650
3117	Floramite 240 SC	ml	94550	79400	44900	9000		2000		229850	614044
4067	Flower DS 4%	ml						8400		8400	218283
3141	Fostonic 80 WP	gram	2214700	2403040	508000	55000	1626400	295900	89300	7192340	10423950
4178	Game 5% EC	ml									182211
3023	Goldazim	ml					20000			20000	20000
3174	Impulse	ml	2330350		867606	977100	1000200	1036000	1241200	7452456	23567336
4073	Impulse Extend	ml		994200						994200	994200
4144	Lecatech	gram	186300	410250	560300	26700	627800	733300	36605	2581255	3582269
3988	LiquidSeal	ml						1800		1800	401250
4034	Luna Tranquility	ml									3766950
3026	Mancozeb	gram	16375	10500	19250	13500	52700			112325	2151022
3073	Meltatox 40 EC	ml			1492400	60800	62400		1109700	2725300	7647200
4343	Microthiol Special Disperss 80 WG	gram						350850		350850	350850
4334	Mycotal	gram						59800	82500	142300	677051
4237	Mytech WP	gram			67500	100000				167500	247000
4245	NEMguard	ml			67500	100000				167500	172000
4216	Pymet 50 WG	gram	511550	996200	230900	88300	13500			1840450	5539684
4185	Rift 20% SL	ml		27500	613200	1572900	580100	637600	400000	3831300	7625670
4275	Rodimus	ml	155000	380300	687500	39000	724300	3682200	2085300	7753600	24639150
3271	Runner	ml	24400	38000						62400	87400
4054	Siliconi	ml	31600	224600	262900	239800		1467300	1182300	3408500	3749654
4284	Sivanto Prime SL 200	ml	629550		548400	9600	32900	500	13500	1234450	1710478
4098	Solucion	ml					1290500			1290500	1290500
4229	Sulfolac 80 WG	gram	2392025	2118195	65500				6500	4582220	6011570
3130	Sulfur	gram					620000	3342500	2498300	6460800	6460800
3844	Swift 500 SC	ml									10000
3127	Switch 62.5 WG	gram	5400				18000	1800		25200	440300

OVERVIEW RECORDED DATA (Continued)

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Code	Description	Unit	Period 1	Period 2	Period 3	Period 4	Period 5	Period 6	Period 7	Subtotal	Year total
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CROP PROTECTION AGENTS (Continued)

4186	Teflu 150 SC	ml	849000			76500		2400		927900	2156107
3378	Teppeki 50 WG	gram		22200	23400	74400				120000	1695259
3187	Tracer 480 SC	ml	800	116200	4800			15000		136800	136807
4005	Trianum-P WP 1.15%	gram	267000	147000	218000	154000	22500	15000		823500	2978764
4027	Velum SC 500	ml				80000		20000		100000	100000
4196	Vidi Parva	ml									89070

WATER

21	Total irrigation	m3	785448	7411	10236	9644	9753	9388	7406	839286	956919
23	Reused drainage water	m3	234	4862	712	719	712	672	597	8508	11911

ENERGY

4	Electricity usage (Total)	kWh	63454	45789	41589	36789	63868	59782	56489	367760	2081966
54	Diesel oil/fuel	litre	9650	12600	9450	17050	22200	21300	14755	107005	171611
6	Green Electricity Usage	kWh	63454	45789	41589	36789	63868	59782	56489	367760	2081966

FERTILIZERS

572	Ammonium Sulphate (21%)	kg									54626
524	Borax (Boric Acid)	kg	752	657	784	797	3826	654	425	7895	14139
503	Calcium nitrate (nitrate of Lime)	kg	32675	9220	1195	992	160800	144300	107510	456692	1006244
506	Copper sulphate	kg	153	265	141	237	241	231	166	1434	3077
559	EDDHA chelated Iron	kg						9129	6982	16111	16111
544	Eddha iron 6%	kg	11597	648	929	1018	11117			25309	75719
525	Fe DTPA 6%	kg	819	921	1549	946	8528	6454	5178	24395	60230
589	Gypsum	kg	4390		642	210	1866	1399	300	8807	8807
521	Magnesium sulphate	kg	40570	1262	1509	1705	135025	125859	98025	403955	1099282
513	Manganese sulphate	kg	523	995	718	717	666	608	402	4629	9758
529	Mono-Ammonium Phosphate (MAP) 12+61+0	kg	420	420	789	1405	13965	1195		18194	65866
514	Mono-potassium phosphate 0+52.29+33.98	kg	50			1150	10200		4225	15625	81558
534	Natriummolybdaat (Brinkman)	kg	69	92	92	92	86		55	486	806
550	Nitric Acid 54%	litre			976	880	55790		26845	84491	297122
551	Nitric Acid 68%	litre	968	1006						1974	36624
549	Phosphoric Acid 85% (Food Grade)	litre	147	880	1130		13825		11725	27707	50702
533	Potassium Nitrate 13+0+46	kg	1525	1153	985	996	62255		37760	104674	156498244
626	Potassium Phosphite 0+30+20	litre	987	1214	166					2367	4934

OVERVIEW RECORDED DATA (Continued)

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Code	Description	Unit	Period 1	Period 2	Period 3	Period 4	Period 5	Period 6	Period 7	Subtotal	Year total
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FERTILIZERS (Continued)

517	Potassium sulphate	kg	1645	1314	120				1415	4494	82228
655	PRIME	litre									1081
535	Sulphuric Acid (30%)	litre	3895	1036	995	125	39375		21385	66811	176056
537	Urea 46%	kg	997	830	965	996	13250		3140	20178	77396
501	Zinc sulphate	litre	406	645	734	715	604		304	3408	6237

ENVIRONMENTAL CLUSTERS

Indoor crops											
2014	ROSE	m2	5060000	5060000	5060000	5060000	5060000	5060000	5060000		
	Subtotal		5060000	5060000	5060000	5060000	5060000	5060000	5060000		
Certified parental material											
661	MPS-ABC certif.parental mat. indoor	m2	5060000	5060000	5060000	5060000	5060000	5060000	5060000		

GENERAL INFORMATION FORM

MPS-Mind

Surface water

3900 What is the minimum distance of these fields to the nearest surface water?

< 250 metres / < 820 feet

Cover

3910 Does the surface of covered crops exceed 95% of this location?

Yes

Slope

3902 What is the maximum slope of a field on this location?

3 - 10%

Leaching to groundwater

3903 Do you grow more than 95% of your crops in a closed (recirculation) system, achieving less than 3% loss of drainwater?

No

3904 What is the minimum depth of the groundwater, taken over all your fields?

3 - 15 metres / 9,8 - 49,2 feet

3905 What is the lowest percentage of organic matter of your soil, taken over all your fields of this location?

3 - 6%

3906 What is the average annual rainfall? (if not known, enter nothing)

600 - 1500 mm annually / 23 - 59 inch

3907 How many months per year may be regarded as exceptionally dry (less than 2% of the annual precipitation)?

2 - 6 months

3908 What is the average day and night temperature over a whole year? (if not known, enter nothing)

> 20 degrees C / 68 degrees F on aver

OVERVIEW RECORDED DATA (Continued)

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GENERAL INFORMATION FORM

Water management

45	Do you collect rainwater?	Yes
47	Do you collect leaking water while working with chemicals?	Yes
49	Do you record water use?	Yes
50	Do you use drip irrigation or recirculation?	Yes

Waste management

41	Do you process organic waste in a responsible way?	Yes
42	Do you process paper waste in a responsible way?	Yes
43	Do you process plastic waste in a responsible way?	Yes
44	Do you process chemical waste in a responsible way?	Yes

OVERVIEW RECORDED DATA

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FORM RECEIVED			yes	yes	yes	yes	yes	yes	
CROP PROTECTION AGENTS									
3868	Addit	ml	489335	215850	543350	716500	510600	407	2476042
4076	AGS Propamocarb	ml		178100					178100
4156	Belt SC 480	ml	820700	267100	36900	130800	28500	42	1284042
3340	Chess 50 WG	gram							
3167	Collis	ml			619000	443900			1062900
3226	Conserve	ml					1400		1400
4064	Crop Guard 80	ml							
4168	Dipel DF	gram		19300					19300
3093	Equation Pro DF	gram				21200		302	21502
4221	Flipper	ml	41800	11778200	7496450	1339800	105500		20761750
3117	Floramite 240 SC	ml	86400	85200	69500	47300	95700	94	384194
4067	Flower DS 4%	ml		1650		60500	147733		209883
3141	Fostonic 80 WP	gram	902950	982950	840250	256400	142250	106810	3231610
4178	Game 5% EC	ml				12300	169600	311	182211
3023	Goldazim	ml							
3174	Impulse	ml	1612580	1929200	1019750	3787750	2873200	4892400	16114880
4073	Impulse Extend	ml							
4144	Lecatech	gram	250000		181800	310400	258500	314	1001014
3988	LiquidSeal	ml	114900	94500	130650	59400			399450
4034	Luna Tranquility	ml			1488750	906250	1371950		3766950
3026	Mancozeb	gram	1379400	11425	527325	62500	58000	47	2038697
3073	Meltatox 40 EC	ml	3582800	1064800	274300				4921900
4343	Microthiol Special Disperss 80 WG	gram							
4334	Mycotal	gram		8000	211000	167400	148300	51	534751
4237	Mytech WP	gram	79500						79500
4245	NEMguard	ml	4500						4500
4216	Pymet 50 WG	gram	35600	1038950	594425	563125	1466950	184	3699234
4185	Rift 20% SL	ml	68800	1872950	1852620				3794370
4275	Rodimus	ml	3714500	7845150	1532500	297000	440000	3056400	16885550
3271	Runner	ml				25000			25000
4054	Siliconi	ml		7500	29100	126450	178050	54	341154
4284	Sivanto Prime SL 200	ml					475250	778	476028
4098	Solucion	ml							
4229	Sulfolac 80 WG	gram				537700	891200	450	1429350
3130	Sulfur	gram							
3844	Swift 500 SC	ml			10000				10000
3127	Switch 62.5 WG	gram	103400	89350	155350	67000			415100

OVERVIEW RECORDED DATA (Continued)

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CROP PROTECTION AGENTS (Continued)

4186	Teflu 150 SC	ml					1227500	707	1228207
3378	Teppeki 50 WG	gram	719600	102675	31800	637175	84000	9	1575259
3187	Tracer 480 SC	ml						7	7
4005	Trium-P WP 1.15%	gram	547000	399000	348000	200000	661000	264	2155264
4027	Velum SC 500	ml							
4196	Vidi Parva	ml				35000	54000	70	89070

WATER

21	Total irrigation	m3	8504	8209	76420	9013	7615	7873	117634
23	Reused drainage water	m3	583	641	592	708	424	454	3402

ENERGY

4	Electricity usage (Total)	kWh	700900	698750	72650	83207	79712	78987	1714206
54	Diesel oil/fuel	litre	15750		12600	23643	12600	13	64606
6	Green Electricity Usage	kWh	700900	698750	72650	83207	79712	78987	1714206

FERTILIZERS

572	Ammonium Sulphate (21%)	kg	12820	1506	11650	16100	4600	7950	54626
524	Borax (Boric Acid)	kg	935	1126	1102	1041	1096	944	6244
503	Calcium nitrate (nitrate of Lime)	kg	178287	153508	102409	104290	4602	6456	549552
506	Copper sulphate	kg	266	223	332	287	279	256	1643
559	EDDHA chelated Iron	kg							
544	Eddha iron 6%	kg	9366	11162	8946	8751	2011	10174	50410
525	Fe DTPA 6%	kg	5131	6114	5728	5156	5994	7712	35835
589	Gypsum	kg							
521	Magnesium sulphate	kg	174092	140485	92185	83225	112025	93315	695327
513	Manganese sulphate	kg	1395	813	913	967	955	86	5129
529	Mono-Ammonium Phosphate (MAP) 12+61+0	kg	12245	8509	8763	6220	2130	9805	47672
514	Mono-potassium phosphate 0+52.29+33.98	kg	19563	16350	413	1900	19282	8425	65933
534	Natriummolybdaat (Brinkman)	kg	42	43	49	45	68	73	320
550	Nitric Acid 54%	litre	46375	37765	41685		38628	48178	212631
551	Nitric Acid 68%	litre				34650			34650
549	Phosphoric Acid 85% (Food Grade)	litre		2100	6615	6370	1610	6300	22995
533	Potassium Nitrate 13+0+46	kg	70320	92385000	63815000	65450	23192	34608	156393570
626	Potassium Phosphite 0+30+20	litre						2567	2567

OVERVIEW RECORDED DATA (Continued)

MPS company number: **802685/01**

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Code	Description	Unit	Period 8	Period 9	Period 10	Period 11	Period 12	Period 13	Subtotal
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FERTILIZERS (Continued)

517	Potassium sulphate	kg	4256	12900	14250	13209	15755	17364	77734
655	PRIME	litre			445		266	370	1081
535	Sulphuric Acid (30%)	litre		64620	29575	12670	2380		109245
537	Urea 46%	kg	13560	7640	9980	7020	11363	7655	57218
501	Zinc sulphate	litre	458	491	536	498	790	56	2829

ENVIRONMENTAL CLUSTERS

Indoor crops									
2014 ROSE	m2		5060000	5060000	5060000	5060000	5060000	5060000	
Subtotal			5060000	5060000	5060000	5060000	5060000	5060000	
Certified parental material									
661 MPS-ABC certif.parental mat. indoor	m2		5060000	5060000	5060000	5060000	5060000	5060000	

CO2 Indicator

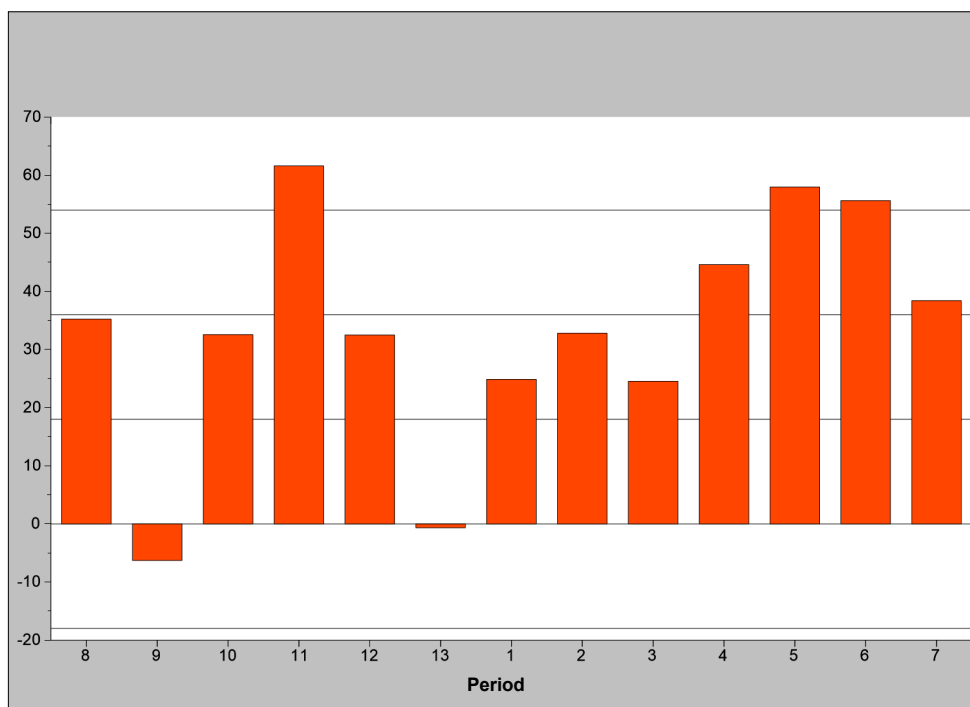
MPS company number: **802685/01**
 Company name: Sher Ethiopia Plc.

Valid: Period 8-2019 until Period 7-2020
 Version: 24-7-2020

Review CO2-emission per energy source per year (x 1000 kg)

Code		CO2 production (x 1000)
54	Diesel oil/fuel	453
4	Electricity usage (Total)	13
6	Green Electricity Usage	-32
Total		434

Review CO2-emission per period (x 1000 kg)



Disclaimer: the purpose of the above mentioned table and graphics is to give an insight in the CO2-emission on company level. The CO2 emission has been based on the energy consumption in GJ and the internationally accepted arithmetic rules. The calculation of the quantity in GJ is based on the calculation system of MPS for the fuel used by the company and the electricity and heating that has been bought and sold. The review serves only as a management tool. No rights can be derived. It is not allowed to use this review for other purposes. In cooperation with (inter)national stakeholders and research organizations MPS is working on further developments concerning CO2. We mainly focus on CO2 emission in the transport chain and the CO2 emission per physical production.