2. Property, plant and equipment

	At the beginning of the year - 2017			Movements during the year - 2017					At the end of the year - 2017		
	Cost	Accumulated depreciation and impairment	Carrying value	Additions	Disposals – Cost	Disposals – Accumulated Depreciation	Depreciation	Movement in CWIP	Cost	Accumulated depreciation and impairment	Carrying value
	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000
Group 2017											
Land, mineral and surface rights	**118 341**	**(64 105)**	**54 236**	**7 463**	**(1 802)**	**959**	**(4 923)**	**-**	**124 002**	**(68 069)**	**55 933**
Boshoek smelter	**1 238 583**	**(218 617)**	**1 019 966**	**129 029**	**(73 182)**	**73 182**	**(120 181)**	**-**	**1 294 430**	**(265 616)**	**1 028 814**
Wonderkop smelter	**309 005**	**(128 789)**	**180 216**	**53 595**	**(12 793)**	**12 793**	**(31 070)**	**-**	**349 807**	**(147 066)**	**202 741**
Lion smelter	**1 416 545**	**(334 564)**	**1 081 981**	**69 445**	**(1 099)**	**1 099**	**(116 077)**	**-**	**1 484 891**	**(449 542)**	**1 035 349**
Tswelopele pelletising plant	**170 898**	**(28 759)**	**142 139**	**3 983**	**(4 324)**	**4 324**	**(13 130)**	**-**	**170 557**	**(37 565)**	**132 992**
Bokamoso pelletising plant	**209 229**	**(61 235)**	**147 994**	**14 100**	**(14 810)**	**14 810**	**(20 853)**	**-**	**208 519**	**(67 278)**	**141 241**
Western mines	**207 307**	**(70 745)**	**136 562**	**34 334**	**(2 580)**	**2 580**	**(27 400)**	**-**	**239 061**	**(95 565)**	**143 496**
Eastern mines	**462 391**	**(153 948)**	**308 443**	**93 103**	**(254)**	**254**	**(41 433)**	**-**	**555 240**	**(195 127)**	**360 113**
Corporate assets	**3 297**	**(2 226)**	**1 071**	**294**	**(42)**	**42**	**(519)**	**-**	**3 549**	**(2 703)**	**846**
Capital work in progress (CWIP)	**162 596**	**-**	**162 596**	**-**	**-**	**-**	**-**	**7 034**	**169 630**	**-**	**169 630**
Total	**4 298 192**	**(1 062 988)**	**3 235 204**	**405 346**	**(110 886)**	**110 043**	**(375 586)***	**7 034**	**4 599 686**	**(1 328 531)**	**3 271 155**
Company 2017											
Corporate assets	**1 310**	**(1 101)**	**209**	**294**	**(42)**	**42**	**(149)**	**-**	**1 562**	**(1 208)**	**354**
Total	**1 310**	**(1 101)**	**209**	**294**	**(42)**	**42**	**(149)**	**-**	**1 562**	**(1 208)**	**354**

Change in accounting estimate
Residual values of assets are assessed annually. During the current year, management assessed the residual values of all permanent structures as nil and therefore depreciation was calculated on this basis. The impact on depreciation was an increase of R30m in the current year. At 31 December 2017, the carrying value of these assets is R958m (2016: R1bn).

Impairment assessment
As a result of an impairment indicator arising from Merafe's market capitalisation being lower than the net asset value at 31 December 2017, management performed an impairment assessment on the basis set out in note 1.20.2 and note 30. The recoverable amount was determined by using the value-in-use calculation via a discounted cash flow model. Based on the model the recoverable amount was higher than the carrying value therefore no impairment was necessary.

Depreciation
* R368.2m depreciation is recognised in the statement of comprehensive income. R7.4m relates to depreciation capitalised to inventory.

2. Property, plant and equipment *(continued)*

		At the beginning of the year - 2016			Movements during the year - 2016					At the end of the year - 2016		
		Cost	Accumulated depreciation and impairment	Carrying value	Additions	Disposals – Cost	Disposals – Accumulated Depreciation	Depreciation	Movement in CW IP	Cost	Accumulated depreciation and impairment	Carrying value
		R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000
	Group 2016											
	Land, mineral and surface rights	122 364	(63 896)	58 468	-	(4 023)	4 023	(4 232)	-	118 341	(64 105)	54 236
	Boshoek smelter	1 225 129	(208 022)	1 017 107	113 617	(100 163)	100 163	(110 758)	-	1 238 583	(218 617)	1 019 966
	Wonderkop smelter	310 225	(122 661)	187 564	18 378	(19 598)	19 598	(25 726)	-	309 005	(128 789)	180 216
	Lion smelter	1 389 252	(247 482)	1 141 770	51 592	(24 299)	24 299	(111 381)	-	1 416 545	(334 564)	1 081 981
	Tswelopele pelletising plant	171 418	(21 254)	150 164	4 575	(5 095)	5 095	(12 600)	-	170 898	(28 759)	142 139
	Bokamoso pelletising plant	204 100	(51 202)	152 898	13 917	(8 788)	8 788	(18 821)	-	209 229	(61 235)	147 994
	Western mines	188 767	(51 190)	137 577	19 436	(896)	896	(20 451)	-	207 307	(70 745)	136 562
	Eastern mines	412 810	(118 981)	293 829	51 368	(1 787)	1 787	(36 754)	-	462 391	(153 948)	308 443
	Corporate assets	3 805	(1 988)	1 817	49	(557)	556	(794)	-	3 297	(2 226)	1 071
	Capital work in progress (CWIP)	99 176	-	99 176	-	-	-	-	63 420	162 596	-	162 596
	Total	4 127 046	(886 676)	3 240 370	272 932	(165 206)	165 205	(341 517)*	63 420	4 298 192	(1 062 988)	3 235 204
	Company 2016											
	Land, mineral and surface rights	4 023	(4 023)	-	-	(4 023)	4 023	-	-	-	-	-
	Corporate assets	1 818	(1 302)	516	49	(557)	556	(355)	-	1 310	(1 101)	209
	Total	5 841	(5 325)	516	49	(4 580)	4 579	(355)	-	1 310	(1 101)	209

* R329.9m depreciation is recognised in the statement of comprehensive income. R11.6m relates to depreciation capitalised to inventory.

The property, plant and equipment was encumbered by a loan more fully described in note 9.2.

Management assessed the residual values of the permanent components of the smelters and pelletisers as higher than the carrying values of these assets and therefore no depreciation has been calculated on these assets. The carrying value of these assets are R1bn.

Although there were no indicators of impairment at 31 December 2016, the group performed an impairment assessment on the basis set out in note 1.20.2, and concluded that no impairment was necessary.