



Certificate

MPS-ECAS awards this certificate in accordance with the certification scheme MPS-ABC version 16.1, to:

**Schroll Flowers ApS
Kirstinebjergvej 33
5792 ÅRSLEV
Denmark
MPS-number: 802863**

Applicable to environmental clusters:
POT PLANTS 2; POTPLANTS outdoors

Validity: **30-1-2023 valid up to and including 21-5-2023**
Total points: **99,1**
Qualification: **A**

Kind regards,
MPS-ECAS

Signature:

Drs. R. Landsmeer, Manager Operations

Date of issue:
24-1-2023

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

P.O. Box 114
2678 ZJ De Lier
The Netherlands

QUALIFICATION AND PERIOD GRAPHS

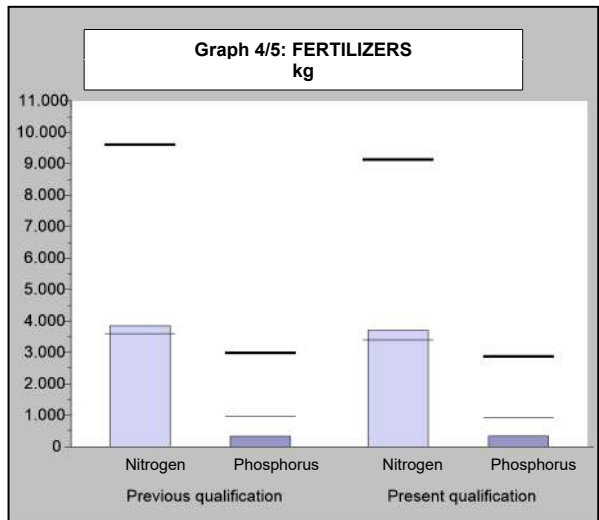
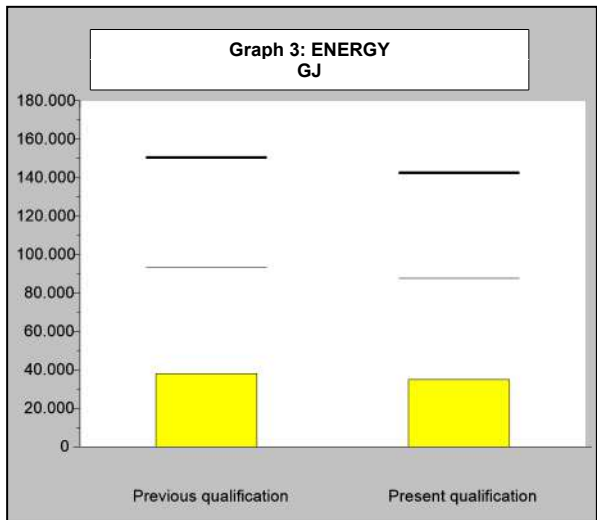
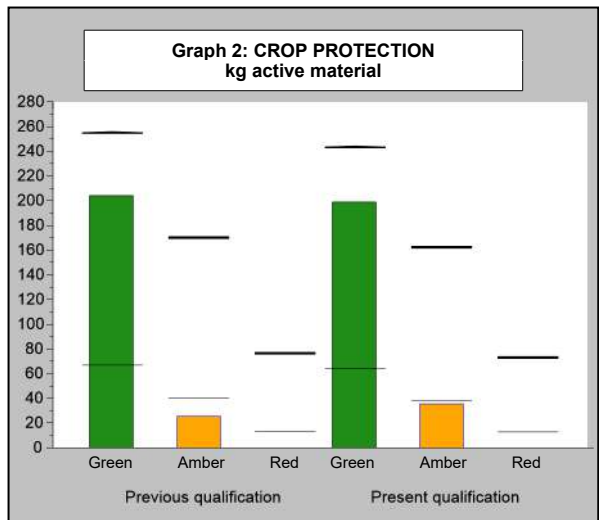
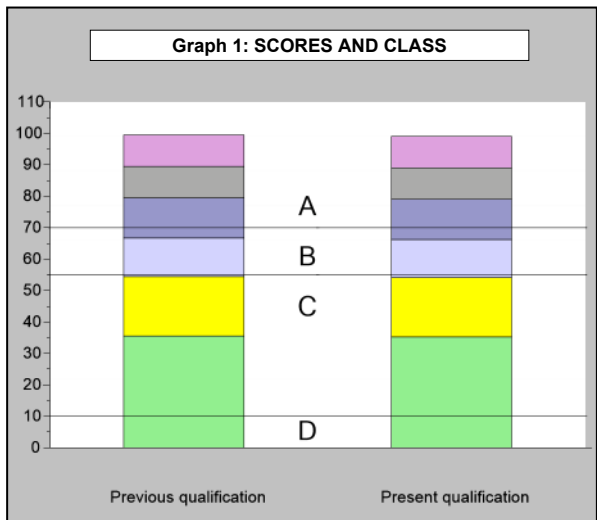
MPS company number: **802863/01**
 Company name: Schroll Flowers ApS (total)

Valid: Period 1-2022 until Period 13-2022
 Version: 24-1-2023

Table 1: DATA QUALIFICATIONS

SUBJECT	Your Company standard		Your use	Your points	max. points	A+ standard	A+ score	Obtained
	Lower	Upper limit						
Crop protection	Green	64,1-243,6 kg	199	3,4	13,7			
	Amber	38,5-162,4 kg	35,6	18,2	18,2			
	Red	12,8-73,1 kg	0	13,7	13,7			
total				35,3	45,5	85 %	77,4 %	no
Energy total		87692,8-142652,9 GJ	34980,2	18,9	18,9	75 %	100 %	yes
Fertilizers	Nitrogen	3402,3-9136,9 kg	3707,3	12,1	12,8			
	Phosphorus	926,1-2876,8 kg	342,9	12,8	12,8			
total				24,9	25,5	75 %	97,3 %	yes
Waste		0-130	130	10	10			
Water								
Certified parental material				10	10			
Total score (points)				99,1	110	90	107,9	yes
COMPANY QUALIFICATION				A				

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

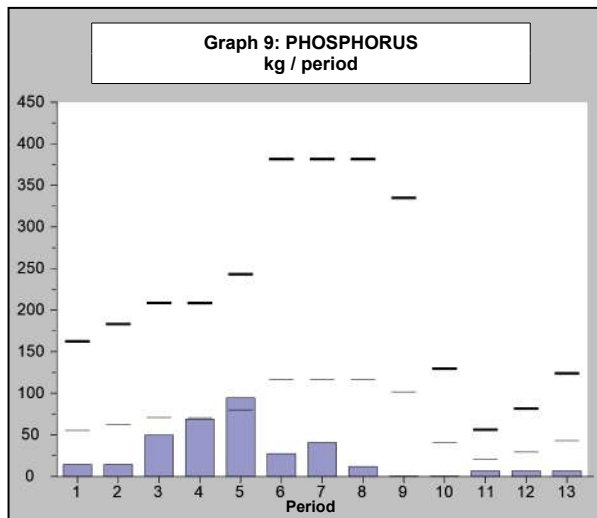
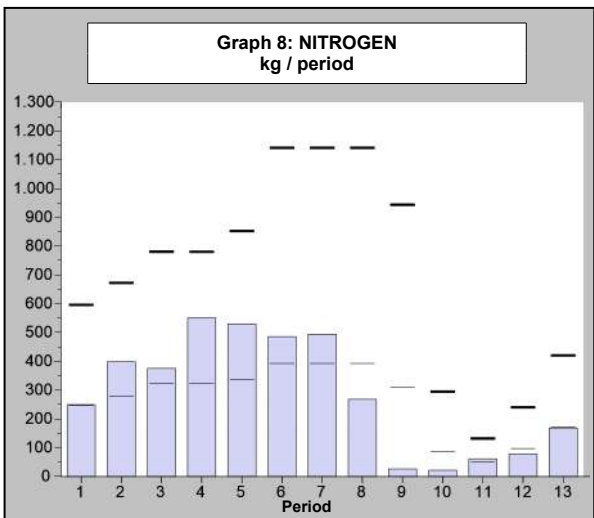
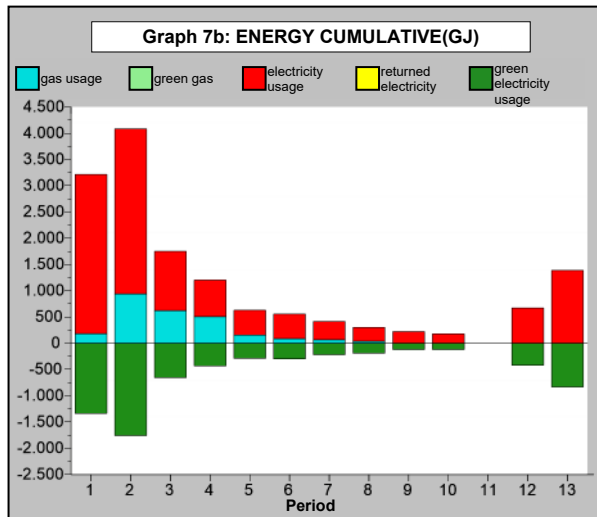
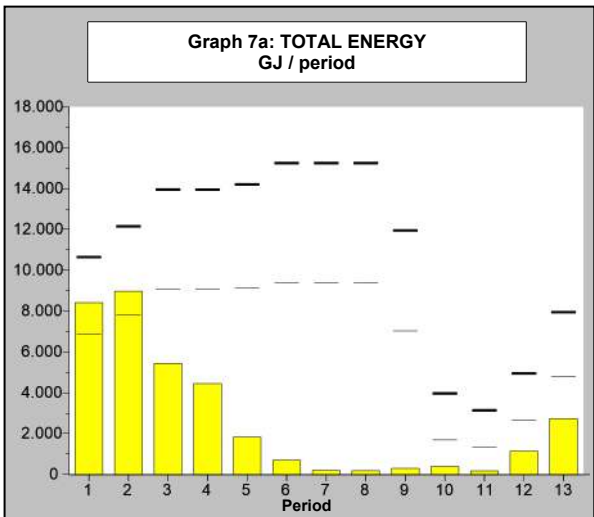
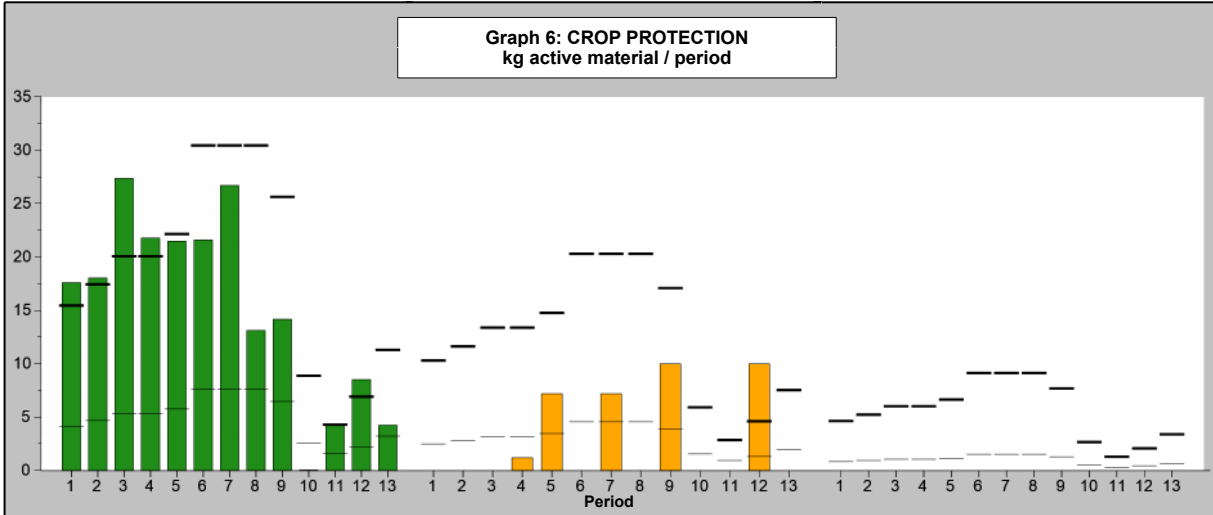


QUALIFICATION AND PERIOD GRAPHS

MPS company number: **802863/01**
 Company name: Schroll Flowers ApS (total)

Valid: Period 1-2022 until Period 13-2022
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<-----> = Upperlimit <.....> = Lowerlimit



MPS-Overview Composition of Qualification

MPS company number: **802863/01**
 Company name: Schroll Flowers ApS (total)

Valid: Period 1-2022 until Period 13-2022
 Version: 24-1-2023

Composition of points MPS environmentally certified parental material

Certified parental material	(Average) area	Your Points	Max points
Total cultivated area 1)	94615,4 m2		
Area certified parental material MPS-ABC	178769,2 m2	18,9	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	1	2	3	4	5	6	7	8	9	10	11	12	13
Environmental	Zone 5	Zone 5	Zone 5	Zone 5	Zone 5	Zone 5	Zone 5	Zone 5	Zone 5	Zone 5	Zone 5	Zone 5	Zone 5

Company usage of MPS-MIND

Pesticide	Indicator color	active ingredient	Annual company use of active substance		
			Green	Amber	Red
Alar 85 SG	●	daminozide	178,500		
AlgeFri N ProFF (ECOstyle)	●	nonanoic acid/pelargonic acid	14,003		
Aluminiumsulfat	○	aluminium sulphate			
Antialgin 50	●	benzalkoniumchloride		20,000	
ATR Sneglekor (Snail Grains)	●	ferric phosphate	0,726		
Azatin EC	●	azadirachtin	0,052		
Barclay Gallup Super 360	●	glyphosate		14,400	
Conserve	●	spinosad	1,200		
Floramite	●	bifenazate	0,480		
Mospilan SG	●	acetamiprid		1,200	
Movento SC 100	●	spirotetramat	0,200		
Nissorun 250 SC (liquid)	●	hexythiazox	1,000		
Sluxx	●	ferric phosphate	1,800		
Spruzit Neu Insektmiddel	●	pyrethrins	0,069		
	○	rapeseed oil			
Sulpher wettable powder	○	sulfur/sulphur			
Teppeki	●	flonicamid	1,000		
Annual company use of active substance			199,029	35,600	

OVERVIEW RECORDED DATA

MPS company number: **802863/01**

Company name: **Schroll Flowers ApS (total)**

Valid: Period 1-2022 until Period 13-2022

Version: 24-1-2023

Code	Description	Unit	Period 8	Period 9	Period 10	Period 11	Period 12	Period 13	Subtotal	Year total
FORM RECEIVED			yes	yes	yes	yes	yes	yes		
CROP PROTECTION AGENTS										
3023	Alar 85 SG	grams	15000			5000	10000	5000	35000	210000
3895	AlgeFri N ProFF (ECOstyle)	ml		75000					75000	75000
3252	Aluminiumsulfat	grams	125000	112000	300000		600000	250000	1387000	4937000
3353	Antialgin 50	ml		20000			20000		40000	40000
3868	ATR Sneglekorn (Snail Grains)	grams								30000
3847	Azatin EC	ml				1000	1000		2000	2000
3369	Barclay Gallup Super 360	ml								40000
3205	Conserve	ml	1000	1000					2000	10000
3279	Floramite	ml		250	250				500	2000
3277	Mospilan SG	grams								6000
3315	Movento SC 100	ml								2000
3821	Nissorun 250 SC (liquid)	ml	1000						1000	4000
3328	Sluxx	grams								60000
3800	Spruzit Neu Insektmiddel	ml								15000
3127	Sulpher wettable powder	grams						25000	25000	25000
3293	Teppeki	grams								2000
WATER										
21	Total irrigation	m3	13595	3499	772	362		992	19220	59393
ENERGY										
1	Gas consumption	m3	1094						1094	74185
2	Conversion factor		1	1	1	1	1	1		
3	Caloric value		1	1	1	1	1	1		
4	Electricity from the grid (Total)	kWh	47741	40532	32567		122319	252394	495553	2185397
54	Diesel oil/fuel	litres	2000	3000	3016		6420	7978	22414	300818
6	Green electricity from the grid	kWh	34374	21482	21820		76118	151436	305230	1211127
7	Residual heat usage	GJ		105	258	206	759	2189	3517	18780
LIGHTING										
550020	HP-Na 400W EVSA	Hour	1	1	1	2	6	8		
		Number	1	1	1	150	1800	3000		
		kWatt								

OVERVIEW RECORDED DATA (Continued)

MPS company number: **802863/01**

Valid: Period 1-2022 until Period 13-2022

Company name: Schroll Flowers ApS (total)

Version: 24-1-2023

Code	Description	Unit	Period 8	Period 9	Period 10	Period 11	Period 12	Period 13	Subtotal	Year total
FERTILIZERS										
513	Ammonium nitrate	kg	175		25	50	25	100	375	2240
303	Ammonium sulphate	litres	200						200	200
455	Calcium karbonat	kg	4,615	4,615	4,62				13,85	46,155
545	Calcium nitrate (nitrate o	kg	500	125		100	200	350	1275	7601
638	Kalk	kg								2286
980	Loker L 2+8+6 (+3.3MgO)	litres								35
516	Magnesium sulphate	kg	200	25		100	150	275	750	4100
666	Micromax (7.5%CaO+12%Fe+37.5% SO3)	kg								77,4
580	Mono-ammonium phosphate	kg				25	25	25	75	625
581	Mono-potassium phosphate	kg	50						50	125
423	NPK 12+14+24	kg	3,077	3,077	3,076				9,23	30,769
420	NPK 12+6+20	kg								1203
537	Potassium nitrate (13+0+45)	kg	850	50	100	200	275	600	2075	11800
415	Sulphuric Acid 96%	litres	1291,404						1291,404	5165,617
596	Superphosphate	kg								782
1042	TE-Mix (AMN Plus)	kg	36		4		8	24	72	460

ENVIRONMENTAL CLUSTERS

Indoor crops										
4000	UNCULTIVATED	m2		22000	70000	72000	60000	40000		
4062	POT PLANTS 2	m2	82000	60000	12000	10000	22000	42000		
	Subtotal		82000	82000	82000	82000	82000	82000		
Outdoor crops										
4044	POTPLANTS outdoors	m2	100000	100000	40000					
4099	UNCULTIVATED	m2			60000	100000	100000	100000		
	Subtotal		100000	100000	100000	100000	100000	100000		
Certified parental material										
661	MPS-ABC certif.parental mat. indoor	m2	82000	60000	82000	82000	82000	82000		
663	MPS-ABC certif.parental mat. outdoor	m2	100000	100000	100000	100000	100000	100000		

OVERVIEW RECORDED DATA (Continued)

MPS company number: 802863/01

Company name: Schroll Flowers ApS (total)

Valid: Period 1-2022 until Period 13-2022

Version: 24-1-2023

GENERAL INFORMATION FORM

MPS-Mind

Surface water

3900 What is the minimum distance of this location to the nearest surface water? < 250 metres / < 820 feet

Cover

3910 Does the surface of protected cultivation exceed 95% of this location? no

3901 What is the percentage of protected cultivation for this location (protected surface/total recorded surface for location)? 25 - 50% covered crops

3909 When a plot used for outdoor crops is close to surface water, is the plot separated from the water by a wind-break or a crop free zone of at least three metres yes

Slope

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

Leaching to groundwater

3903 Do you grow more than 95% of your crops in a closed (recirculation) system, with less than 3% loss of drainwater? No

3904 What is the minimum depth of the groundwater on all your plot(s)? 3 - 15 metres / 9,8 - 49,2 feet

3905 What is the lowest percentage of organic material of your soil on all your plots of this location? 1,5 - 3%

MPS-OEX

Sidescreens:

3950 Are sidescreens being used during lighting in the night? Yes

Topscreens:

3951 Are topscreens being used during lighting in the night? Yes

3952 If yes, what is the percentage of light-reduction? 95% or more

CO2

3953 Do you apply CO2? No

Substrate

3957 Do you cultivate cut flowers on substrate? No

Diffuse light

3961 Do you have diffuse glass on your greenhouse? No

3963 Do you have diffuse foil on your foil-greenhouse? No

3965 Do you have diffuse screens on your greenhouse? No

3967 Do you use a diffuse coating on your greenhouse? No

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

OVERVIEW RECORDED DATA

MPS company number: **802863/01**

Company name: **Schroll Flowers ApS (total)**

Valid: Period 1-2022 until Period 13-2022

Version: 24-1-2023

Code	Description	Unit	Period 1	Period 2	Period 3	Period 4	Period 5	Period 6	Period 7	Subtotal
FORM RECEIVED			yes	yes	yes	yes	yes	yes	yes	
CROP PROTECTION AGENTS										
3023	Alar 85 SG	grams	20000	20000	30000	25000	25000	25000	30000	175000
3895	AlgeFri N ProFF (ECOstyle)	ml								
3252	Aluminiumsulfat	grams	375000	425000	325000	500000	550000	775000	600000	3550000
3353	Antialgin 50	ml								
3868	ATR Sneglekorn (Snail Grains)	grams	15000						15000	30000
3847	Azatin EC	ml								
3369	Barclay Gallup Super 360	ml					20000		20000	40000
3205	Conserve	ml	1000	1000	1000		2000	3000		8000
3279	Floramite	ml	500	500	500					1500
3277	Mospilan SG	grams				6000				6000
3315	Movento SC 100	ml		2000						2000
3821	Nissorun 250 SC (liquid)	ml				2000			1000	3000
3328	Sluxx	grams		20000	20000				20000	60000
3800	Spruzit Neu Insektmiddel	ml			5000	10000				15000
3127	Sulpher wettable powder	grams								
3293	Teppeki	grams			2000					2000
WATER										
21	Total irrigation	m3	2178	2543	5120	6604	7115	8910	7703	40173
ENERGY										
1	Gas consumption	m3	5207	26840	17755	14439	4434	2487	1929	73091
2	Conversion factor		1	1	1	1	1	1	1	
3	Caloric value		1	1	1	1	1	1	1	
4	Electricity from the grid (Total)	kWh	551731	571198	205463	126686	86008	85468	63290	1689844
54	Diesel oil/fuel	litres	106354	103020	37461	31569				278404
6	Green electricity from the grid	kWh	242762	319871	119169	78545	52465	53845	39240	905897
7	Residual heat usage	GJ	3175	3440	3470	2945	1723	510		15263
LIGHTING										
550020	HP-Na 400W EVSA	Hour	8	8	7	2	1	1	1	
		Number	2042	2042	2330	3024	1	1	1	
		kWatt								

OVERVIEW RECORDED DATA (Continued)

MPS company number: **802863/01**

Valid: Period 1-2022 until Period 13-2022

Company name: Schroll Flowers ApS (total)

Version: 24-1-2023

Code	Description	Unit	Period 1	Period 2	Period 3	Period 4	Period 5	Period 6	Period 7	Subtotal
FERTILIZERS										
513	Ammonium nitrate	kg	90	275	250	225	300	325	400	1865
303	Ammonium sulphate	litres								
455	Calcium karbonat	kg	4,615	4,615	4,615	4,615	4,615	4,615	4,615	32,305
545	Calcium nitrate (nitrate o	kg	575	800	798	1430	998	925	800	6326
638	Kalk	kg			245	787	1254			2286
980	Loker L 2+8+6 (+3.3MgO)	litres	10	10	15					35
516	Magnesium sulphate	kg	400	525	425	575	475	475	475	3350
666	Micromax (7.5%CaO+12%Fe+37.5% SO3)	kg			7,74	27,09	42,57			77,4
580	Mono-ammonium phosphate	kg	50	50	125	75		100	150	550
581	Mono-potassium phosphate	kg					75			75
423	NPK 12+14+24	kg	3,077	3,077	3,077	3,077	3,077	3,077	3,077	21,539
420	NPK 12+6+20	kg			129	414	660			1203
537	Potassium nitrate (13+0+45)	kg	950	1350	1050	1500	1500	1700	1675	9725
415	Sulphuric Acid 96%	litres					2582,809		1291,404	3874,213
596	Superphosphate	kg			84	269	429			782
1042	TE-Mix (AMN Plus)	kg	36	56	48	56	56	68	68	388

ENVIRONMENTAL CLUSTERS

Indoor crops										
4000	UNCULTIVATED	m2		12000						
4062	POT PLANTS 2	m2	62000	70000	82000	82000	82000	82000	82000	
	Subtotal		62000	82000	82000	82000	82000	82000	82000	
Outdoor crops										
4044	POTPLANTS outdoors	m2					20000	100000	100000	
4099	UNCULTIVATED	m2	100000	100000	100000	100000	80000			
	Subtotal		100000	100000	100000	100000	100000	100000	100000	
Certified parental material										
661	MPS-ABC certif.parental mat. indoor	m2	62000	82000	82000	82000	82000	82000	82000	
663	MPS-ABC certif.parental mat. outdoor	m2	100000	100000	100000	100000	100000	100000	100000	

CO2 Indicator

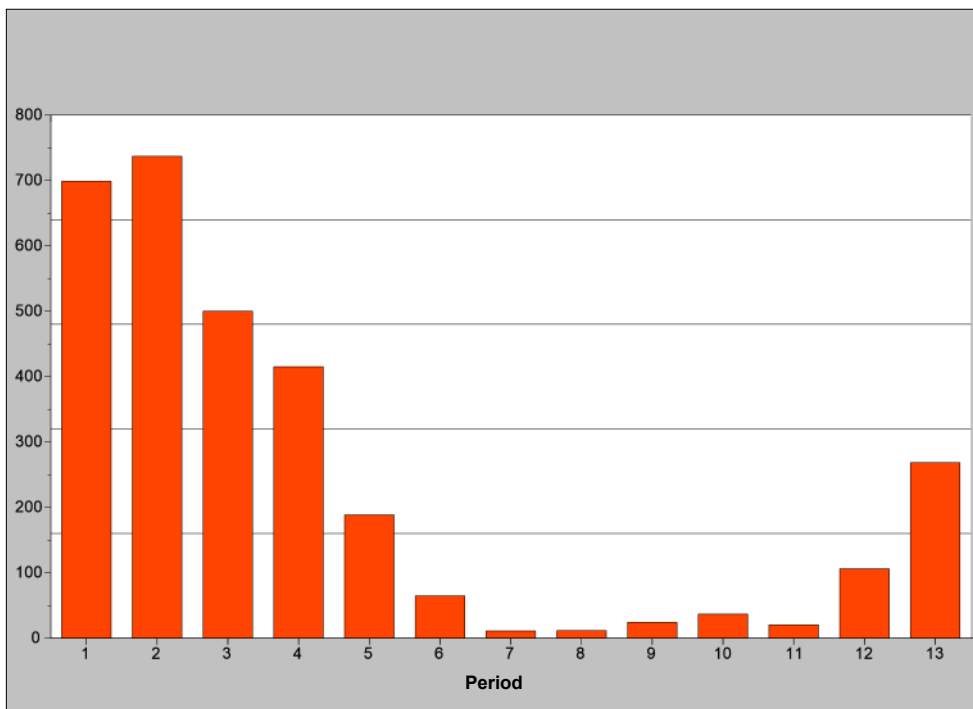
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Review CO2-emission per energy source per year (x 1000 kg)

Code		CO2 production (x 1000)
7	Residual heat usage	1855
54	Diesel oil/fuel	793
4	Electricity from the grid (Total)	673
1	Gas consumption	133
6	Green electricity from the grid	-373
Total		3081

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.