

## 11. Property, plant and equipment

(all amounts in Euro thousands)

## Group

Year ended 31 December 2015	Land	Quarries	Buildings	Plant & equipment	Motor vehicles	Office furniture, fixtures and equipment	Assets under construction	Total
<b>Opening balance</b>	<b>283,070</b>	<b>127,016</b>	<b>209,968</b>	<b>917,694</b>	<b>31,995</b>	<b>10,483</b>	<b>94,611</b>	<b>1,674,837</b>
Additions	2,465	2,885	413	4,266	236	511	149,571	160,347
Disposals (NBV) (note 29)	-37	-661	-298	-1,018	-511	-39	-602	-3,166
Reclassification of assets from/to other PPE categories	6,649	5,636	9,173	70,001	20,972	1,572	-111,774	2,229
Transfers from inventories (note 19)	-	3,164	-	334	-	-	-	3,498
Transfers from other non-current assets	-	723	-	-	-	-	-	723
Reclassification of assets from/to intangible assets (note 13)	-	107	-	-	-	-	-1,367	-1,260
Transfers to government grants (note 27)	-	-	-231	-	-	-	-	-231
Depreciation charge (note 29)	-3,335	-5,664	-11,694	-71,741	-9,485	-2,325	-	-104,244
Impairment of PPE (note 29)	-3,999	-185	-	-458	-	-	-8,413	-13,055
Exchange differences	16,609	12,040	5,531	32,854	2,005	159	5,432	74,630
<b>Ending balance</b>	<b>301,422</b>	<b>145,061</b>	<b>212,862</b>	<b>951,932</b>	<b>45,212</b>	<b>10,361</b>	<b>127,458</b>	<b>1,794,308</b>
<b>Leased assets under finance leases</b>								
<b>Opening balance</b>	-	-	-	<b>603</b>	<b>1,506</b>	-	-	<b>2,109</b>
Additions	-	-	-	-	12,087	-	-	12,087
Reclassification of assets to other PPE categories	-	-	-	-378	-1,851	-	-	-2,229
Depreciation charge (note 29)	-	-	-	-60	-867	-	-	-927
Exchange differences	-	-	-	18	354	-	-	372
<b>Ending balance</b>	-	-	-	<b>183</b>	<b>11,229</b>	-	-	<b>11,412</b>
<b>At 31 December 2015</b>								
Cost	338,441	187,146	407,420	1,807,292	233,314	58,702	135,862	3,168,177
Accumulated depreciation	-33,023	-42,085	-194,324	-854,587	-176,873	-48,341	-	-1,349,233
Accumulated losses of impairment of PPE	-3,996	-	-3	-821	-	-	-8,404	-13,224
<b>Net book value</b>	<b>301,422</b>	<b>145,061</b>	<b>213,093</b>	<b>951,884</b>	<b>56,441</b>	<b>10,361</b>	<b>127,458</b>	<b>1,805,720</b>

## 11. Property, plant and equipment (continued)

(all amounts in Euro thousands)

## Group

Year ended 31 December 2016	Land	Quarries	Buildings	Plant & equipment	Motor vehicles	Office furniture, fixtures and equipment	Assets under construction	Total
<b>Opening balance</b>	<b>301,422</b>	<b>145,061</b>	<b>212,862</b>	<b>951,932</b>	<b>45,212</b>	<b>10,361</b>	<b>127,458</b>	<b>1,794,308</b>
Additions	416	5,575	421	6,014	750	691	127,423	141,290
Fair value adjustments due to joint venture acquisition (note 30)	3,242	-	4,399	5,099	-	-	-	12,740
Additions due to acquisition of joint venture (note 30)	1,585	-	1,562	10,113	-	33	87	13,380
Disposals (NBV) (note 29)	-56	-	-169	-2,587	-172	-26	-1,194	-4,204
Reclassification of assets from/to other PPE categories	309	2,680	13,073	81,640	13,499	1,683	-114,643	-1,759
Transfers from inventories (note 19)	-	-	-	667	24	-	-	691
Transfer to investment property after revaluation (note 12)	-11	-	-	-	-	-	-	-11
Transfers from/to other accounts	-	-	-	47	-	-	-39	8
Reclassification of assets to intangible assets (note 13)	-	-	-	-	-	-17	-3,083	-3,100
Depreciation charge (note 29)	-3,433	-7,568	-11,550	-72,390	-8,983	-2,474	-	-106,398
Impairment of PPE (note 29)	-	-	-738	-3,502	-	-7	-915	-5,162
Exchange differences	-53,053	2,790	-35,704	-173,517	324	-354	-26,800	-286,314
<b>Ending balance</b>	<b>250,421</b>	<b>148,538</b>	<b>184,156</b>	<b>803,516</b>	<b>50,654</b>	<b>9,890</b>	<b>108,294</b>	<b>1,555,469</b>
<b>Leased assets under finance leases</b>								
<b>Opening balance</b>	-	-	-	<b>183</b>	<b>11,229</b>	-	-	<b>11,412</b>
Additions	-	-	-	91	6,913	-	-	7,004
Reclassification of assets to other PPE categories	-	-	-	-	1,759	-	-	1,759
Depreciation charge (note 29)	-	-	-	-58	-3,094	-	-	-3,152
Exchange differences	-	-	-	-19	762	-	-	743
<b>Ending balance</b>	-	-	-	<b>197</b>	<b>17,569</b>	-	-	<b>17,766</b>
<b>At 31 December 2016</b>								
Cost	289,445	221,782	381,369	1,694,682	242,693	57,514	109,210	2,996,695
Accumulated depreciation	-37,127	-73,244	-196,457	-886,982	-174,470	-47,617	-	-1,415,897
Accumulated losses of impairment of PPE	-1,897	-	-756	-3,987	-	-7	-916	-7,563
<b>Net book value</b>	<b>250,421</b>	<b>148,538</b>	<b>184,156</b>	<b>803,713</b>	<b>68,223</b>	<b>9,890</b>	<b>108,294</b>	<b>1,573,235</b>

## 11. Property, plant and equipment (continued)

(all amounts in Euro thousands)

## Company

## Year ended 31 December 2015

	Quarries	Land	Buildings	Plant & equipment	Motor vehicles	Office furniture, fixtures and equipment	Assets under construction	Total
<b>Opening balance</b>	<b>873</b>	<b>4,048</b>	<b>53,933</b>	<b>153,030</b>	<b>750</b>	<b>7,206</b>	<b>16,292</b>	<b>236,132</b>
Additions	-	241	250	2,767	97	393	12,672	16,420
Disposals (NBV) (note 29)	-	-	-	-6	-36	-13	-	-55
Reclassification of assets from/to other PPE categories	-	-	527	9,418	-	-	-9,945	-
Reclassification of assets to intangible assets (note 13)	-	-	-	-	-	-	-1,354	-1,354
Transfers to government grants (note 27)	-	-	-231	-	-	-	-	-231
Depreciation charge (note 29)	-63	-	-2,270	-10,041	-155	-959	-	-13,488
Reversal of impairment of PPE due to disposal (note 29)	-	-	-3	3	-	-	-	-
<b>Ending balance</b>	<b>810</b>	<b>4,289</b>	<b>52,206</b>	<b>155,171</b>	<b>656</b>	<b>6,627</b>	<b>17,665</b>	<b>237,424</b>

## At 31 December 2015

Cost	1,656	4,289	97,256	328,898	3,419	26,693	17,665	479,876
Accumulated depreciation	-846	-	-45,047	-173,241	-2,763	-20,066	-	-241,963
Accumulated losses of impairment of PPE	-	-	-3	-486	-	-	-	-489
<b>Net book value</b>	<b>810</b>	<b>4,289</b>	<b>52,206</b>	<b>155,171</b>	<b>656</b>	<b>6,627</b>	<b>17,665</b>	<b>237,424</b>

## Year ended 31 December 2016

<b>Opening balance</b>	<b>810</b>	<b>4,289</b>	<b>52,206</b>	<b>155,171</b>	<b>656</b>	<b>6,627</b>	<b>17,665</b>	<b>237,424</b>
Additions	-	411	290	8,385	474	444	10,111	20,115
Disposals/write-offs (NBV) (note 29)	-	-5	-	-	-12	-33	-	-50
Reclassification of assets from/to other PPE categories	-	-	2,259	11,340	-	509	-14,108	-
Reclassification of assets to intangible assets (note 13)	-	-	-	-	-	-	-60	-60
Depreciation charge (note 29)	-63	-	-2,292	-11,221	-165	-958	-	-14,699
Provisions for restoration	-	-	-	47	-	-	-	47
<b>Ending balance</b>	<b>747</b>	<b>4,695</b>	<b>52,463</b>	<b>163,722</b>	<b>953</b>	<b>6,589</b>	<b>13,608</b>	<b>242,777</b>

## At 31 December 2016

Cost	1,656	4,695	99,805	348,671	3,740	27,534	13,608	499,709
Accumulated depreciation	-909	-	-47,339	-184,463	-2,787	-20,945	-	-256,443
Accumulated losses of impairment of PPE	-	-	-3	-486	-	-	-	-489
<b>Net book value</b>	<b>747</b>	<b>4,695</b>	<b>52,463</b>	<b>163,722</b>	<b>953</b>	<b>6,589</b>	<b>13,608</b>	<b>242,777</b>

## 11. Property, plant and equipment (continued)

### Disposal of assets

#### Group

During 2016, the Group received €0.9 million (2015: €1.1 million) from the disposal of tangible assets with total net book value of €4.2 million (2015: €3.2 million). Thus, the Group recognized €3.3 million losses (2015: €2.2 million) on disposal of PPE in the consolidated income statement (note 4).

#### Company

During 2016, the Company received €102 thousand (2015: €356 thousand) from the disposal of tangible assets with total net book value of €50 thousand (2015: €55 thousand). Thus, the Company recognized €52 thousand gains (2015: €124 thousand) on disposal of PPE in the income statement (note 4).

### Impairments of property, plant and equipment

During 2016, the Group recorded an impairment amounting to €5.2 million mainly due to machinery impairment in Greece and Western Europe segment. The machinery was impaired as its recoverable amount was lower than its carrying amount. The recoverable amount is the fair value less costs to sell and was determined using a sale price quote from an unrelated third party as the amount that the buyer would purchase this machinery. This quote is not from an active market and represents a level 3 in the valuation hierarchy.

During 2015, the Group's subsidiary in U.S.A., Titan America LLC (TALLC), decided to suspend of development activities at the site of a proposed cement plant in Eastern North Carolina, USA (the "Castle Hayne" project). As a result of this, TALLC recorded an impairment provision of €12.4 million to bring the asset to its recoverable amount of €1.0 million within the December 31, 2015 financial statements. The fair value was obtained through an independent valuator and represents a level 3 in the valuation hierarchy.

### Property, plant and equipment pledged as security

The assets of the Company have not been pledged. On the Turkish subsidiary Adocim Marmara Cimento Beton Sanayi ve Ticaret A.S. assets, there is mortgage of €4.6 million, securing its bank credit facilities.

## 12. Investment property

The Group's investment property does not include certain investment properties of the Company, which are leased to Group subsidiaries, and as a result, are included in property, plant and equipment in the Group statement of financial position. Investment property is measured at fair value by external, independent, certified valuers, members of the institute of the certified valuers and certified from the European Group of Valuers' Associations (TEGoVA) & RICS (Royal Institution of Chartered Surveyors).

(all amounts in Euro thousands)

	Group		Company	
	2016	2015	2016	2015
<b>Opening balance</b>	<b>9,548</b>	<b>9,267</b>	<b>9,461</b>	<b>9,908</b>
Additions	-	31	-	-
Disposals	-77	-161	-	-161
Net loss from measurement at fair value (note 4)	-243	-300	-335	-286
Transfer from own-used property after revaluation	588	-	-	-
Transfer from inventories (note 19)	-	715	-	-
Exchange differences	4	-4	-	-
<b>Ending balance</b>	<b>9,820</b>	<b>9,548</b>	<b>9,126</b>	<b>9,461</b>

(all amounts in Euro thousands)

	Group		Company	
	2016	2015	2016	2015
Rental income derived from investment property	326	212	135	57
Direct operating expenses (including repair and maintenance) that did not generate rental income	-45	-24	-22	-
<b>Net profit arising from investment properties carried at fair value</b>	<b>281</b>	<b>188</b>	<b>113</b>	<b>57</b>

The fair value measurement of the investment property of the Company has been mainly conducted in accordance with the comparative method or the current market values of similar properties. The main factors that were taken into consideration, are the property location, the surface area, the local urban planning, the bordering road networks, the regional infrastructure, the property maintenance status and merchantability, the technical construction standards in the case of buildings and the impact of environmental issues if any.