Bluestar Adisseo Company

2017 Annual Report (Abstract)

I. Important Notice

1. **This Abstract is based on the full text of the Annual Report. In order for a full understanding of the operating results, financial condition and future development planning of the Company, investors are kindly reminded to read the full text carefully that published on website of Shanghai Stock Exchange and other media designated by the China Securities Regulatory Commission (the "CSRC").**

2. **The Company's Board of Directors, Board of Supervisors, directors, supervisors, and senior management guarantee that, the content of the annual report is authentic, accurate and complete, and contains no false statement, misleading presentation or material omissions, and they assume individual and several & joint legal liabilities for the annual report.**

3. **All of the Company's directors have attended the meeting of the Board of Directors.**

4. **KPMG Huazhen LLP issued an unqualified audit opinion.**

5. **The Board of Directors has reviewed the profit distribution plan and the plan to use the statutory reserve to perform a capital increase in the reporting period.**

   As audited by KPMG Huazhen LLP, the net profit attributable to the shareholders of the Company at the consolidated level for the year ended December 31, 2017 amounted to RMB 1,323,315,773 and the accumulated profits available for distribution at parent company level as at December 31, 2017 amounted to RMB 871,027,986.
   Therefore, in order to share the Company's operation achievements with all shareholders, as well as enabling the Company for further development in consideration of the Company's actual operation situations, the Company proposes that: based on the Company's total share capital of 2,681,901,273 shares dated December 31, 2017, the Company will distribute to all shareholders, cash dividend of RMB 1.73 yuan per 10 shares (inclusive of tax). The total amount of the cash dividends to be distributed is RMB 463,968,920.23 yuan.
   The above proposal is still subject to the approval of 2017 Annual General Shareholders' Meeting.

II. Company Profile and Financial highlights

1. Brief Information on the Company's Shares

Brief information on the Company's stock				
Type of security	Stock exchange on which the securities are listed	Share abbreviation	Share code	Share abbreviation before modification
Ordinary Shares	Shanghai Stock Exchange	Adisseo	600299	BNCM

	Secretary to the Board of Directors
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2. Main businesses explanation of the company during the reporting period

The primary businesses of the Group are as follows: research, development, production and sale of feed additives for animal nutrition.

Adisseo is a global leader in nutrition and health feed solutions including research and development, production and sales with over 75 years' experience. Adisseo supplies three types of products: Performance products (including methionine, vitamins, ammonium sulfate and sodium sulfate), Specialty products (including enzymes, rumen-protected methionine, organic selenium and probiotics additives) and Other products (including carbon disulfide, sulfuric acid and services of processing powder). By relying on its rich product mix, expansive sales, distribution platforms and strong technical support team, the Company provides innovative feed additives solutions to around 2,600 customers located in over 130 countries globally.

The Group owes its success to a strategy in which innovation is the driving force. As such, Adisseo has around 200 people dedicated to research, in a commitment to continuously bringing new, ever more effective products to market. The Company has actively implemented its "two-business-pillar" strategy in recent years, i.e. continuous consolidating its leadership in methionine industry, while at the same time accelerating its development in Specialty business.

Adisseo's mission is to provide the world with healthy, sustainable, affordable, high quality food without compromising the principles of sustainability.

By 2050, the world's population will have risen to more than nine billion. Providing food and nutrition security is becoming more complex with respect to the long-term environmental sustainability. The combination of natural resources scarcity, climate change and population growth further aggravate this complexity.

The feed-food chain face a dual challenge: producing larger quantities of high quality and affordable meat, milk, and eggs in response to an increasing global demand, while doing so through production systems that are environmentally sound, socially responsible and economically viable. Today it is acknowledged that Animal nutrition plays an important role to improve end-product quality and safety, increase livestock production efficiency, reduce/minimize its environmental impact, and keep animal healthy and feeling well.

From this perspective, Adisseo contribute effectively in developing and providing innovative products and services to the feed and food industry contributing to the sustainable growth of the planet. Especially, Adisseo currently provides animal nutrition additives for essential nourishment and digestibility improvement, stabilization of gut flora, helping specifically animal health by strengthening the animals' intestinal tract and therefore increase their resistance to harmful micro-organisms. As such, we contribute to the prudent use of antibiotics, reducing the risk of Antimicrobial resistance (AMR).

As well Adisseo feed ingredients contribute to support sustainable production and environmental protection by the reduction of effluent (e.g. methane, nitrogen, and phosphorus), the increase of resource efficiency and the balance of animal productivity and welfare.

Adisseo is a global leader in its main product lines:

- Adisseo is a world leader in methionine market and the world's second largest producer of methionine in 2017 by market share. Adisseo is one of the few global methionine producers capable of producing methionine in both powder and liquid forms. Adisseo is also one actor with a complete offer of methionine products;
- Adisseo is the world-leading producer of rumen-protected methionine;
- Adisseo is a world-leading and the most recognized supplier of Non-Starch Polysaccharide enzymes;
- Adisseo is well positioned in the vitamin business in the feed industry, who endeavors to provide a packaged offer of vitamin solutions with high quality and complete traceability of the products.

Its global leadership in the methionine market and deep scientific know-how in feed nutrition have enabled Adisseo to establish long-term and stable relationships with its customers. Taking full advantage of its unparalleled global sales network, Adisseo provides its customers with a comprehensive and diverse product mix that includes methionine, vitamins and specialties to satisfy the customers' demand for multiple products, and consistently provides high-quality products and after-sales service in all product lines.

Furthermore, Adisseo has a powerful team of technical experts to offer professional consultation on additive application technologies and feed formulation and finished products analysis, strengthening its position as the go-to supplier for and its long-term and productive relationships with its customers.

Adisseo is present worldwide and operates on all continents with two manufacture platforms and seven R&D centers based in Europe and China together with sales force organized in five business areas: Europe/Africa/Middle East, North & Central America, South America, Asia Pacific and

China.

The two manufacture platforms enable Adisseo manage the majority of its production internally, some vitamins are traded and Adisseo works with industrial partnerships for the production of specialties.

The seven R&D centers represent true engines of its development. In order to ensure sustainable growth, Specialty products will become a second business-pillar and thus Adisseo allocates financial resources on R&D for new products.

The main performance-driven factors for Adisseo are the following:

- Worldwide meat, consumption. The animal feed additives market is driven by the worldwide consumption of meat on which the poultry industry is the main one. This market grows sustainably each year due to the growth of the world population, the increase of meat consumption worldwide and to the industrialization of the feed industry;
- Currency exchange rates. Adisseo sells its products in different countries, mainly in US dollar, partly in Euro and partly in RMB. Regarding cost, its plants are mainly in Europe and China, it purchases a significant portion of its raw material in Euro, US dollar and RMB;
- Brent oil. Adisseo uses raw materials that are partly derivatives of Brent oil.

3. Main financial data

3.1 Main financial data for the latest three reporting periods

Unit: Yuan Currency: RMB

Main accounting data	2017	2016	Changes in comparison with the same period of last year (%)	2015
Operating revenue	10,397,823,108	10,688,263,140	-3%	15,173,331,658
Net profit attributable to the shareholders of the Company	1,323,315,773	1,865,346,347	-29%	1,528,651,062
Net profit attributable to the shareholders of the Company after deduction of non-recurring profit or losses	1,290,183,564	1,866,719,988	-31%	259,638,678
Net cash flow arising from operating activities	2,513,085,624	3,053,923,615	-18%	3,555,802,311
	The end of 2017	**The end of 2016**	**Changes in comparison with the end of last year (%)**	**The end of 2015**
Net assets attributable to the shareholders of the Company	13,164,279,736	12,075,838,659	9%	10,189,335,115

Total assets	21,329,082,225	19,943,821,352	7%	17,913,081,071

3.2 Main financial data on a quarterly basis for the reporting period

Unit: Yuan Currency: RMB

	Q1 2017	Q2 2017	Q3 2017	Q4 2017
Operating revenue	2,469,115,491	2,463,004,742	2,685,499,272	2,780,203,603
Net profit attributable to the shareholders of the Company	316,552,800	260,817,921	334,299,969	411,645,083
Net profit attributable to the shareholders of the Company after deduction of non-recurring profits and losses	311,750,717	261,312,320	327,549,649	389,570,878
Net cash flow from operating activities	609,215,893	598,075,982	378,138,972	927,654,777

Explanation of the data difference between the above quarterly financial data with the data published in previous quarterly reports:

☐ Applicable √ Not applicable

4. Share Change and Shareholders

4.1 Total number of shareholders and Shares held by top ten shareholders

Total number of shareholders by the end of reporting period	22,359
Total number of shareholders at the end of the last month before the date when the annual report was published	20,596

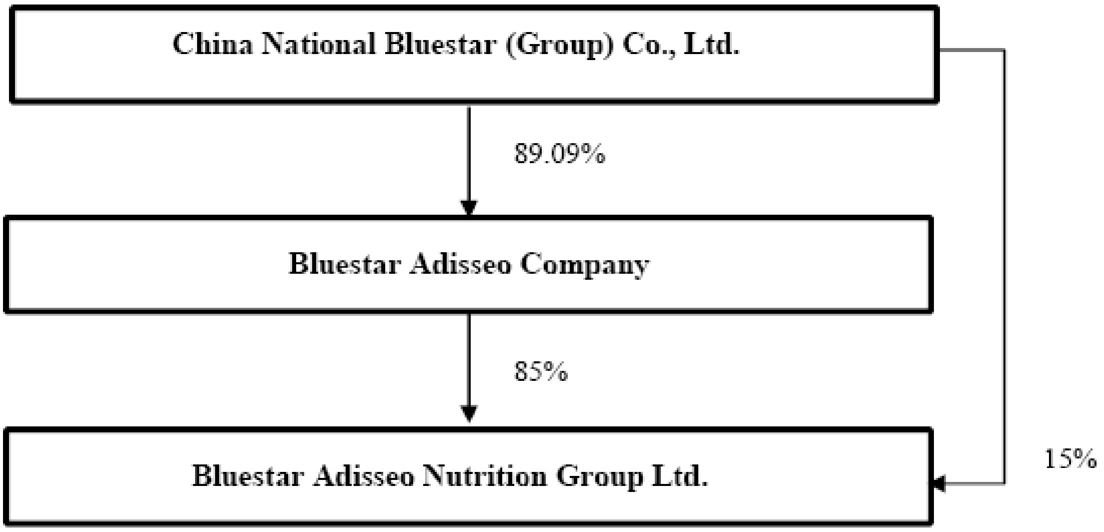
Shares held by top ten shareholders

Name of shareholder (full name)	Change in the reporting period	Number of shares held by end of the period	Proportion of shares held (%)	Number of shares with trading restrictions	Status of pledged or frozen shares		Type of shareholder
					Share status	Number	
China National Bluestar (Group) Co., Ltd.	0	2,389,387,160	89.09%	2,107,341,862	Frozen	10,000,000	Stated owned legal entity
Truevalue AM-SPDB-Truevalue Xinhuoli No.1 multi-layer asset mgt plan	1,991,925	22,754,207	0.85%	0	Unknown	0	Unknown
China Securities Finance Corporation Limited	13,794,697	13,794,697	0.51%	0	Unknown	0	Unknown
Shaanxi International Trust-SITI No.39 Jubaopen Security Plan	10,635,789	10,635,789	0.40%	0	Unknown	0	Unknown
Wu Mengling	9,559,285	9,559,285	0.36%	0	Unknown	0	Unknown
Changshi Investment Company Ltd	0	6,563,822	0.24%	0	Pledged	6,560,000	Unknown
MacroLink Holdings Limited	6,068,074	6,068,074	0.23%	0	Unknown	0	Unknown
Jiangsu Juhe Chuangyi Emerging Industry Investment Fund LLP	2,210,000	6,000,000	0.22%	0	Unknown	0	Unknown
China Electronic Investment Holding Company	0	5,185,185	0.19%	0	Unknown	0	Unknown
Guangxi Railway Development Investment Fund	0	5,185,185	0.19%	0	Unknown	0	Unknown

Statement on related relationship or acting in concert among the above shareholders	The State-owned corporation shareholders, China National Bluestar (Group) Co., Ltd. and Beijing Research and Design Institute of Rubber Industry (who owns 3,737,262 shares), are subsidiaries of China National Chemical Corporation. Except for the abovementioned shareholders, the Company does not know whether any related relationship exists among other shareholders, or whether the other shareholders have acted in concert as regulated by the Administrative Measures for Purchasing of Listed Companies.
Description for the participation in margin trading business of the top 10 shareholders (If any)	Not applicable

4.2 Block diagram of the shareholding interest and control relationship between the Company and its controlling shareholders

√ Applicable ☐ Not applicable



4.3 Block diagram of the shareholding interest and control relationship between the Company and its ultimate controlling shareholder

√ Applicable ☐ Not applicable

4.4 Total number of preferred shareholders and Shares held by top ten shareholders

☐ Applicable √ Not applicable

5. Corporate bonds

☐ Applicable √ Not applicable

III. Discussion and Analysis of the Operation

1. Analysis of results of operations of main businesses in the reporting period

See analysis of main business and related contents.

1.1 Analysis of main business

Analysis of main changes in items of profit & loss statement and cash flow statement

Unit: Yuan Currency: RMB

Items	Amount of current period	Amount in the same period of last year	Change (%)
Operating revenue	10,397,823,108	10,688,263,140	-3%
Cost of sales	6,350,759,160	5,618,473,986	13%
Selling and distribution expenses	1,005,421,123	900,475,273	12%
General and administrative expenses	721,033,442	849,592,390	-15%
Financial expenses	(57,062,707)	(32,392,590)	-76%
Net cash flow from operating activities	2,513,085,624	3,053,923,615	-18%
Net cash flow from investing activities	(900,548,429)	(609,768,378)	-48%
Net cash flow from financing activities	(880,068,583)	(751,646,313)	-17%
Research and development expenditure	300,228,195	245,649,340	22%

(1) Income & Cost Analysis

√ Applicable ☐ Not applicable

a. Analysis by industry, by product and by region

Main operations by industry						
By industry	Operating revenue	Cost of sales	Gross profit ratio (%)	Increase/de-crease in operating revenue on the same period of last year (%)	Increase/decrease in operating cost on the same period of last year (%)	Variation in GP ratio on the same period of last year
Health and Nutrition	10,397,823,108	6,350,759,160	39%	-3%	13%	-8%

Main operations by product

By product	Operating revenue	Cost of sales	Gross profit ratio (%)	Increase/decrease in operating revenue on the same period of last year (%)	Increase/decrease in operating cost on the same period of last year (%)	Variation in GP ratio on the same period of last year
Performance products	8,101,555,708	5,290,143,748	35%	-7%	16%	-13%
Specialty products	1,729,578,118	757,693,985	56%	27%	11%	6%
Other products	566,689,282	302,921,427	47%	-5%	-17%	8%
Total	**10,397,823,108**	**6,350,759,160**	**39%**	**-3%**	**13%**	**-8%**

Main operations by region						
By region	Operating revenue	Cost of sales (*)	Gross profit ratio (%)	Increase/decrease in operating revenue on the same period of last year (%)	Increase/decrease in operating cost on the same period of last year (%)	Variation in GP ratio on the same period of last year
Europe / Africa/MO	3,305,841,954			-3%		
North & Central America	2,312,659,756			10%		
Asia / Pacific (excluded China)	1,709,651,123			-3%		
South America	1,642,983,410			-5%		
China	1,154,068,435			-18%		
Other	272,618,430			-10%		
Total	**10,397,823,108**			**-3%**		

Explanation on main business by industry, by product and by regions
√ Applicable ☐ Not applicable

(*) The Company discloses only operating revenue by region due to the fact that neither operating cost, nor gross margin are monitored by region.

Performance products are mainly driven by the methionine business. The decrease in operating revenue by 7% is due to the sharp decrease in methionine prices in 2017 compared to 2016. The negative price impact on methionine has been partly balanced by a very significant volume growth of 11%, especially on liquid methionine. Adding a negative US$/€ and raw material purchasing price impact, gross profit ratio decreased but still maintained at a quite solid level.

Operating revenue in Specialty products is significantly increasing with 27% annual growth rate. Adisseo confirms its leadership in the Ruminants segment with 2017 volumes recovery after 2016 milk crisis especially with 50% of volume increase is Smartamine®. Enzymes also delivered a double digit growth thanks to the successful innovation in a fierce competitive environment. Selisseo® and Alterion®, products launched in recent years, more than almost double their operating revenue compared to last year, confirming Adisseo ability to successfully leverage on its innovation investments. This revenue increase allowed a gross profit improvement.

Cost of sales suffered from raw material prices increase partly balanced by rigorous cost management.

Analysis of the factors impacting the income from sale of products

In comparison with 2016	Change in Volume	Change in sales price	Exchange rate impact
Performance products	819,262,312	(1,854,230,666)	402,366,152
Specialty products	367,581,202	(16,787,551)	21,774,781

Adisseo's operating revenue in 2017 totaled RMB 10,397,823,108 and decreased by 6% at constant EUR/CNY rate (i.e. -3% at current EUR/CNY rate), compared to 2016.

b. Production, Sales and Inventory Quantity analysis

√ Applicable ☐ Not applicable

Units of volume by category of products comprising are not homogeneous. Therefore, no disclosure have been provided.

c. Cost analysis table

Unit: Yuan

By industry							
By industry	Cost composition items	Amount of current period	Proportion to the total cost of current period (%)	Amount of the same period of last year	Proportion to the total cost of the same period of last year (%)	Proportion of change in the amount of current period over the same period of last year (%)	Explanation
Health and Nutrition		6,350,759,160	100%	5,618,473,986	100%	13%	Unfavorable impact of increasing volume of sales and high raw material cost

By product							
By product	Cost composition items	Amount of current period	Proportion to the total cost of current period (%)	Amount of the same period of last year	Proportion to the total cost of the same period of last year (%)	Proportion of change in the amount of current period over the same period of last year (%)	Explanation
Performance products	Raw materials, purchased equipment and consumables used (71%), Depreciation and amortization (11%), Other (18%)	5,290,143,748	83%	4,568,963,128	81%	16%	Unfavorable impact of increasing volume of sales and high raw material cost
Specialty products	Raw materials, purchased equipment and consumables used (81%), Depreciation and amortization (4%), Other (15%)	757,693,985	12%	684,284,187	12%	11%	Unfavorable impact of increasing volume of sales
Other products	Raw materials, purchased equipment and consumables used (43%), Depreciation and amortization (17%), Other (40%)	302,921,427	5%	365,226,671	7%	-17%	Favorable impact of decreasing volume of sales

Other explanations related to cost analysis
☐ Applicable √ Not applicable

d. Main customers and main suppliers

√ Applicable ☐ Not applicable

The total amount of sales revenue from Adisseo's top 5 customers amounted to RMB 914 million, accounting for 9% of the Group's total operating revenue. There is no sales revenue from the related parties.
N°1: RMB 297 million; N°2: RMB 177 million; N°3: RMB 166 million; N°4: RMB 155 million; N°5: RMB 119 million.

The total amount of purchasing from the Company's top 5 suppliers amounted to RMB 1,250 million accounting for 21% of the Company's total operating cost, in which the amount of

purchasing from the related parties is null.
N º1: RMB 373 million; N º2: RMB 362 million; N º3: RMB 250 million; N º4: RMB 143 million; N º5: RMB 122 million.

(2) Expenses

√ Applicable ☐ Not applicable

Items	Amount of current period	Amount in the same period of last year	Change (%)
Selling and distribution expenses	1,005,421,123	900,475,273	12%
General and administrative expenses	721,033,442	849,592,390	-15%
Financial (income)/expenses	(57,062,707)	(32,392,590)	-76%

The increase of selling expenses was in line with the increase of sales volumes as well as the further expansion of business team of specialty production worldwide to support the second business-pillar strategy.

The decrease of financial expense is mainly due to increased interests earned on cash deposits and the increase in currency exchange result in 2017.

(3) R&D expenditures

√ Applicable ☐ Not applicable

Unit: Yuan

Research and development expenditure recorded in expenses of current period	298,604,006
Research and development expenditure capitalized of current period	1,624,189
Total research and development expenditure	300,228,195
Proportion of total research and development expenditure to operating revenue (%)	2.90%
R&D headcount as of December 31 2017	181
% of R&D headcount over total headcount	9%
% of capitalized R&D expenditure over total amount	0.54%

Explanation

√ Applicable ☐ Not applicable

Adisseo has reinforced its R&D resources in China by establishment a new R&D center in Nanjing as well as a new strategic alliance with Sichuan Agriculture University for the purpose to provide timely support and innovation to Nanjing plant as well as more China-market oriented technologies and solutions. During 2017, the incubator (Innov'L@b) has been created to generate a leverage effect and enable Adisseo continuing to increase its annual R&D investment to support its "two-business-pillar" strategy.

(4) Cash flow

√ Applicable ☐ Not applicable

The Adisseo net cash flow from operating activities amounts to RMB 2,513,085,624 compared to RMB 3,053,923,615 last year.

The decrease of net cash flow from operating activities compared to the same period of last year is explained by:

- RMB -659 million (-22%) due to the decrease in Adisseo's sales;
- RMB 118 million (4%) due to changes in the EUR/CNY currency exchange rate.

The economic performance of Adisseo mainly explains the still high level of cash generated. The operating cash flow generated by Adisseo enabled to invest RMB 974,692,179, reimbursed various debt for an amount of RMB 13,073,351 and paid dividends for an amount of RMB 866,995,232.

1.2 Significant change in the Company's profit composition or profit sources in the reporting period arises from the ancillary businesses

☐ Applicable √ Not applicable

1.3 Analysis of assets and liabilities

(1) Information of assets and liabilities

Unit: Yuan

Items	As at December 31 , 2017		As at December 31, 2016		% change	Explanation
	Amount	Percentage to total assets (%)	Amount	Percentage to total assets (%)		
Derivative financial assets	19,287,286	0%	11,471,676	0%	68%	Change related to hedging of EUR/USD.
Interest receivable	9,693,743	0%	1,040,703	0%	831%	Interests receivable on cash deposit.
Other receivables	43,080,271	0%	25,869,193	0%	67%	Increase due to insurance compensation of a 2015 losses in Nanjing plant.
Construction in progress	887,324,323	4%	453,360,413	2%	96%	Increase linked to European expansion and A-Dry+ projects.
Long-term prepaid expenses	0	0%	2,367,403	0%	-100%	Amortization of capitalized fees.
Other non-current assets	8,468,000	0%	2,747,272	0%	208%	Miscellaneous prepayments for tangible assets.
Short-term borrowings	0	0%	469,236	0%	-100%	Decrease due to repayments.
Derivative financial liabilities	9,495,399	0%	68,508,557	0%	-86%	Change related to hedging of EUR/USD.
Advances from customers	4,551,000	0%	20,811,000	0%	-78%	Decrease of receipt in advance in China due to less consignment sales.
Wages and benefits payable	690,155,511	3%	443,664,431	2%	56%	Increase linked to employee benefits with maturity less than one year at the end of 2017.
Taxes payable	221,281,764	1%	362,784,968	2%	-39%	Offset effect of French tax on value-added.
Interest payable	8,559,892	0%	5,543,874	0%	54%	Interests accrued.
Dividends payable	154,485,540	1%	104,121,900	1%	48%	Declared dividends higher in 2017.
Long-term employee benefits payable	407,467,115	2%	647,814,349	3%	-37%	Decrease linked to employee benefits with maturity less than one year at the end of 2017.
Provisions	0	0%	29,196,374	0%	-100%	Change of classification of provisions depending on their nature.
Other comprehensive income	(484,132,396)	-2%	(860,732,283)	-4%	44%	Impact of exchange rate EUR/CNY.
Surplus reserve	351,560,696	2%	256,211,737	1%	37%	Allocation of 10% of 2017 net profit of BAC.

(1) Restricted assets at the end of reporting period

☐ Applicable √ Not applicable

(2) Other information

☐ Applicable √ Not applicable

1.4 Analysis of chemical industry business information

(1) Basic information of the industry

a. Modifications in regulation

☐ Applicable √ Not applicable

b. Basic information of the subdivided sectors industry and the companies' position in the industry

√ Applicable ☐ Not applicable

- Industry trend

The animal feed additives industry is exposed to favorable global "megatrends" and is expected to grow significantly over the coming years. This growth is expected to be driven primarily by the industrialization of meat production, global population growth and wealth creation. This should be the case in emerging markets, where consumers' dietary preferences are expected to shift towards protein-rich diets.

Adisseo multi-product portfolio enhances its position with customers and differentiates our product offering from that of our competitors. Since Adisseo supplies a range of nutritional feed additives, it can provide value-added formulation advice to our customers and advise them with respect to their feed additive inclusion rate decisions.

This industry is further characterized by high entry barriers, such as high technological know-how, increasingly stringent regulations to obtain permits and authorizations, compliance with national and regional environmental and health and safety regulations, the ability to source key intermediates and the large capital investments required to develop new methionine and vitamin production capacities.

The chemical process to manufacture methionine requires significant manufacturing expertise and process technology. Access to, or development of, such expertise and technology constitutes a significant barrier to entry in this market. Furthermore, technical and commercial expertise and on-going investment in product and process innovation are critical factors to remain competitive.

Based on industry practice, the initial capital expenditures to build a world-scale, greenfield chemical methionine production facility would require a large amount of capital investment and could require at least four years to permit, plan and construct. Furthermore, access to key intermediates and raw materials used for manufacturing methionine, such as MMP for which there is only a limited number of merchant suppliers, is critical to the establishment of new production facilities.

On the demand side, global methionine continues to grow on a global scale at a rate of 6% per year as shown in the table published by *Feedinfo*.

	2016	2017	2018	2019
Demand KT	1190	1265	1338	1414
% growth rate	**5.1**	**6.3**	**5.8**	**5.7**
Additional volume	57	75	73	76

On the supply side, methionine supply shortage in 2015 has impacted market prices up. The announced new capacities from competitors have finally come on stream after some delays. In 2016 and 2017, Adisseo faced with a less favorable market environment in the methionine business, after an exceptional 2015 year, as expected.

Negative impacts from price have been partly compensated by Adisseo volumes growth, and raw material prices increase based on a higher Brent level has been partly compensated by rigorous cost management.

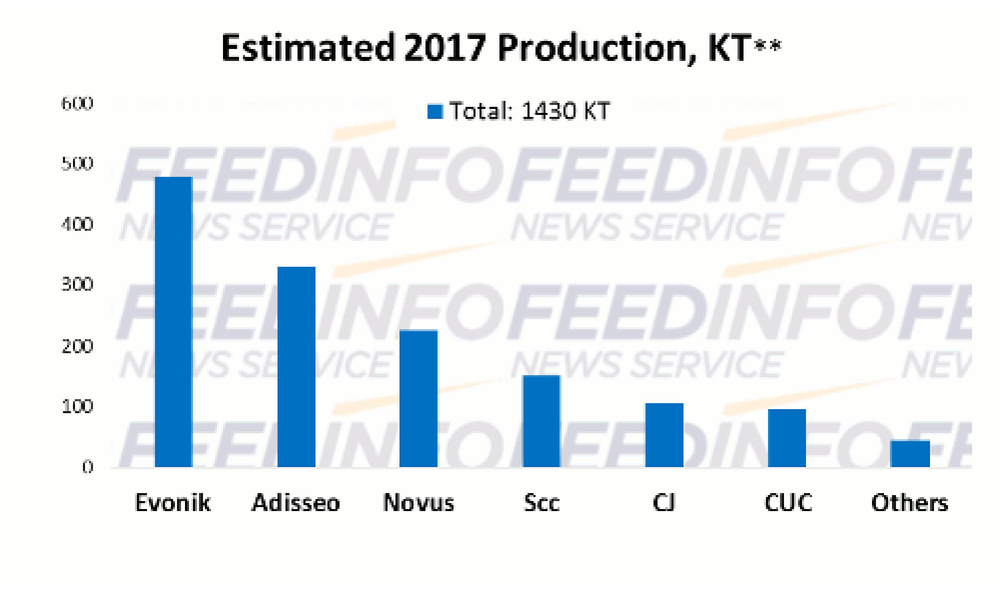
By the end of 2017, a temporary rebound has been observed on the market.

- <u>Adisseo's Competitive landscape in each Business</u>

Methionine

Production capacity in the global methionine market is concentrated, large companies such as Evonik, Adisseo, Novus and Sumitomo Chemical (SCC) are key players. Due to population growth, economic development of emerging economies, and the modernization of the animal husbandry sector, the demand for methionine in the Asia-Pacific area, including China, continues to increase rapidly. China has one of the world's highest production volumes for pork, poultry and livestock. Its animal husbandry sector continues to grow rapidly, which leads to rapid growth in demand for methionine. As the aforementioned key methionine players continue to strengthen their global position currently, they have increased investments in Asia, while domestic companies represented by Ningxia Ziguang keep investing in additional capacity. Zhejiang NHU has entered in the methionine market during the 1st semester of 2017, however, with a nameplate capacity of 50 KT per year, the extra volumes sold into the market during 2017 remained modest in the context of the overall global demand of around 1265 KT. During 2017 CJ sold more product into the market than the previous year. However, the year on year increase was modest and partially absorbed by their growing captive use.

According to a *Feedinfo* December 2017 report, there have been only minor increases in the volumes of additional capacity brought to the market during the past twelve months and the production of methionine (KT per year) by major players breaks down as follows:



As indicated above, Adisseo is the world's second largest producer of methionine in 2017 with a market share of 27% (Refer to Section 3 "Basic overview of the Company").

Vitamins

Vitamins are widely used in medicine, food additives and animal feed additives. In recent years, as China's vitamin sector continues to grow, China has become a major producer and exporter of vitamins, and the production technology and market shares for vitamin C, vitamin E, vitamin B2 and vitamin D3 are top-ranked globally. Adisseo's major competitors in the vitamins market mainly include BASF S.E., DSM N.V., Zhejiang NHU and Zhejiang Pharmaceutical. The domestic vitamin A & E production in China is dominated by Zhejiang NHU and Zhejiang Pharmaceuticals Joint Stock Company.

Enzymes

The enzymes market needs extensive research & development, patented technology and capital expenditure for the production. Novozymes, DuPont, Ab Vista, BASF, DSM and Adisseo are the main players.

(2) Product and production

a. **Main operating mode**

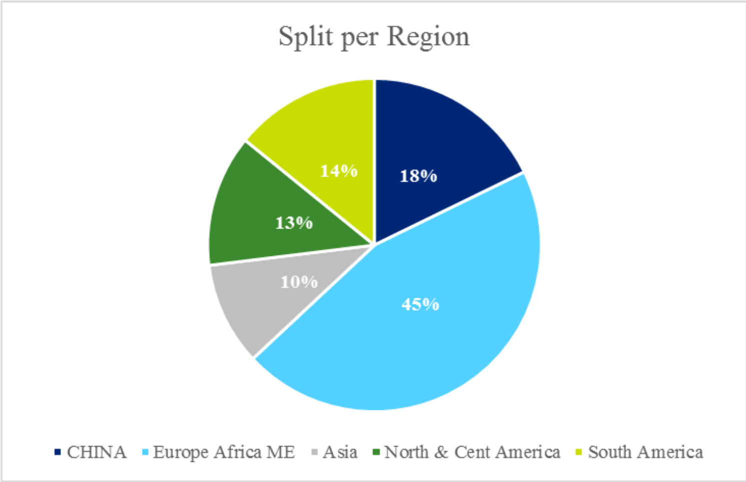
√ Applicable ☐ Not applicable

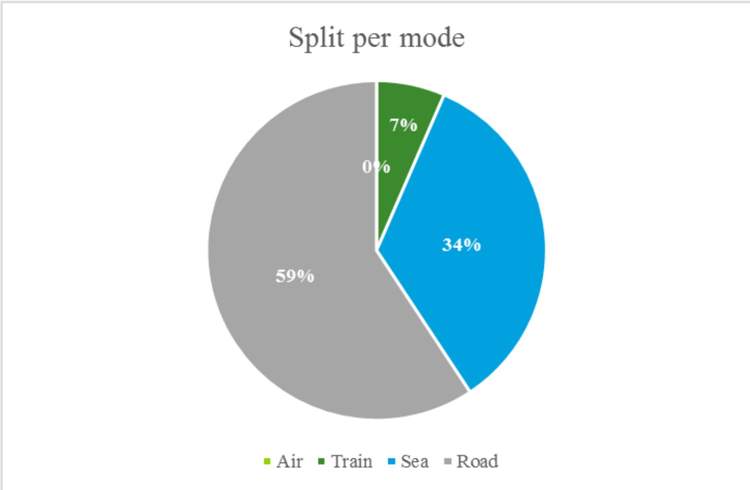
Adisseo constantly adapts its distribution network as per the evolution of flows of goods.

Raw materials transportation is entirely in the hands of its suppliers. For intermediary products Adisseo moved mainly by railway for safety and security reasons.

In 2017 for the finished products, Adisseo moved worldwide around 837 KT compared to 800 KT in 2016. Adisseo ships the finished goods with all the transportation modes. The main ones is the road transport. The transport unit are various: truck, dry and reefer containers for packed goods and tank truck, rail tank cars, isotanks and parcel tankers for bulk.

Below the split per region and per mode in terms of number of shipments in 2017:





Adisseo's production materials and finished products inventories are stored in tanks for liquid products and traditional warehouses for the other products. Warehouses located in its factories are managed by its own people and warehouses outside its factories are all outsourced to logistics providers. For both outsourced and insourced warehouses, Adisseo has established policies with regard to warehouse management. These policies are regularly audited and improved.

Change of main operating mode during the reporting period

☐ Applicable √ Not applicable

b. Information of principal product

√ Applicable ☐ Not applicable

Products	Subdivided sectors industry	Main raw material	Field of Application	Factors affecting the price
Methionine, methionine hydroxyl analogue, vitamins, ammonium sulfate and sodium sulfate	Performance products	Propylene, gas, ammoniac, sulphur, methanol. E-oil	Animal Feeds	Energy and raw material costs, Brent oil and US dollar level.
Enzyme preparation, rumen-protected methionine, organic selenium additives and probiotics additives	Specialty products	Enzymes: visco, cellulose, stearic acid, wheat flour. Rumen-protected methionine: propylene, gas, ammoniac, Sulphur, methanol, latex, isobutyl propionate silica et organic selenium	Animal Feeds	Energy and raw material costs, Brent oil and US dollar level.
Carbon disulfide, sulfuric acid and services of processing powder	Other products	Gas, sulphur.	Industrial application	Energy and raw material costs, Brent oil and US dollar level.

Adisseo is a major player in the feed ingredient industry sector. As such, the company portfolio encompasses more than 70 products, available for sale at customers worldwide.

Adisseo benefits from accessing global markets thanks to effective Global Market Access organization and processes able to determine applicable technical regulations and manage product compliance to those regulations in this respect.

In the absence of harmonized standards and requirements as well as differing national standards across countries, feed business operators need to be aware of the regulations for each country they want to access. Some countries and jurisdictions impose specific technical restrictions such as product testing, certification and shipment inspection requirements. In addition, the complex regulatory framework in some countries is constantly being updated and expanded.
In this complex technical and sanitary trade environment, Adisseo ensures products market access in more than 130 countries, resulting in more than 950 official registrations approvals worldwide.

Adisseo acknowledges its responsibility for food and feed safety and consecutively control associated risks. During the manufacture of feed products, our company places the highest priority on the safety and health of our products and as such, places the highest emphasis on ensuring that each product is safe and fit for animal consumption and is in compliance with the current industry standards.

For this purpose, company management has decided to implement and maintain an integrated management system through its worldwide activities (manufacturing and trade), complying in general to the ISO 9001 standard, and in addition, where applicable, complying to the FAMI-QS Code of Practice.

Adisseo is recognized by stakes as a visible and credible global leader, as such the company holds membership at major worldwide feed industry associations and committees in North America, Latin America, Europe and China.

c. R&D and innovation

√ Applicable ☐ Not applicable

Adisseo R&D program is structured into 3 activities:

- Discovery – fundamental research, developing in partnership with academics or start-up companies;
- Innovation – testing and commercialization through world-wide R&D centers;
- Enhancement – ongoing enhancement for validated projects.

Adisseo continues to make significant efforts to reinforce its R&D programs.

Adisseo promotes a policy of reinforced and continuous research and innovation for its products, production processes as well as its businesses, work and organization methods. There are 7 research and development centers focused on several different areas such as analysis, nutrition, formulation, biotechnology, chemical processes, chemistry, formulation and processes. During 2017, the incubator (Innov'L@b) has been created to generate a leverage effect and therefore we are expecting three new products to be launched in 2018. In 2017, the Company's total research and development expenditures amounted to RMB 300,228,195 (including expenditure capitalized for the period) and its proportion to net assets and operating revenue was 2.3% and 2.9%, respectively.

Please refer to Section 4, Part II.1.(3) R&D expenditures for detailed figures.

d. Manufacturing techniques

√ Applicable ☐ Not applicable

Adisseo's vertically integrated production process ensures a reliable supply for the key intermediates in methionine production and capturing the full value versus competition.

Main raw materials sourced externally are propylene, methanol, natural gas and sulphuric products. Some intermediates produced in excess are sold (sulphuric acid and carbon disulphide). The end products are powder and liquid methionine; sodium sulphate and ammonium sulphate constitute by products.

Adisseo manufacturing network includes seven plants: five in France, one in Spain and one in China. From those plants Adisseo delivers its finished products directly or indirectly to around 2,600 customers in the world. According to commercial agreements, it ships directly to customers or regional warehouses and from those regional warehouses to customers.

Adisseo also has a dedicated warehouse in Shanghai for traded products that are sourced in China, grouped in this warehouse and shipped worldwide either to customers or its regional warehouses.
Adisseo constantly adapts its distribution network according to the evolution of the demand to guarantee the excellent service provided to customers.

e. Production capacity and operation situation

√ Applicable ☐ Not applicable

Main Plant or projects	New Plant/Capacity under construction (Ton)	Expected completion date
Nanjing plant expansion	20,000	2018
New Nanjing Plant	180,000	Mid 2021
European platform expansion	50,000	2018
Rhodimet® A-dry+	9,000	2018

f. Change in capacity production during the reporting period

√ Applicable ☐ Not applicable

To increase its liquid methionine production in Europe by 50 KT per year. Adisseo announced in 2016 the European platform expansion project. This project, planned to be completed by the end of 2018.

With the completion of A-dry+ Project, there will be additionally 9 KT to be offered to the customers whose manufacturing process does not allow the use of liquid form so that they can also enjoy the benefits of this molecule to them.

To meet the continuously growing demand of customers and thus consolidate its leadership role, the Board of Directors of Bluestar Adisseo Company has approved the construction of a new liquid methionine plant with a capacity of 180 KT per year, on January 16, 2018. The new facility will be located in the Nanjing Liuhe Chemical Park, adjacent to the existing Adisseo plant in Nanjing. It is expected to start about mid-2021 and will require an investment estimated at USD 490 million.

Adjustment and improvement on product line or product capacity structure

√ Applicable ☐ Not applicable

After completion of the 2016 phase of its development, the Nanjing plant in China can produce liquid methionine at full capacity i.e. 150 KT per year. With the further debottlenecking project completed in current Nanjing plant, the new nameplate capacity of the Nanjing Plant will achieve 170 KT per year.

Description of unusual production halts

☐ Applicable √ Not applicable

(3) Purchasing of raw material

a. Basic information of principal raw material

√ Applicable ☐ Not applicable

Unit: RMB

Raw material	Purchasing pattern	Market value of raw material	Prices Fluctuation vs 2016	Impact on operating cost of the company due to the fluctuation in the purchase price
Propylene 95%	Long-term contract	879,365,557	16%	Slight increase in operating cost
Methanol	Long-term contract	220,859,850	31%	Slight increase in operating cost
Sulphur	Long-term contract	157,946,914	14%	Slight increase in operating cost

b. Measures to address the risk of price variation of raw materials

Description of financing approaches (including derivatives deals)

☐ Applicable √ Not applicable

Description of other methods (including periodically reserve)

☐ Applicable √ Not applicable

(4) Description of sales of product

a. Sales pattern

√ Applicable ☐ Not applicable

Adisseo manages different kinds of contracts depending on the customers' needs and the product. For methionine sales, Adisseo could propose spot sales, simple contract between 1 and 12 months with prices fixed at the order, or long-term contract over many years with fixed volumes and prices defined by quarter/month.

b. Basic information of main business by subdivided sectors industry

√ Applicable ☐ Not applicable

Information on Adisseo's main operations by business are specified above in Adisseo's "Income and Cost analysis". Refer to Section IV. II. Analysis of results of operations of main businesses in the reporting period.

Adisseo' industry is "Health and Nutrition".

c. Pricing strategy and price variation of principal product

√ Applicable ☐ Not applicable

Historical pricing volatility in the methionine market has been attributable to exogenous factors like natural disasters or animal disease outbreaks and competitive behaviors from industry participants.

Competitive behaviors within the industry and related new capacity announcements or start-ups could also affect the supply and demand balance.

The pricing environment for vitamins is primarily driven by supply and demand dynamics. The primary end for vitamin A and E markets are animal feed. However, vitamin E is also driven by the human food, pharmaceutical and cosmetics markets.

The pricing of our products is in most cases in-line with market pricing which can vary from region to region. Where possible, our prices also reflect a premium for the value-added support services that we provide to our customers.

Our global pricing policy is implemented at three levels: global, regional and national. Our global pricing strategy is established by our Global business directors. The responsibility of the Regional business managers is to adapt this global pricing strategy according to the specific market and competitive environment of the countries under their responsibility.

Regular reviews facilitate Adisseo ability to secure contracts with key customers at the right price and to seize profit-maximizing opportunities. A substantial number of our contracts across all our business lines are concluded on a quarterly basis with fixed pricing for such period.

d. Basic information of main operating by sales channel

√ Applicable ☐ Not applicable

Sales through distributors represent less than 10% of Adisseo total turnover (2016: 7%). The main part is performed directly by Adisseo own commercial network.

e. Accounting policy of revenue recognition of every marketing channel

√ Applicable ☐ Not applicable

For detail on the accounting policy of revenue recognition, please refer to the accounting policies described in Section 11.

f. Information of co-products, by-products, semi-finished products, waste materials, recycling products of residual heat

√ Applicable ☐ Not applicable

Product	Capacity of production for the year	Pricing methods	Main customers	Proportion to total operating revenue
Sodium sulfate	Not disclosed	Market prices	Feed and chemical producers	Not disclosed
Ammonium sulfate	Not disclosed	Based on indexes (raw materials and energy)	Fertilizers producers	Not disclosed
Carbon sulphur	Not disclosed	Based on indexes (raw materials and energy)	Viscose, rubber vulcanization, agrochemicals producers	Not disclosed

Explanation

☐ Applicable √ Not applicable

(5) Environmental protection and safety production

a. Description of significant accidents happened in safety production

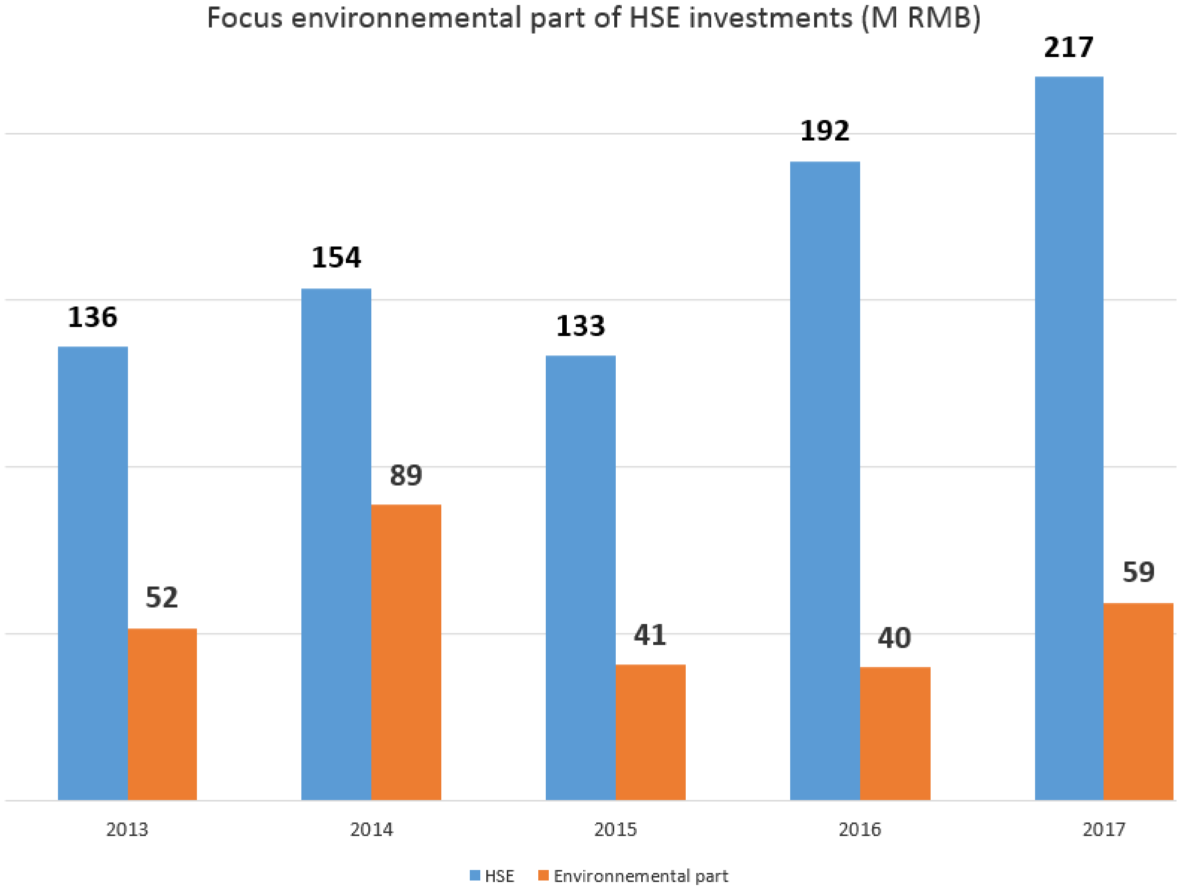
☐ Applicable √ Not applicable

b. Investment in environmental protection during the reporting period

√ Applicable ☐ Not applicable

Every year, Adisseo conducts new surveys and initiates new projects to reduce the environmental impact arising from its activities. From the supply chain to the water and energy consumption of production plants, office buildings and sales activities, every part of Adisseo is covered by the company's environmental policy. Adisseo is taking account of all the complaints with utmost care and strives to take the innovative route to addressing these issues. For example, a "Zero Odor" project with the objective to minimize the risk of inconveniencing local communities in the vicinity of our production plants was launched in 2016. In 2017, we realized odor cartography of each plants, identified most problematic areas, defined specific actions plans and shared good practices.

Adisseo investments in environmental protection consist mainly in decreasing consumption of water and energy for production and helps to limit chronic emissions and waste (see indicators in our digital Sustainable Development report www.sustainability.adisseo.com/en/).



HSE: Health and Safety Executive

c. General information related to significant environmental events in the reporting period

☐ Applicable √ Not applicable

d. Others

☐ Applicable √ Not applicable

1.5 Summary of Analysis of overall investments

☐ Applicable √ Not applicable

(1) Significant equity investment acquired in the reporting period

☐ Applicable √ Not applicable

(2) Significant non-equity investment made in the reporting period

☐ Applicable √ Not applicable

(3) Financial Assets measured at fair value

√ Applicable ☐ Not applicable

Adisseo holds derivative financial instruments to manage the effect of changes in currency exchange rates. Derivatives are not used for speculative purposes. For most of those transactions, the Group applies cash flow hedge accounting and documents, at the inception of the hedge, the type of hedging relationship, the hedging instruments, the nature and the term of the hedged item.

For further detail, please refer to paragraph 49 "Hedging" in Section 11.

1.6 Sales of Major Assets and Equity

☐ Applicable √ Not applicable

1.7 Analysis of companies controlled by or invested in the Company

The following figures are based on financial information before elimination of the entities.

Company Name	Registered/Subscribed Capital	Business	Total assets	Net assets	Net profit	Change
Adisseo France S.A.S	EUR 83,417,000	R&D, production and distribution	10,123,530,385	5,441,657,334	1,229,899,979	*NA*
Bluestar Adisseo Nanjing Co., Ltd	RMB 1,969,000,000	R&D, production and distribution	3,797,311,000	2,835,496,730	188,520,015	*NA*
Adisseo Life	USD 700,000	Distribution &	983,610,954	521,985,228	34,946,470	*NA*

Science (Shanghai) Co., Ltd		Sourcing				
Adisseo USA Inc.	USD 3,139,000	Distribution	342,113,320	270,988,596	16,339,716	*NA*
Adisseo Brasil Nutriçao Animal Ltda	BRL 1,987,106	Distribution	315,459,006	5,209,320	24,141,358	*NA*

Subsidiaries representing more than 10% of the Group's consolidated net profit:

Company Name	Adisseo France S.A.S	Bluestar Adisseo Nanjing Co., Ltd
Business	R&D, production and distribution	R&D, production and distribution
Revenue	8,778,589,330	1,670,124,333

Adisseo France S.A.S is an important subsidiary of Adisseo: the main businesses of this company are R&D, manufacturing as well as distribution of protected methionine for ruminants and vitamin A produced at the Commentry plant, powder methionine produced at the Commentry and the Roussillon plants, upstream products of methionine at the Les Roches plant and also of liquid methionine produced at Burgos plant (Spain).

Bluestar Adisseo Nanjing Co., Ltd is the second largest entity within the Adisseo Group and deals with a producing liquid methionine.

1.8 Structured entities controlled by the Company

☐ Applicable √ Not applicable

2. Description of reason for listing suspension of the Company's shares

☐ Applicable √ Not applicable

3. Description and reason of delisting of the Company's shares

☐ Applicable √ Not applicable

4. Analysis of the reasons and impacts of changes in accounting policies or accounting estimates

☐ Applicable √ Not applicable

5. A analysis of the reasons and impacts of correction of significant accounting errors

☐ Applicable √ Not applicable

6. Scope of consolidated financial statements

√ Applicable ☐ Not applicable

See Note VIII of the Annual Report for the change of consolidation scope and Note IX for rights and interests in other subjects.