

Invested capital

3.1 Intangible assets and impairment test of goodwill

| DKK million | Goodwill | Acquired patents, trademarks, licenses and know-how, etc. | Completed IT development projects | IT development projects in progress | Total |
|--|--------------|---|-----------------------------------|-------------------------------------|----------------|
| Cost at January 1, 2016 | 1,140 | 2,912 | 349 | 24 | 4,425 |
| Currency translation adjustments | (3) | 2 | 2 | - | 1 |
| Additions from business acquisitions | 22 | 216 | - | - | 238 |
| Additions during the year | - | 26 | 42 | 72 | 140 |
| Disposals during the year | - | - | (20) | - | (20) |
| Transfers to/(from) other items | - | - | 47 | (47) | - |
| Cost at December 31, 2016 | 1,159 | 3,156 | 420 | 49 | 4,784 |
| Amortization and impairment losses at January 1, 2016 | | (1,487) | (262) | | (1,749) |
| Currency translation adjustments | | (1) | (2) | | (3) |
| Amortization during the year | | (224) | (51) | | (275) |
| Impairment losses | | (40) | - | | (40) |
| Disposals during the year | | - | 20 | | 20 |
| Amortization and impairment losses at December 31, 2016 | | (1,752) | (295) | | (2,047) |
| Carrying amount at December 31, 2016 | 1,159 | 1,404 | 125 | 49 | 2,737 |

Impairment

In 2016, an impairment loss of DKK 40 million on licenses has been recognized and included in Cost of goods sold. The impairment loss was the result of an impairment test performed on a specific asset where indication of impairment had been identified due to reduced cash flow projections for the assets in question. The cash flow used for impairment was based on business plans for the period 2017-2021. A WACC of 11% was used to calculate the discounted cash flows.

Impairment test of goodwill

With effect from 2016, Management has identified two cash-generating units (CGUs): Novozymes' main activities and the Albedimex Group. In 2015, Management monitored goodwill for the Novozymes Group as a whole, which meant that the impairment test of goodwill was performed for the Novozymes Group as a whole.

The market value of Novozymes is significantly greater than equity, and no further key assumptions are used in determining whether impairment of goodwill

exists for Novozymes' main activities (2015: no impairment).

The recoverable amount of the Albedimex Group has been determined based on a value-in-use calculation. The key assumptions used in testing for impairment are based on Management's expectations for operational development and growth, which are partly based on past experience. This calculation uses risk-adjusted cash flow projections based on financial budgets and business plans approved by Management covering a budget period of 5 years. Cash



CRITICAL ACCOUNTING ESTIMATES AND JUDGMENTS

If there is any indication that an asset may be impaired, the asset's value in use is estimated and compared with the carrying amount. The calculation of value in use is based on the discounted cash flow method using estimates of future cash flows from the continuing use of the asset. The key parameter is the expected revenue streams. This parameter is based on estimates of the future, and the value in use calculated thus aggregates the natural uncertainty of these estimates. More information related to the estimates made may become available in future periods, which may give rise to changes in the estimated value in use.

flows beyond the 5-year budget period are extrapolated using an estimated growth rate of 3%. This growth rate does not exceed the long-term average growth rate for the markets in which the CGU operates. A WACC of 11% has been used to calculate the discounted cash flows for the Albedimex Group.

As the value in use for the Albedimex Group is greater than its carrying amount, no impairment has been identified.

Invested capital

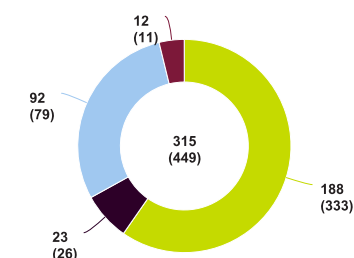
3.1 Intangible assets and impairment test of goodwill (continued)

| DKK million | Goodwill | Acquired patents, trademarks, licenses and know-how, etc. | Completed IT development projects | IT development projects in progress | Total |
|--|--------------|---|-----------------------------------|-------------------------------------|----------------|
| Cost at January 1, 2015 | 1,113 | 2,836 | 314 | - | 4,263 |
| Currency translation adjustments | (3) | 13 | 1 | - | 11 |
| Additions from business acquisitions | 30 | 68 | - | - | 98 |
| Additions during the year | - | 4 | 21 | 38 | 63 |
| Disposals during the year | - | (9) | (1) | - | (10) |
| Transfers to/(from) other items | - | - | 14 | (14) | - |
| Cost at December 31, 2015 | 1,140 | 2,912 | 349 | 24 | 4,425 |
| Amortization and impairment losses at January 1, 2015 | | (1,077) | (232) | | (1,309) |
| Currency translation adjustments | | - | (1) | | (1) |
| Amortization during the year | | (245) | (30) | | (275) |
| Impairment losses | | (174) | - | | (174) |
| Disposals during the year | | 9 | 1 | | 10 |
| Amortization and impairment losses at December 31, 2015 | | (1,487) | (262) | | (1,749) |
| Carrying amount at December 31, 2015 | 1,140 | 1,425 | 87 | 24 | 2,676 |

Recognition of amortization and impairment losses by function 2016 (2015)

■ Cost of goods sold ■ Sales and distribution
■ Research and development ■ Administration

DKK million



Impairment

The intangible asset related to the partnership with Beta Renewables S.p.A has been fully written down by recognizing an impairment loss of DKK 174 million in 2015. This was partly offset by a compensation of DKK 120 million in accordance with the Beta Renewables

agreement. The net impairment loss of DKK 54 million has been recognized in Cost of goods sold.

The impairment loss was the result of an impairment test performed on the specific asset as the expectations for the cash flows

related to the asset had been reduced. The impairment test compared the discounted cash flow related to the future use of the asset with the carrying amount of the asset. The cash flow used was based on business plans for the period 2016-2022. A WACC of 13% was used to calculate the discounted cash flows.

3.1 Intangible assets and impairment test of goodwill (continued)

§ ACCOUNTING POLICIES

Intangible assets other than goodwill are measured at cost less accumulated amortization and impairment losses. Goodwill and IT development projects in progress are not subject to amortization.

Costs associated with large IT projects for the development of software for internal use are capitalized if they are incurred with a view to developing new and improved systems.

Amortization is based on the straight-line method over the expected useful lives of the finite-lived assets, as follows:

- Completed IT development projects are amortized over the useful life. IT development assets are amortized over a period of 3-5 years
- Acquired patents, trademarks, licenses and know-how are amortized over their useful lives. The useful lives of patents and trademarks are normally identical to the patent period. Licenses are amortized over the agreement period. Recognized patents, trademarks, licenses and know-how are amortized over a period of 7-15 years

Expected useful lives are reassessed regularly.

Research costs and development costs pertaining to ongoing optimization of production processes for existing products, or to development of new products where lack of approval by the authorities, acceptance by customers and other uncertainties mean that the development costs do not fulfill the criteria for recognition in the balance sheet, are expensed as incurred.

The Group regularly reviews the carrying amounts of its finite-lived intangible assets to determine whether there is an indication of an impairment loss. An impairment loss is recognized to the extent that the asset's carrying amount exceeds its estimated recoverable amount. Impairment losses are reversed only to the extent of changes in the assumptions and estimates underlying the impairment calculation. Goodwill is tested for impairment annually or whenever there is an indication that the asset may be impaired.