

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: **18-5-2020 until 9-8-2020**
Total points: **87,8**
Qualification: **A**

Kind regards,
MPS-ECAS

Signature:

Date of issue:
6-5-2020



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)

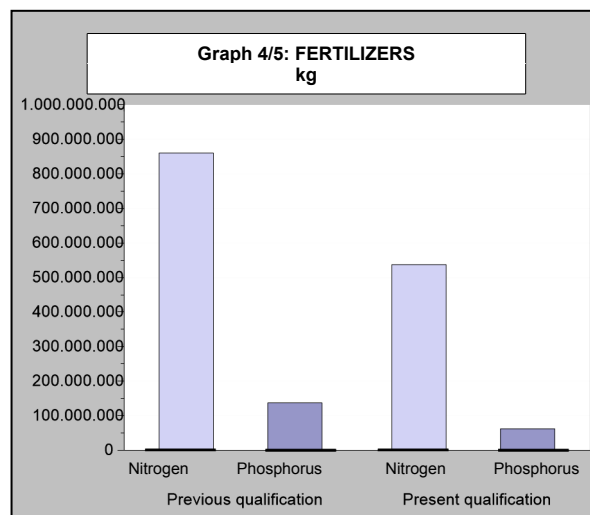
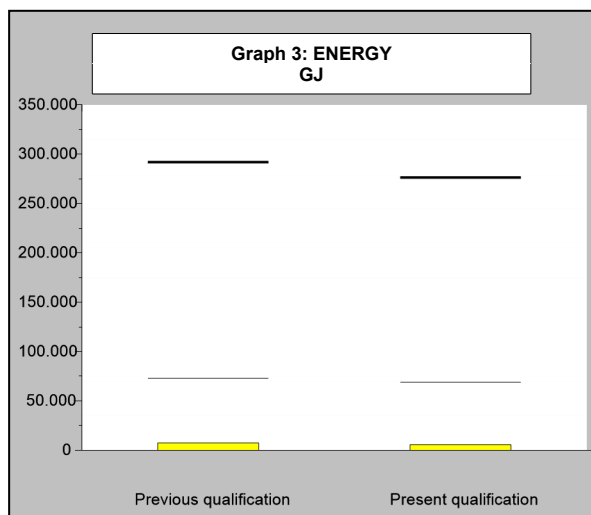
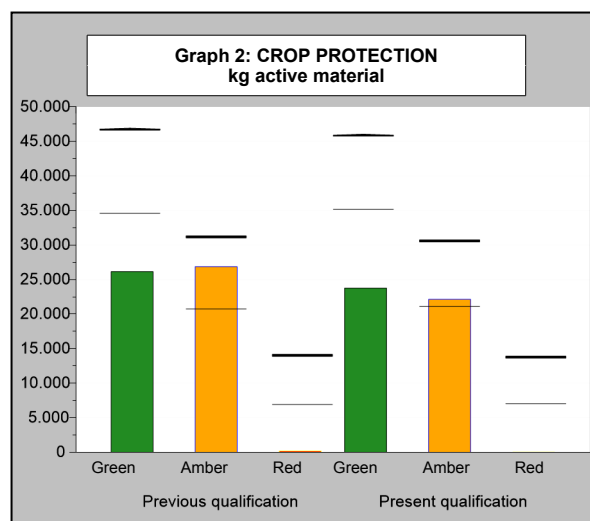
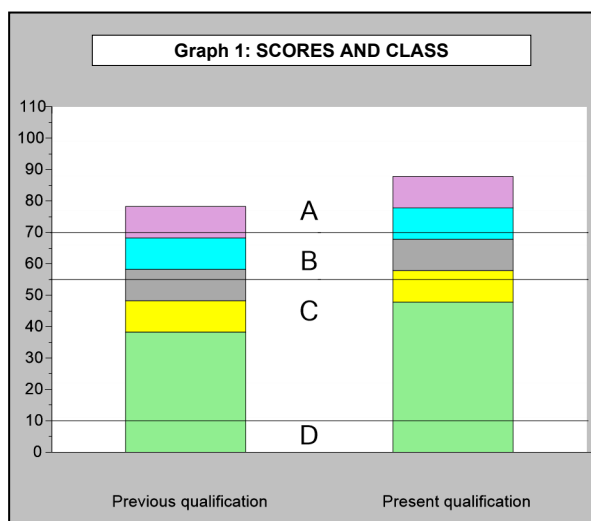
Valid: Period 5-2019 until Period 4-2020
Version: 6-5-2020

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	35176,7-45904,9 kg	23768,9	15	15			
	Amber	21106-30603,3 kg	22131,6	17,8	20			
	Red	7035,3-13771,6 kg	17,5	15	15			
total				47,8	50	85 %	95,6 %	yes
Energy total		69088,5-276353,8 GJ	5682,1	10	10	75 %	100 %	yes
Fertilizers	Nitrogen	638338,5-1136553,8 kg	537586431,6	0	10			
	Phosphorus	151800-283165,4 kg	62444612,6	0	10			
total				0	20	75 %	0 %	no
Waste		0-130	130	10	10			
Water		0-130	130	10	10			
Certified parental material				10	10			
Total score (points)				87,8	110	90	87,8	no
COMPANY QUALIFICATION				A				

COMPANY USAGE PER 13 PERIODS

<-----> = Upper limit <.....> = Lower limit

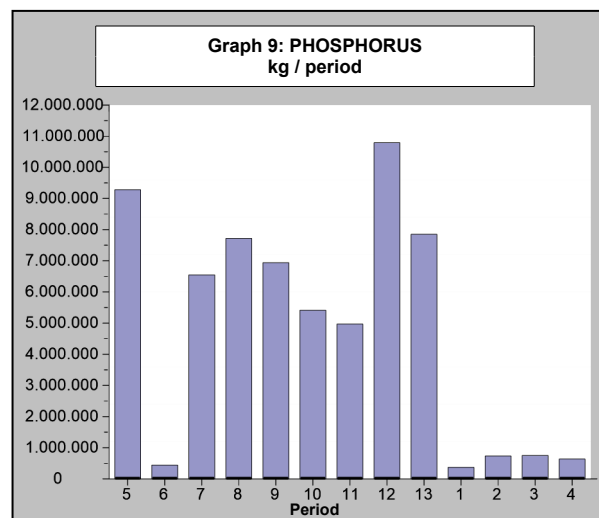
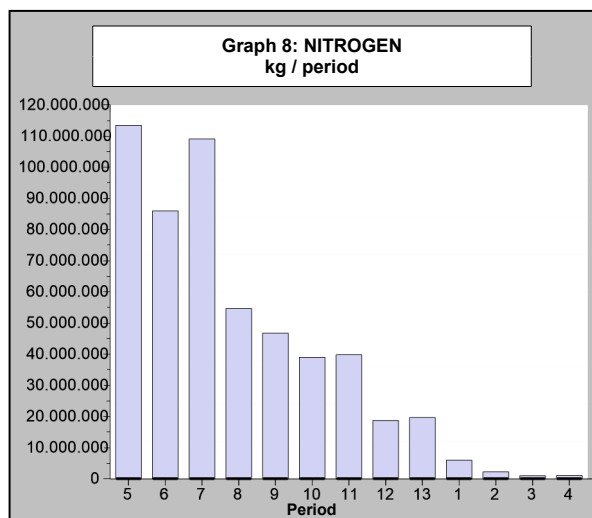
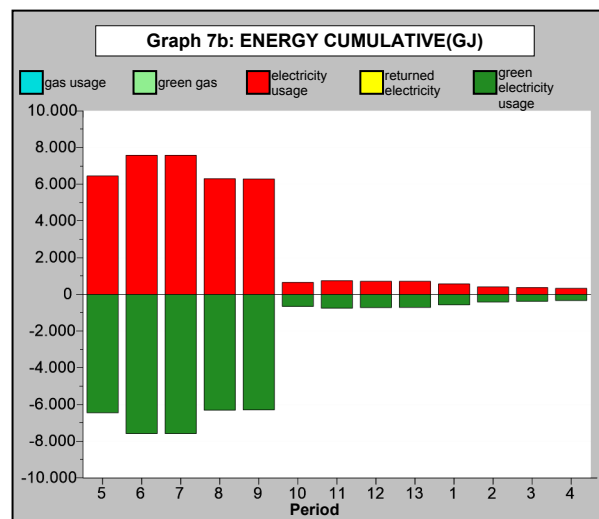
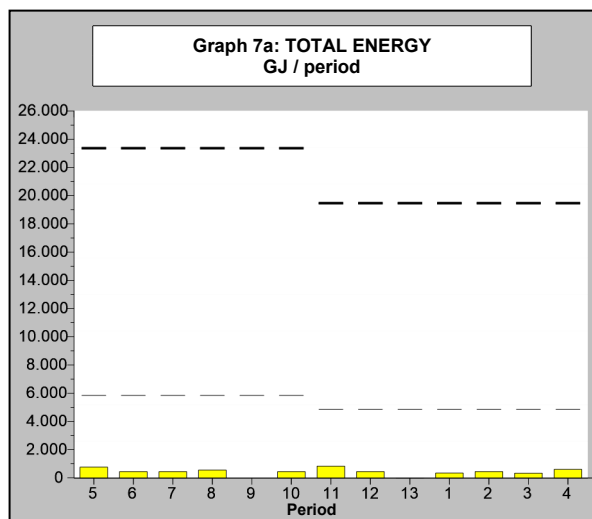
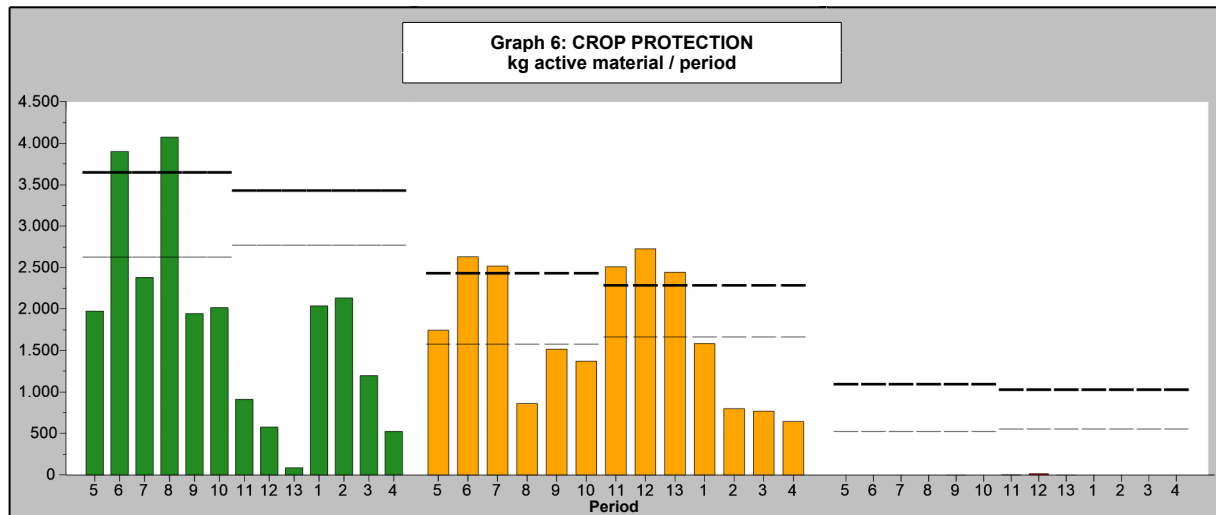


QUALIFICATION AND PERIOD GRAPHS

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

Valid: Period 5-2019 until Period 4-2020
 Version: 6-5-2020

<-----> = Upperlimit <-----> = Lowerlimit



MPS-Overview Composition of Qualification

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

Valid: Period 5-2019 until Period 4-2020
Version: 6-5-2020

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	5	6	7	8	9	10	11	12	13	1	2	3	4
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	1044,116		
Chess 50 WG	●	pymetrozine		62,745	
Collis	●	boscalid	212,580		
	●	kresoxim-methyl	106,290		
Conserve	●	spinosad	13,758		
Crop Guard 80	●	furfural		156,506	
Dipel DF	○	bacillus thuringiensis			
Equation Pro DF	●	cymoxanil	97,163		
	●	famoxadone		72,872	
Flipper	○	potassium salts and fatty acids			
Floramite 240 SC	●	bifenazate	184,103		
Flower DS 4%	●	pyrethrins			8,395
Fostonic 80 WP	●	fosetyl-aluminium	9794,320		
Game 5% EC	●	lufenuron			9,111
Impulse	●	spiroxamine		15998,543	
Impulse Extend	●	spiroxamine		298,260	
Lecatech	○	fungus			
Luna Tranquility	●	fluopyram	425,665		
	●	pyrimethanil		1273,229	
Mancozeb	●	mancozeb	5275,745		
Meltatox 40 EC	●	dodemorph	2590,040		
Mycotal	○	verticillium lecanii / lecanicillium s			
Mytech WP	○	paecilomyces lilacinus			
NEMguard	○	garlic extract			
Nimrod 25 EC	●	bupirimate		107,000	
Nomolt	●	teflubenzuron	175,395		
Pymet 50 WG	●	pymetrozine		3644,254	
Rift 20% SL	●	acetamiprid	1271,464		
Rizolex 50 WP	●	tolclofos-methyl		13,000	
Rodimus	○	plant extract			
Runner	●	methoxyfenozide	165,564		
Siliconi	○	wetting/sticker agents other			
Sivanto Prime SL 200	●	flupyradifurone		332,716	
Solucion	○	wetting/sticker agents other			
Sulfolac 80 WG	○	sulfur/sulphur			

MPS-Overview Composition of Qualification

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

Valid: Period 5-2019 until Period 4-2020
 Version: 6-5-2020

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		167,499	
	●	fludioxonil	113,175		
Teflu 150 SC	●	teflubenzuron	645,871		
Teppeki 50 WG	●	flonicamid	1399,180		
Topsin M	●	thiophanate-methyl	18,200		
Tracer 480 SC	●	spinosad	67,683		
Trium-P WP 1.15%	○	trichoderma harzianum			
Velum SC 500	●	fluopyram	40,000		
Vidi Parva	○	plant extract			
Annual company use of active substance			23768,900	22131,623	17,506

OVERVIEW RECORDED DATA

MPS company number: **802685/01**

Company name: Sher Ethiopia Plc. (total)

Valid: Period 5-2019 until Period 4-2020

Version: 6-5-2020

Code	Description	Unit	Period 11	Period 12	Period 13	Period 1	Period 2	Period 3	Period 4	Subtotal	Year total
FORM RECEIVED			yes	yes	yes	yes	yes	yes	yes		
CROP PROTECTION AGENTS											
3868	Addit	ml	716500	510600	407	267750	586700	1295500	1268850	4646307	7342792
4076	AGS Propamocarb	ml									178100
4156	Belt SC 480	ml	130800	28500	42	90500	199300	62750	73900	585792	2175242
3340	Chess 50 WG	gram						65489	60000	125489	125489
3167	Collis	ml	443900							443900	1062900
3226	Conserve	ml		1400		46850	8000	11900	35700	103850	114650
4064	Crop Guard 80	ml						95632	100000	195632	195632
4168	Dipel DF	gram									400700
3093	Equation Pro DF	gram	21200		302	157075	19300			197877	323877
4221	Flipper	ml	1339800	105500			4508600	1542800	632100	8128800	45557250
3117	Floramite 240 SC	ml	47300	95700	94	94550	79400	44900	9000	370944	767094
4067	Flower DS 4%	ml	60500	147733						208233	209883
3141	Fostonic 80 WP	gram	256400	142250	106810	2214700	2403040	508000	55000	5686200	12242900
4178	Game 5% EC	ml	12300	169600	311					182211	182211
3174	Impulse	ml	3787750	2873200	4892400	2330350		867606	977100	15728406	31997086
4073	Impulse Extend	ml					994200			994200	994200
4144	Lecatech	gram	310400	258500	314	186300	410250	560300	26700	1752764	2458964
3988	Liquid Seal	ml	59400							59400	431650
4034	Luna Tranquility	ml	906250	1371950						2278200	3766950
3026	Mancozeb	gram	62500	58000	47	16375	10500	19250	13500	180172	6594682
3073	Meltatox 40 EC	ml						1492400	60800	1553200	6475100
4334	Mycotal	gram	167400	148300	51					315751	534751
4237	Mytech WP	gram						67500	100000	167500	265000
4245	NEMguard	ml						67500	100000	167500	260000
3077	Nimrod 25 EC	ml									428000
3249	Nomolt	ml									1169300
4216	Pymet 50 WG	gram	563125	1466950	184	511550	996200	230900	88300	3857209	7288509
4185	Rift 20% SL	ml					27500	613200	1572900	2213600	6357320
3183	Rizolex 50 WP	gram									26000
4275	Rodimus	ml	297000	440000	3056400	155000	380300	687500	39000	5055200	36375850
3271	Runner	ml	25000			24400	38000			87400	689850
4054	Siliconi	ml	126450	178050	54	31600	224600	262900	239800	1063454	1170054
4284	Sivanto Prime SL 200	ml		475250	778	629550		548400	9600	1663578	1663578
4098	Solucion	ml									2500
4229	Sulfolac 80 WG	gram	537700	891200	450	2392025	2118195	65500		6005070	6005070
3844	Swift 500 SC	ml									10000
3127	Switch 62.5 WG	gram	67000			5400				72400	452700

OVERVIEW RECORDED DATA (Continued)

MPS company number: **802685/01**

Company name: Sher Ethiopia Plc. (total)

Valid: Period 5-2019 until Period 4-2020

Version: 6-5-2020

Code	Description	Unit	Period 11	Period 12	Period 13	Period 1	Period 2	Period 3	Period 4	Subtotal	Year total
------	-------------	------	--------------	--------------	--------------	-------------	-------------	-------------	-------------	----------	------------

CROP PROTECTION AGENTS (Continued)

4186	Teflu 150 SC	ml		1227500	707	849000			76500	2153707	4305807
3378	Teppeki 50 WG	gram	637175	84000	9		22200	23400	74400	841184	2798359
3060	Topsin M	gram									26000
3187	Tracer 480 SC	ml			7	800	116200	4800		121807	141007
4005	Trianum-P WP 1.15%	gram	200000	661000	264	267000	147000	218000	154000	1647264	3947264
4027	Velum SC 500	ml							80000	80000	80000
4196	Vidi Parva	ml	35000	54000	70					89070	89070

WATER

21	Total irrigation	m3	9013	7615	7873	785448	7411	10236	9644	837240	960323
23	Reused drainage water	m3	708	424	454	234	4862	712	719	8113	11883

ENERGY

4	Electricity usage (Total)	kWh	83207	79712	78987	63454	45789	41589	36789	429527	4303237
54	Diesel oil/fuel	litre	23643	12600	13	9650	12600	9450	17050	85006	160056
6	Green Electricity Usage	kWh	83207	79712	78987	63454	45789	41589	36789	429527	4303237

FERTILIZERS

572	Ammonium Sulphate (21%)	kg	16100000	4600000	7950000					28650000	116351000
524	Borax (Boric Acid)	kg	1040700	1096400	944	752000	656960	783800	796600	5127404	12383444
503	Calcium nitrate (nitrate of Lime)	kg	104290000	4601667	6456050	32675000	9220000	1194792	991848	159429357	1272400357
506	Copper sulphate	kg	286900	279450	256150	153100	265150	141300	237,2	1382287,2	3419925,2
544	Eddha iron 6%	kg	8751000	2011000	10174000	11597000	648000	929364	1018000	35128364	69091864
525	Fe DTPA 6%	kg	5156000	5994000	7712000	819000	920500	1549238	946460	23097198	59197698
589	Gypsum	kg				4390000		641667	210000	5241667	5241667
521	Magnesium sulphate	kg	83225000	112025000	93315000	40570000	1262000	1509474	1705000	333611474	1307286474
513	Manganese sulphate	kg	967100	955400	868,9	522850	994560	717800	716600	4875178,9	11196358,9
529	Mono-Ammonium Phosphate (MAP) 12+61+0	kg	6220000	21307000	9805000	420000	420000	789412	1405000	40366412	104394912
514	Mono-potassium phosphate 0+52.29+33.98	kg	1900000	19282500	8425000	50000			1150000	30807500	98244500
534	Natriummolybdaat (Brinkman)	kg	45570	68020	73,46	69100	91700	91660	91780	457903,46	766717,46
550	Nitric Acid 54%	litre		38628333	48177500			976334	880000	88662167	214487167
551	Nitric Acid 68%	litre	34650000			968412	1006250			36624662	559919662
549	Phosphoric Acid 85% (Food Grade)	litre	6370000	1610000	6300000	147350	880000	1130066		16437416	25152416
533	Potassium Nitrate 13+0+46	kg	65450000	23191667	34607500	1525000	1153000	985000	996000	127908167	647388167
626	Potassium Phosphite 0+30+20	litre			2566800	986800	1214400	165500		4933500	4933500

OVERVIEW RECORDED DATA (Continued)

MPS company number: **802685/01**

Company name: Sher Ethiopia Plc. (total)

Valid: Period 5-2019 until Period 4-2020

Version: 6-5-2020

Code	Description	Unit	Period 11	Period 12	Period 13	Period 1	Period 2	Period 3	Period 4	Subtotal	Year total
------	-------------	------	--------------	--------------	--------------	-------------	-------------	-------------	-------------	----------	------------

FERTILIZERS (Continued)

517	Potassium sulphate	kg	13209800	15755000	17364000	1645000	1313750	119857		49407407	156558407
655	PRIME	litre		266000	370000					636000	4808000
535	Sulphuric Acid (30%)	litre	12670000	2380000		3895000	1036000	995000	125000	21101000	132446000
537	Urea 46%	kg	7020000	11363000	7655000	997000	830455	965000	996000	29826455	127216455
501	Zinc sulphate	litre	497900	790050	562,75	405900	645300	732700	714800	3787212,75	7494952,75

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 part registration?

Yes

Slope

3902 What is the maximum slope of a field in this part registration?

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 part registration?

3 - 6%

3906 What is the average precipitation per annum? (if unknown, please leave blank)

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 unknown, please leave blank)

> 20 degrees C / 68 degrees F

OVERVIEW RECORDED DATA (Continued)

MPS company number: **802685/01**

Company name: Sher Ethiopia Plc. (total)

Valid: Period 5-2019 until Period 4-2020

Version: 6-5-2020

GENERAL INFORMATION FORM

Water management

45	Is rainwater being collected?	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	Is organic waste being processed in a responsible way?	Yes
42	Is paper being processed in a responsible way?	Yes
43	Is plastic being processed in a responsible way?	Yes
44	Is chemical waste being processed in a responsible way?	Yes

OVERVIEW RECORDED DATA

MPS company number: **802685/01**

Company name: Sher Ethiopia Plc. (total)

Valid: Period 5-2019 until Period 4-2020

Version: 6-5-2020

Code	Description	Unit	Period 5	Period 6	Period 7	Period 8	Period 9	Period 10	Subtotal
FORM RECEIVED			yes	yes	yes	yes	yes	yes	
CROP PROTECTION AGENTS									
3868	Addit	ml	1212850	7050	228050	489335	215850	543350	2696485
4076	AGS Propamocarb	ml					178100		178100
4156	Belt SC 480	ml		244650	220100	820700	267100	36900	1589450
3340	Chess 50 WG	gram							
3167	Collis	ml						619000	619000
3226	Conserve	ml			10800				10800
4064	Crop Guard 80	ml							
4168	Dipel DF	gram	300900	80500			19300		400700
3093	Equation Pro DF	gram		126000					126000
4221	Flipper	ml	7976500	4386300	5749200	41800	11778200	7496450	37428450
3117	Floramite 240 SC	ml	155050			86400	85200	69500	396150
4067	Flower DS 4%	ml					1650		1650
3141	Fostonic 80 WP	gram	7500	2197150	1625900	902950	982950	840250	6556700
4178	Game 5% EC	ml							
3174	Impulse	ml	3459650	4168100	4079400	1612580	1929200	1019750	16268680
4073	Impulse Extend	ml							
4144	Lecatech	gram	139050		135350	250000		181800	706200
3988	Liquid Seal	ml	12800	19400		114900	94500	130650	372250
4034	Luna Tranquility	ml						1488750	1488750
3026	Mancozeb	gram	1576880	2156600	762880	1379400	11425	527325	6414510
3073	Meltatox 40 EC	ml				3582800	1064800	274300	4921900
4334	Mycotal	gram					8000	211000	219000
4237	Mytech WP	gram		18000		79500			97500
4245	NEMguard	ml	70000	18000		4500			92500
3077	Nimrod 25 EC	ml		428000					428000
3249	Nomolt	ml	1169300						1169300
4216	Pymet 50 WG	gram	8750	796050	957525	35600	1038950	594425	3431300
4185	Rift 20% SL	ml	141350	94700	113300	68800	1872950	1852620	4143720
3183	Rizolex 50 WP	gram	14000	12000					26000
4275	Rodimus	ml	7498500	6479000	4251000	3714500	7845150	1532500	31320650
3271	Runner	ml	602450						602450
4054	Siliconi	ml	67500		2500		7500	29100	106600
4284	Sivanto Prime SL 200	ml							
4098	Solucion	ml	2500						2500
4229	Sulfolac 80 WG	gram							
3844	Swift 500 SC	ml						10000	10000
3127	Switch 62.5 WG	gram	12800	19400		103400	89350	155350	380300

OVERVIEW RECORDED DATA (Continued)

MPS company number: **802685/01**

Company name: Sher Ethiopia Plc. (total)

Valid: Period 5-2019 until Period 4-2020

Version: 6-5-2020

Code	Description	Unit	Period 5	Period 6	Period 7	Period 8	Period 9	Period 10	Subtotal
------	-------------	------	-------------	-------------	-------------	-------------	-------------	--------------	----------

CROP PROTECTION AGENTS (Continued)

4186	Teflu 150 SC	ml	67200	23300	2061600				2152100
3378	Teppeki 50 WG	gram	582450	457250	63400	719600	102675	31800	1957175
3060	Topsin M	gram	14000	12000					26000
3187	Tracer 480 SC	ml	19200						19200
4005	Trianum-P WP 1.15%	gram	776000	230000		547000	399000	348000	2300000
4027	Velum SC 500	ml							
4196	Vidi Parva	ml							

WATER

21	Total irrigation	m3	13270	8340	8341	8504	8209	76420	123084
23	Reused drainage water	m3	816	557	580	583	641	592	3769

ENERGY

4	Electricity usage (Total)	kWh	716804	842303	842303	700900	698750	72650	3873710
54	Diesel oil/fuel	litre	21500	12600	12600	15750		12600	75050
6	Green Electricity Usage	kWh	716804	842303	842303	700900	698750	72650	3873710

FERTILIZERS

572	Ammonium Sulphate (21%)	kg	16400000	21125000	24200000	12820000	1506000	11650000	87701000
524	Borax (Boric Acid)	kg	1389400	1223800	1480600	934700	1126000	1101540	7256040
503	Calcium nitrate (nitrate of Lime)	kg	240066000	194426000	244275000	178287000	153508000	102409000	1112971000
506	Copper sulphate	kg	394438	361450	461050	266050	222800	331850	2037638
544	Eddha iron 6%	kg	4489500			9366000	11162000	8946000	33963500
525	Fe DTPA 6%	kg	6861000	5450000	6816500	5131000	6114000	5728000	36100500
589	Gypsum	kg							
521	Magnesium sulphate	kg	201519000	160526000	204868000	174092000	140485000	92185000	973675000
513	Manganese sulphate	kg	1068480	987500	1144300	1394500	813400	913000	6321180
529	Mono-Ammonium Phosphate (MAP) 12+61+0	kg	32550000	1162500	800000	12245000	8508500	8762500	64028500
514	Mono-potassium phosphate 0+52.29+33.98	kg	2737000	587500	27787500	19562500	16350000	412500	67437000
534	Natriummolybdaat (Brinkman)	kg	65874	37700	70590	42330	43200	49120	308814
550	Nitric Acid 54%	litre				46375000	37765000	41685000	125825000
551	Nitric Acid 68%	litre	193140000	147000000	183155000				523295000
549	Phosphoric Acid 85% (Food Grade)	litre					2100000	6615000	8715000
533	Potassium Nitrate 13+0+46	kg	50000000	115155000	127805000	70320000	92385000	63815000	519480000
626	Potassium Phosphite 0+30+20	litre							

OVERVIEW RECORDED DATA (Continued)

MPS company number: **802685/01**

Company name: Sher Ethiopia Plc. (total)

Valid: Period 5-2019 until Period 4-2020

Version: 6-5-2020

Code	Description	Unit	Period 5	Period 6	Period 7	Period 8	Period 9	Period 10	Subtotal
------	-------------	------	-------------	-------------	-------------	-------------	-------------	--------------	----------

FERTILIZERS (Continued)

517	Potassium sulphate	kg	49745000	17275000	8725000	4256000	12900000	14250000	107151000
655	PRIME	litre		3727500				444500	4172000
535	Sulphuric Acid (30%)	litre		17150000			64620000	29575000	111345000
537	Urea 46%	kg	41253000	7077000	17880000	13560000	7640000	9980000	97390000
501	Zinc sulphate	litre	755040	681650	785250	458350	491400	536050	3707740

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

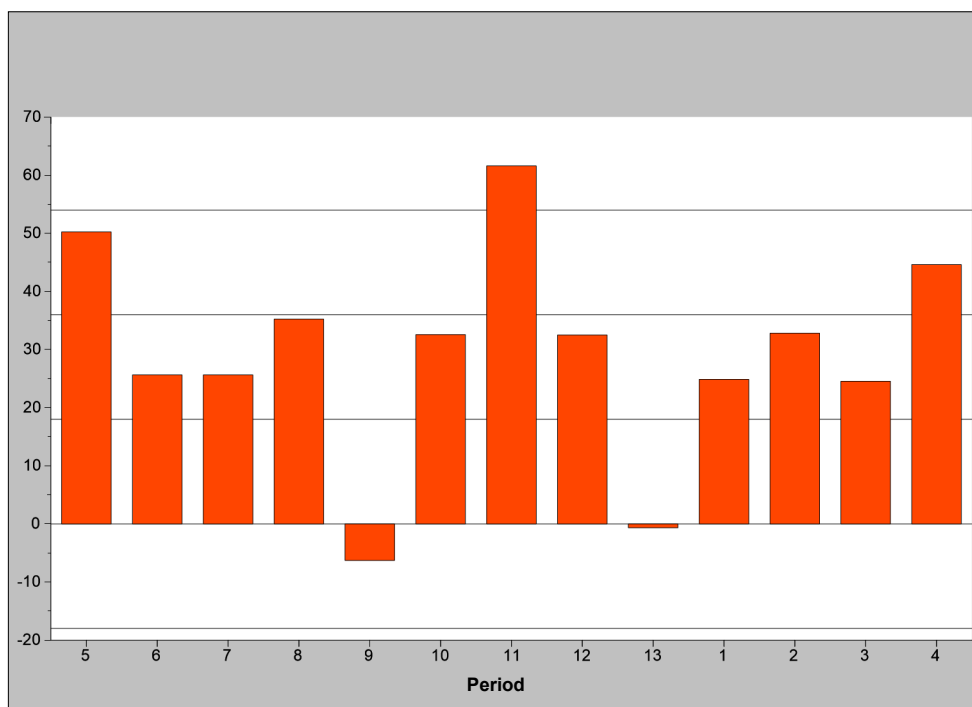
MPS company number: **802685/01**
 Company name: Sher Ethiopia Plc.

Valid: Period 5-2019 until Period 4-2020
 Version: 6-5-2020

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

Code		CO2 production (x 1000)
54	Diesel oil/fuel	422
4	Electricity usage (Total)	27
6	Green Electricity Usage	-66
Total		383

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.