



NITROGÉN MŰVEK Zrt.  
ANNUAL REPORT  
2016



## ■ MESSAGE FROM THE CHAIRMAN-CEO



### Dear partner,

The aim of our company and our subsidiaries is to maintain and increase the current market share on both the Hungarian and the international market. The tools to achieve this are increasing product quantities, improving quality, impeccable servicing, and providing farmers with professional support that is as comprehensive as possible.

Introducing the new business divisions – produce, seed, pesticide trading – proved to be a good business policy, as verified by market feedback. The recognition of the business divisions and their market shares are growing from year to year, which is thanks to the complex service provided to farmers. We do not just provide products, but Complete Genezis Technology.

In the summer of 2016 we purchased six new establishments around the country, partly to secure the right storage conditions for the fertilizers we produce, and partly to enable the commercial produce division to store and dry the produce purchased from end-user partners located in the region around the new establishments, thereby meaning we can serve agricultural producers faster and more efficiently.

In September we organised a plant inauguration ceremony following the complete renewal of the more than 80-year-old factory complex, during which our partners were able to visit our modern, energy-efficient, environmentally-friendly and higher-capacity plants which have been and are still being built as a result of the investment project underway since 2004. These include the Granulation2 plant with a daily

nominal capacity of 1,960 tonnes that produces an excellent quality of Pétisó, and the related Packaging3 plant, in which we handle the big-bag packaging of the fertilizer produced.

They were also able to see the Nitric acid plant with a capacity of 1,150 tonnes/day, which is expected to be handed over in the first half of 2017; this was built, along with the related tanks and cooling water tower, to provide the raw material needed for the production of surplus fertilizer. Thanks to these investments we will have one of the most advanced fertilizer plants in Europe.

From 2016 the produced fertilizer is – largely – sold in Hungary via the Genezis partner network that reaches end-users directly, while abroad it is sold through our subsidiaries set up in different countries. Subsidiaries were also established in Bulgaria and Austria for this purpose. Our goal is to conquer more and more new markets with our excellent Genezis products.

With the Complex Genezis Technology, we want to structure our sales – primarily in Hungary – by propagating fertilizer practices where fertilizer, seed and pesticide use optimally meet the special requirements of various areas, plant and soil types. This helps farmers to achieve higher crop averages and greater revenues.

It is important for us to keep in constant touch with our end-users, so they find out about our products and services first-hand. To this end we have organised many different events in recent years – Genezis partner meetings, the Genezis 2.0 conference organised for young farmers, and the nationwide “road-show” at the start of the year – where the end-users of our products were able to learn about our commercial policies and products, the results of our experiments, as well as exchange experience with a view to ensuring effective cooperation and information-sharing.

In the interests of those working in Hungarian agriculture and the future of our company and subsidiaries we are still counting on cooperating with our partners to meet the challenges we face.

Sincerely yours,  
László Bige  
Chairman-CEO



## ■ Managing boards of Nitrogénművek Zrt.



**DR. ISTVÁN BLAZSEK**  
Board member

**ZALÁN BIGE**  
Board member

**ESZTER FÁBRY**  
Chief Finance Officer

**LÁSZLÓ TIBOR BIGE**  
Chairman-CEO

**ZOLTÁN BIGE**  
General Manager

**JÁNOS SZILÁGYI**  
Chief Executive Officer

## ■ Supervisory Board of Nitrogénművek Zrt.



**GÉZA TÓSOKI**  
employees' representative,  
member of the Board

**RÓBERT SZUROVCSÁK**  
chairman of the Board

**ZOLTÁN GYENES**  
member of the Board



## INTRODUCTION

The main activity of Nitrogénművek Zrt. and its subsidiaries is the production and sale of solid and liquid fertilizers and foliage fertilizers with one or more components and containing macro, micro and mezo elements, production and sale of polyethylene bags needed for packaging, as well as the distribution of the NPK products of Bige Holding Kft. in Szolnok, part of the parent company's holding network.

The fertilizer products are sold under the brand name of GENEZIS, to an increasing extent through a direct sales system – the Genezis partner network.

In addition to producing a comprehensive range of fertilizers, the Group's activities also include the manufacturing of other chemical products and the provision of industrial services.

The centre of our production activity is the Pétfürdő premises of the parent company, Nitrogénművek Zrt., which concentrates on producing single-component products containing nitrogen as the active substance. The company's main product, conducive from an environmental and agronomical perspective, is Pétisó,

alongside which there are also significant sales volumes of urea that is rich in nitrogen, and of ammonium nitrate.

The range of nitrogen fertilizers includes nitrosol used as top, foliage and irrigation fertilizer, as well as mikramid that contains not only nitrogen but also micro-nutrient elements.

Nitrogénművek Zrt. produces the most important raw materials for the production of fertilizer itself, ammonia and nitric acid, whilst it also produces other chemical products – liquid ammonia and industrial gases.

The other divisions of the parent company – seeds, produce, pesticide trading – do all they can to fully satisfy the demands of agricultural producers. These business divisions are based at Nitrogénművek Zrt.'s premises in Budapest.

Six permanent establishments were purchased in summer 2016 throughout the country. These were bought for the purpose of storing some of the fertilizers under appropriate conditions, storing purchased produce and carrying out related services.



## Our interests

Registered offices of the subsidiaries are indicated on the map; names of the consolidated companies are highlighted (marked with green): 2016 ownership interests of Nitrogénművek Zrt.

Name	Site	Ownership interest	Core activities
Péti Nitrokomplex Kft.	8105 Pétfürdő, Hősök tere 14.	100%	manufacture, packaging and distribution of artificial fertilizers
Péti Polietilén Zsák Kft.	8105 Pétfürdő, Hősök tere 14.	100%	manufacture and distribution of polythene packaging materials
Nitrogén-Pinkerton Kft.	8105 Pétfürdő, Hősök tere 14.	53,3%	investigation and security services
Nádudvari Agrokémiai Kft.	4181 Nádudvar, Kabai u. 60.	24,52%	manufacture and distribution of artificial fertilizers and nitrogen compounds
BIGE Szállítmányozási Kft.	8105 Pétfürdő, Hősök tere 14.	100%	other supplementary services for transport
Nitrogén Projekt Kft.	8105 Pétfürdő, Hősök tere 14.	100%	asset management
Nitro Pet d.o.o.	24000 Subotica, Matie Corvina 15.	100%	transportation and agency activities; retail distribution of chemical products and artificial fertilizers
Nitropét Slovakia s.r.o.	932 01 Velky Meder, Nám. Mládeže 117/27	51%	retail and wholesale of agricultural products and chemicals
BH Chemical Impex s.r.l.	440011 Satu Mare, Al. I. Cuza u. 2.	100%	wholesale of chemical products
Nitropet Deutschland Handels GmbH	85540 Haar, Ladehofstrasse 10.	100%	retail and wholesale
Nitropet Italia s.r.l.	39100 Bolzano, Via Galvani 21.	100%	retail and wholesale
Nitropet d.o.o.	31000 Osijek, Ulica Hrvatske Republike 14.	100%	distribution of fertilizers and soil improvers
Nitropet Bulgaria e.o.o.d.	4001 Plovdiv, Hvoyna str. 1, floor 2 ap	100 %	distribution of fertilizers, soil improvers, pesticides, seeds and chemical products, as well as corn trade
Nitropet Austria Handel GmbH	1110 Bécs, Dopplergasse 2/5/14	100 %	distribution of fertilizers, seed, chemical substances and corn trade

After rating the subsidiaries the parent company resolved to consolidate the following five companies into the consolidated financial statements:

- Péti Polietilén Zsák Kft., Pétfürdő, wholly owned
- Péti Nitrokomplex Kft., Pétfürdő, wholly owned
- Nitro-Pet d.o.o., Subotica, wholly owned
- BH Chemical Impex s.r.l., Satu Mare, wholly owned
- Nitropét Slovakia s.r.o., Velky Meder, 51 % ownership interest

Péti Nitrokomplex Kft. and Péti Polietilén Zsák Kft. operate at the Pétfürdő site; the services necessary for their industrial infrastructure are also provided by the parent company. The core activity of Péti Nitrokomplex Kft. is the manufacturing and distribution of products containing special micro and macro elements, as well as the sale of small pre-packaged bags of the parent

company's fertilizer products. The company performed other chemical industry services – contract manufacturing, contract packaging – in 2016 as well, but similarly to previous years, it is not significant.

Péti Polietilén Zsák Kft. manufactures and distributes polyethylene packaging, bags and wrapping. Its production capacity primarily satisfies the needs of the parent company for bags and wrapping material, with any additional free capacity used to meet external market demands. In response to market demand, alongside the manufacturing and sale of self-manufactured products the company adds to its product range purchase and direct sale of packaging materials not produced by the company.

"Nitro Pet" d.o.o. is active in the Serbian town of Subotica, and distributes the parent company's products in

Serbia. Compared to previous years there were various steps taken to rationalise business operations in 2016. BB-packaged fertilizers were included in the product range; furthermore, road transport has almost completely replaced the rail transportation used to date, which means the fertilizer produced by the parent company can even be delivered straight to the customer if required, instead of selling from the warehouse in Subotica as has been the case to date. The business site of SC. BH Chemical Impex Kft. is in Satu Mare, where they are engaged exclusively in the wholesale of Genezis products. 2016 was eventful for the company. New sales staff were hired in the fourth quarter, enabling far greater sales than before, and there was no shortage of Péti-só. Sales revenue was also boosted by the company including the small pre-packaged products by Péti Nitrokomplex Kft. in its product range in Romania, alongside the traditional fertilizer products of the parent company, while pesticides were purchased and exported too.

Nitropét Slovakia Kft.'s permanent establishment is located in the Slovakian Velky Meder, from where it supplies the Slovak and Czech markets with Genezis products. There is significant competition on this market; with a view to protecting and stabilising its existing market position the company responds to this with a swift, regular and reliable flow of quality products coupled with a flexible pricing policy. In 2016 after the new granulation plant was launched, customer requirements were met with the desired volume of products; thanks to this, sales volumes were higher compared to the previous year with a more than 50% increase in the average price per tonne. The larger sales volumes are also due to greater demand from the Czech market. The parent company works closely with the Fertilizers Europe committees and other international organisations, receiving information, studies and analyses on the EU fertilizer market; the organisation also functions as a body for interest representation and legal remedy vis-à-vis manufacturers outside the European Union.



## ■ PRODUCTION

No overhauls were planned in advance for 2016, so our production activity was determined by the operation and technical condition of our production plants – primarily the ammonia plant.

The commissioning of the new 2,000 tonnes/day Granulation2 plant heralded a major change in the production structure, and significantly increased our fertilizer capacity. The commissioning of the Granulation2 plant enabled us to start the investment for reconstructing the Pétisó plant and increasing capacity.

The Ammonia plant developments and the launch of the new plants not only boosted production capacities, but also brought considerable energy savings. The majority of these savings appeared in the company's steam system as surplus steam, which we use to generate electricity, thereby reducing the quantity of electric energy purchased.

Consequently, the company's 2016 production volume was higher than the previous year: we manufactured 101,000 tonnes more fertilizer.

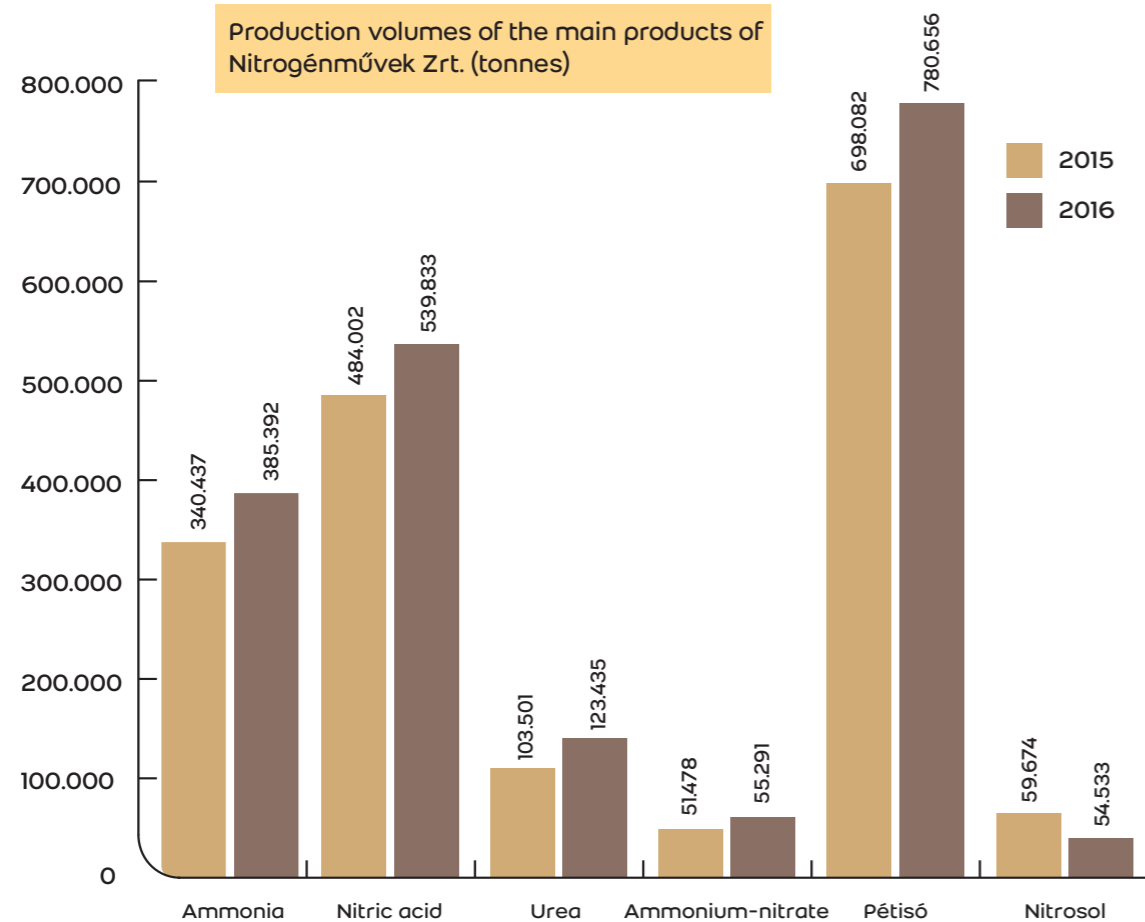
### Main events influencing our production in 2016:

In the Ammonia plant, following the technological changes in 2015 to expand capacity and improve energy efficiency, the plant reached a daily capacity of 1400 tonnes. This increased capacity could not be used though because the investments underway at the parent company have yet to be completed. Furthermore, the capacity expansion of the Ammonia plant and operating at a higher capacity required other changes, and the time required for this reduced the time available for production.

The natural gas utilisation indicator for the Ammonia plant improved significantly following the developments, thereby lowering our production costs.

The Nitric acid plant operated at a high capacity of 95-100% during the production periods.

As a result of developments in previous years – during the downtime of the Ammonia plant – the Nitric acid plant supplied the neutralisation plant with ammonia



gas, in some cases whilst producing nitric acid, which ensured the continuity of fertilizer production and increased the time available for production.

The production of the Urea plant was influenced by the quantity of ammonia available and its own technical condition. During the first six months, production was mainly hindered by maintenance work in the ammonia plant, while the plant's own technical problems reduced its operating capacity in the closing months of the year.

The Pétisó plant operated until May 2016, during which time its production was adapted to the commercial demands and the production of the re-commissioned granulation plant. The capacity expansion and reconstruction works began after this, and are expected to be completed at the end of June 2017.

Production in the Granulation1 plant was steady and reliable during the year. During the planned downtime, the maintenance work needed for stable operations was carried out. The Neutralisation and Dolomite grinder plants functioned without any major faults in 2016.

The Neutralisation2 and the Dolomite Grinder2 plants supplied the Pétisó plant with raw material at the start of the year, before switching to the Granulation2 plant after the Pétisó plant shut down.

During February the warranty measurements for Pétisó were successfully conducted in Granulation2 plant, before the tests for ammonium nitrate began. However, these were postponed by the German supplier of the plant because of change requests that arose during the trial operation.

The downtime of the Pétisó plant and the commissioning of the Granulation2 plant not only resulted in greater production capacity, but also significantly lowered the steam consumption of the fertilizer plants. The steam saved here was used to generate electricity in the steam condensation turbine generator unit – commissioned at the end of summer – and this will continue in future.



## ■ ENVIRONMENTAL PROTECTION

As a corporation in the chemical industry the Group is committed to using its environment in a rational and considerate manner with a view to laying the foundations for its future development. For this reason it pays close attention to ensuring that operations comply with environmental laws and regulations and to mitigating the harmful ecological impacts of its technologies.

With a view to reducing environmental load, the parent company Nitrogénművek Zrt. constantly perfects and develops its manufacturing technology.

Since 2000 Nitrogénművek Zrt. has operated an Environmental Management System. The auditors of TÜV Rheinland InterCert Kft. performed a supervisory audit of the system certified according to MSZ EN ISO 14001:2005 in June 2016. The audit confirmed that the design, documentation and implementation of the system is appropriate and complies with all relevant requirements of the standard. Péti Polietilén Zsák Kft. that manufactures polyethylene packaging materials also has Environmental Management Systems under ISO 14001, the supervisory audit was successfully completed in 2016.

Reporting, recording and disposal of hazardous waste generated is ensured by the members of the Group in compliance with regulations.

The parent company recycled the majority of the production waste created during the operations of the fertilizer factory in Pétfürdő into manufacturing technologies, while it gave waste paper, waste plastics and office wastes to a recycling company. Communal and inert waste is taken away and disposed by licensed organisations.

Packaging waste produced at Péti Nitrokomplex Kft. – polyethylene bags, plastic bottles, containers, contaminated boxes – was utilised based on a contract concluded with a recycling company taking on the firm's recycling obligations. Péti Polietilén Zsák Kft. re-processed the polyethylene waste it produced when making bags in 2016 as well: it produced lower-quality products by grinding and re-granulating the waste.

Packaging waste generated by BH Chemical Impex s.r.l. is collected and disposed by a specialised firm based on a contract. No hazardous wastes were produced at the other companies and there were no harmful emissions.





**2016 SALES ACTIVITY**



Consolidated financial statements for 2016 prepared in accordance with International Financial Reporting Standards as adopted by the EU

Consolidated Statement of Comprehensive Income

Data in THUF

Description

2016 figures

Total operating income	75,173,531
Total operating costs	66,988,479
Operating profit	8,185,052
Loss/Profit on financial transactions	-3,339,952
Share of profit of associates, net of tax	42,954
Profit before tax	4,888,054
Profit for the period	5,322,086

Consolidated Statement of Financial Position

Data in THUF

Description

2016 figures

ASSETS	
Total non-current assets	93,543,017
Total current assets	84,902,470
TOTAL ASSETS	178,445,487
EQUITY AND LIABILITIES	
Shareholders' equity	
Total shareholders' equity	53,407,821
Non-current liabilities	
Total non-current liabilities	98,478,522
Total current liabilities	26,559,144
TOTAL EQUITY AND LIABILITIES	178,445,487



## 2016 SALES ACTIVITY



**Zoltán Rácz**  
Commercial Deputy  
CEO

We produce and sell all of the fertilizer types used in modern nutrient management, and want to provide our partners with a comprehensive service; this is why we also sell seeds and pesticides in Hungary, besides fertilizers, and take part in crop trading. Our primary objective is to satisfy the needs of Hungarian end-users to the full, and support farmers professionally via our sales and consulting colleagues in the Genezis partner network. The main task of the network comprising trained and experienced sales agents is to offer individuals and farmers the right type and price of fertilizer, seed and pesticide for their

land, bearing sustainable development in mind, and to buy the produce made available.

Our commercial activity is supported by a uniform visual appearance, which helps consumers recognize our Genezis brand whilst also duly symbolising the defining role of our company on the market.

In 2016 during our fertilizer demonstration experiments on large parcels of land under the 500 Club programme we supplied fertilizer for an area of 2500 hectares as well as seeds as required by the farmers under the comparative experimental system using divided land parcels based on ProPlanta advice.



### Best outputs for the 4 main cultures in the 2015/2016 year:

Produce	Location of experiment	Average crop		Extra	%
		Genezis (t/ha)	Industrial (t/ha)	average crop (t/ha)	
Corn	Bajna	10.6	6.7	3.9	37
Sunflower	Polgár	4.45	3.69	0.76	17
Rapeseed	Iregszemcse	5.15	4.45	0.70	14
Autumn wheat	Polgár	8.08	6.08	2.00	25

Using economic calculations we make a complex input return comparison after harvests for every experiment, which is shown in the following table.

### 2015-2016 500 Club average results

	Number of experiments	Of which experiments with increased yield	Average yield increase	Average crop prices	Average net additional profit
	no.	no.	t/ha	HUF/t	HUF/ha
Corn	33	28	0.79	45,000	22,180
Sunflower	18	14	0.31	100,000	26,824
Autumn wheat	155	139	0.52	41,000	27,708
Winter rapeseed	55	48	0.33	105,520	42,623

The extra cost of input materials and fertilizers recommended by our specialist advisers for Genezis parcels, compared to parcels treated traditionally (industrially) were deducted from the average net additional profit.

### Use of nitrogen active ingredient in 2015-2016 (kg/ha)

	Genezis parcel	Industrial parcel
Corn	158	115
Sunflower	96	78
Autumn wheat	144	111
Winter rapeseed	162	127

The results clearly prove that it is worth treating arable land professionally since the extra attention and nutrients pay off significantly and produce a very high economic yield for the farmers when applied throughout the entire cultivated area.

Based on the experiments conducted for six years now we can say that at least further 20% growth is possible on the Hungarian fertilizer market also in the short term, provided that farmers accept and use the technology we recommend for the various types of produce.

The 500 Club programme is a major learning curve, which we are continuing in the 2017-2018 season with the positive experiences of the partners involved, under the customary operating conditions. Despite the reduction in the number of experiments, we have set the goal of using the maximum nitrogen active substance permitted by law on the 3 hectare land parcels of the farmers involved in the programme, and examining the results.

## Trade of fertilizers and chemical products

According to information from the Hungarian Research Institute of Agricultural Economics, distributors of fertilizer sold 1.2 million tonnes of single-component fertilizer directly to Hungarian agricultural producers in 2016. The turnover of single-component nitrogen fertilizer rose by 14% in 2016 compared to the average for 2011-2015. Similar to previous years, the greatest demand in 2016 was for limestone ammonium nitrate (MAS), accounting for 46% of the entire fertilizer turnover. Fertilizer prices dropped by 11.3% on average, with the price of Pétisó dropping to its 2010 level.

The quarterly breakdown of fertilizer demand in 2016 was similar to 2015.

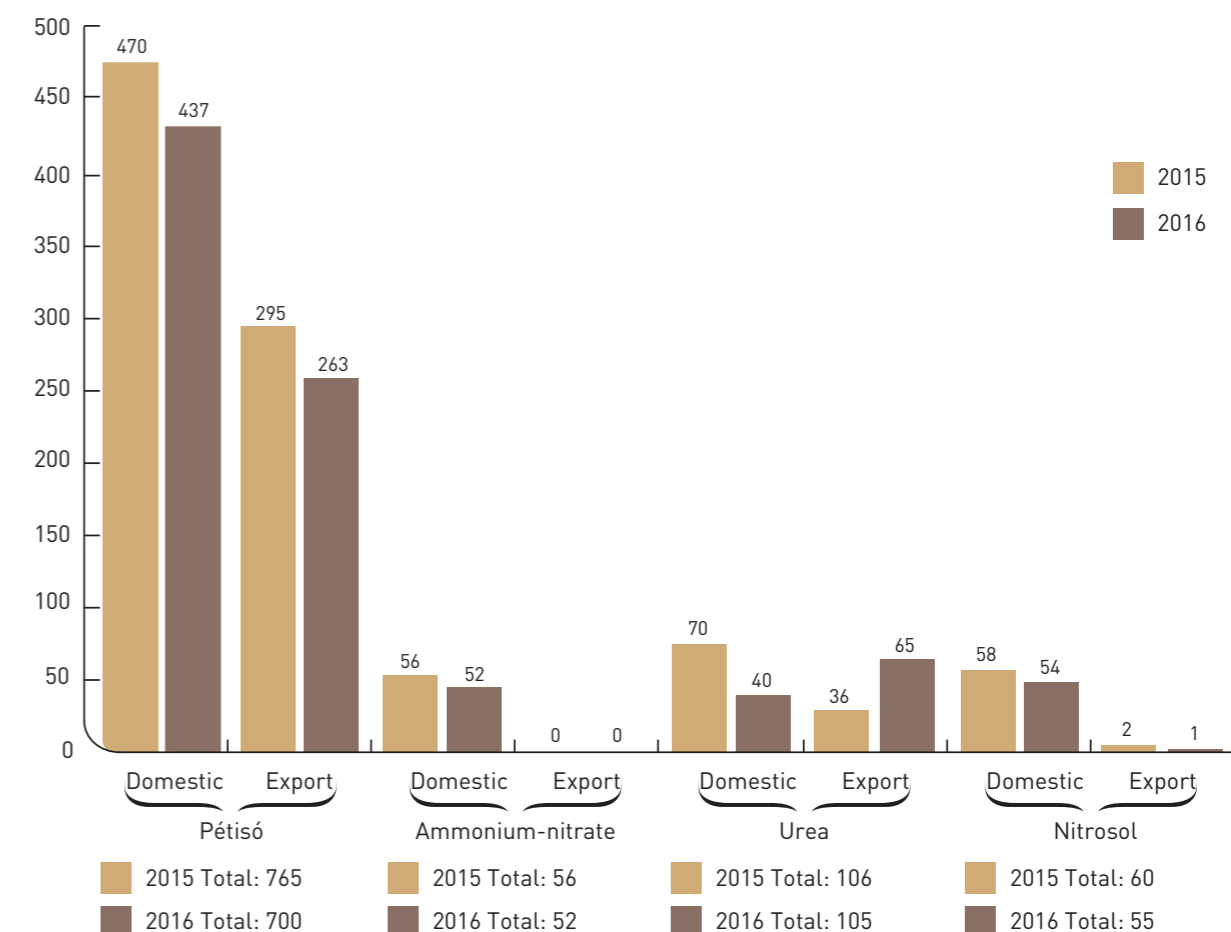
Some 583,000 tonnes of nitrogen fertilizer were sold in Hungary in 2016. The goal was to completely restructure our domestic fertilizer sales and continue to strengthen the sales agent role of the Genezis partner network, which we want to use to boost the sales volumes of our products by providing a high standard of service directly to end-users. As a result of this strategy, the volume sold directly by the Genezis partner network in 2016 totalled 80% of our domestic sales.

The premises acquired in summer 2016 – Barcs, Hőgyész, Kiskorpád, Nagyatád, Nagydorog, Nagykamarás – help to reach end-users more quickly; besides the storage and sale of fertilizers they provide an opportunity to buy up, clean, dry and store the produce of nearby farmers and agricultural producers with greater flexibility.

Our sales agents recommend the entire range of Genezis fertilizers – including nitrogen and complex NPK fertilizers, solid and liquid basic fertilizers and top dressings as well as irrigation and foliage fertilizers – required for modern nutrient management on a thorough professional basis. With the help of all the fertilizers available along with specialist advice we can provide assistance in cost-effective business operations.

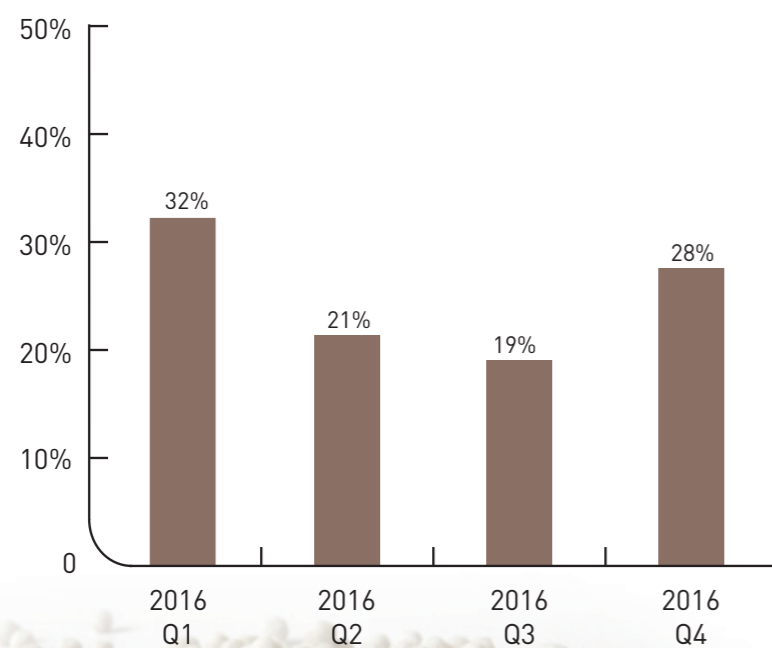
The horticultural division created in 2016 has six sales agents/consultants; they cover the entire country and supply horticultural partners with the input materials they need. Of course, alongside professional horticultural businesses, we also provide hobby gardeners with excellent products and services.

Sale of fertilizers by Nitrogénművek Zrt. by product and destination (data in thousand tonnes)



Quantity distribution of fertilizers distributed in Hungary by quarter

Distribution



(Source: RIAE)



The fleet of lorries purchased in 2014 to safeguard the versatility of fertilizer deliveries supplied more than 600,000 tonnes of fertilizer in 2016 to end-user partners working in Hungary.

The commercial supply available is primarily used to satisfy as much of Hungarian agriculture's fertilizer demands as possible; however, utilising our production capacities to an appropriate extent necessitates and also facilitates the maintenance and expansion of our presence on external markets.

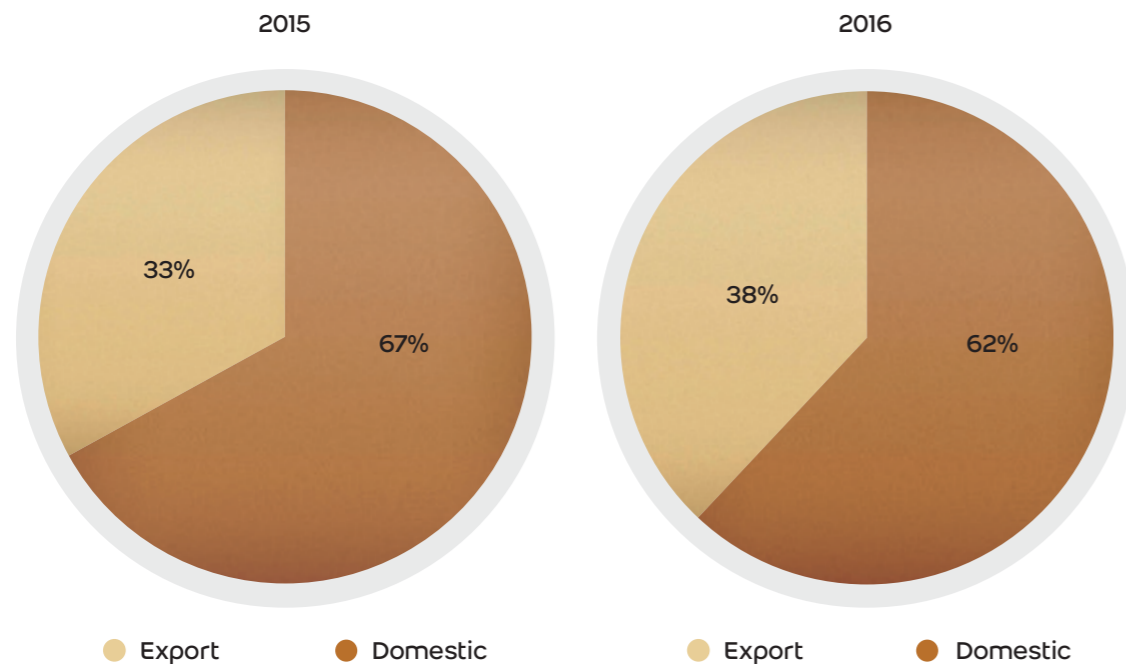
This is why our export markets play an important role alongside satisfying domestic end-user requirements. In 2016 we sold and delivered our products to 13 countries, which meant our entire sales market totalled 59,680,000 hectares.

We still regard neighbouring countries as our major export target markets, since fertilizers can be transported economically within a geographical distance of about 1,000 km from the site.

In accordance with the practice established over the years, sales were mainly performed through own companies established abroad; the number of such firms increased further in 2016: we established Nitropet Austria GmbH in Vienna and Nitropet Bulgaria e.o.o. in Plovdiv.

Our most significant export markets in 2016 included Slovakia, Austria, Romania, Germany, the Czech Republic, Poland, Serbia and Croatia.

## Fertilizer sales revenue by destination



The reliable quality of our products and services as well as our good partnerships established over the years contribute to the sale of our chemical products and to preserving our market position.

We look upon our major industrial gas and liquid ammonia purchasers as our strategic partners, to whom we constantly pay special attention and this enables us to market the total amount produced and use their nitrogen resources if necessary.

## ■ Sale of seeds

Similar to previous years, Hungary experienced a shrinkage of areas for the cultivation of major spring arable crops in 2016 as well, but there was no significant decrease in seed stocks at the market producers and seed distributors.

A new opportunity arose for us in relation to existing producer procurement channels, which enabled us to buy seeds under better conditions, taking advantage of the strong pricing and distributor position. The distributor competition toughened as the season progressed, resulting in significant price discounts.

Seeds were primarily sold through our existing end-user partnerships from fertilizer sales, utilising synergies of products available within our company through the Genezis technology developed for arable land crops.

Our seed business division raised its sales revenue by 42% in 2016 compared to the previous year, principally because our partners – both suppliers and end-users – see the company as a reliable partner focusing on long-term goals.

We managed to increase sales figures for all of the main arable seeds, which are dominated by hybrid seeds. The largest volumes were sold in corn, followed by sunflower seeds and winter rapeseed. Here we manage to increase our market share year by year: for corn and sunflower seed this exceeded 10% in 2016, while for winter rapeseed it meant a market share of 15%.

We still aim to generate dynamic growth in our sales volumes and market shares through the comprehensive service provided to our end-user partners.

Our sales range was expanded in 2016 with cereal, soy and other seeds, and we achieved tangible market shares with them. We deem it important to develop our own product portfolio, in which the main role will be our own seeds marketed under the GENEZIS brand name; we hope these sales will increase the confidence and commitment of our customers towards us.

The cereal seeds marketed under the GENEZIS brand name meet Hungarian cultivation standards and farmer requirements regarding the individual types, thereby ensuring long-term, sustainable farming.

## ■ Sale of produce

Based on provisional figures from the CSO, the entire output of the agricultural industry in 2016 at current basic prices was 5% higher than in 2015. The increase in agricultural production volumes was accompanied by lower producer prices. Production costs remained at the same level as the previous year, and so gross added value rose by 13%, while net business income from agricultural activity was 22% higher in 2016.

According to provisional figures, the production volume of plant products increased by 13% in 2016, while agricultural producer prices dropped by an average of 3% compared to 2015.

On the strength of CSO figures, the average corn crop broke records in 2016 by exceeding 8.6 tonnes per hectare, most of which stemmed from the alternation of ideal warm weather and plenty of rain. Record crops were harvested in sunflower seeds and rapeseed too, at almost 1.9 million tonnes and 900,000 tonnes respectively. The production of grain was up by 2.5 million tonnes (+178%) on a slightly smaller area of 145,000 hectares (-5.4%).

In terms of crop trading, we sold almost 196,000 tonnes in 2016 – some 50% more than in the previous year – for a value of HUF 10.2 billion, which is 61.7% more than in 2015. Almost 70% of our sales was in fodder corn, while 15% was attributable to other grains and 15% to oily seeds.

We have concluded successful deals with almost all of the major produce users in Hungary and the surrounding countries, which proves that we have become a recognised crop trader and a regional player, similar to the situation with fertilizer.

In terms of sales we are one of the top 5 suppliers for two of our customers.

Our commercial produce division still essentially has no speculative positions, but its purchases are always somewhat higher than its sales to ensure sales offers can always be provided for customers.

One major event in the life of the business division was the company's purchase in summer 2016 of the establishments referred to above – Barcs, Hőgyész, Kiskörpád, Nagyatád, Nagydorog, Nagykamarás – to help to reach producers more directly; they make it easier to buy up the produce of nearby farmers and agricultural producers, and enable us to provide services to them, such as cleaning, drying and storing their produce. At these premises, irrespective of the fact that we only acquired them towards the end of the season, more than 20,000 tonnes of crops were purchased.

With a view to broadening our supplier opportunities and providing a better service for smaller farmers, alongside purchasing these establishments we launched our primary producer purchases as well, which means from 2016 we are able to buy produce from all market players.



## ■ Sale of pesticides

2016 was the second – full commercial – season for the company's youngest business division, the pesticide division. In this pesticide season we sold various pesticides amounting to almost HUF 1 billion, more than double the turnover of the first market year.

Given our commercial fertilizer activity we can undertake to distribute large volumes of pesticide products as one of the key players on the commercial agricultural market; our goal is to increase our market share dynamically in this field in the coming years, similarly to 2016.

We boosted our market position in 2016 by expanding our availability and range of goods, and with larger stocks. One key part of this business policy is that alongside the products bought from Hungarian retail-

ers we placed increasing emphasis on selling parallel-imported producer products, whose share on the Hungarian market we raised from the customary 10% to 20-25%. The figures show that we are heading in the right direction and we want to continue this activity in the future with greater volumes.

One of the key elements of serving end-users flexibly was solving storage and delivery tasks; to this end we entered into service agreements, and developing a logistics system for our own pesticides is a task for the future.

In 2016 we established our professional pesticide consulting service for farmers, which is provided by more than 20 plant pathologists.

## ■ HR development, restructuring, preserving our values, commitment and motivation



**Medve József**  
humán igazgató

Operations were adapted to the challenges of the continuously changing environment in 2016 as well, in line with the key employer role that Nitrogénművek Zrt. has been performing in the region for decades. In light of this, preservation of core values, i.e. appreciation of employees, social responsiveness,

receives constant focus. In 2016 94 new employees joined and in total 71 employees left Nitrogénművek Zrt. 27 leavers requested termination of their employment due to retirement. New employees were recruited to replace the leavers as well as with the aim of expanding the trading network.

As a result of these processes and other headcount changes, as of 31 December 2016 the average number of full-time employees totals 654, while together with the consolidated subsidiaries it totals 772.

Employees are provided with competitive income, which is supplemented by the system of fringe benefits. As of 1 January 2016 basic wages were increased

by an average of 4 %. The Cafeteria system including fringe benefits was maintained and particular attention was devoted to social benefits, among others the provision of housing support.

Dialogue between employees and the representative organisations is continuous and effective, the partners co-operate to the fullest extent in order to sustain the stability of the company.

The goal of our company's management is for employees to be dedicated, realise their objectives and enjoy being at their workplace. To this end it lays great emphasis on maintaining and continuously improving employee satisfaction.

True to our traditions, we organised our "Pensioners' Gathering" in 2016 too along with the "Nitrogen Family Day", where 10 of our employees were awarded the "Best Employee of Nitrogénművek Zrt." Award and the Chairman Award.

## ■ Profit: sales revenue and costs

In 2016 we realised HUF 74.5 billion net sales revenue with our consolidated subsidiaries.

Domestic sales in 2016 generated net revenues of HUF 53 billion. The ratio of fertilizer product sales within sales revenue is 62%, derived from the sales of single-component fertilizers containing nitrogen as their active substance.

### 2016 consolidated sales revenue of the Group (HUF million)

Description	2016
<b>Domestic, of which</b>	<b>53,261</b>
Nitrogen-based fertilizers	33,372
Produce and seed	14,466
Pesticide	971
Other	6,394
<b>Export, of which</b>	<b>21,273</b>
Nitrogen-based fertilizers	19,978
Produce and seed	591
Other	704
<b>Total sales revenue:</b>	<b>74,534</b>



The other business divisions – seed, produce, pesticide trading – generated 29% of domestic sales revenue. In 2016, HUF 21 billion in net sales revenue was generated by the Group's export sales, 94% of which was nitrogen fertilizers, while 3% related to sales of produce.

Material-type expenses dominate in the structure of production costs; this item includes costs of purchased raw and auxiliary materials, maintenance materials and fuel necessary for the production, as well as – among others – transportation, logistics, third-party maintenance costs, purchase costs of produce, seed and pesticides sold by the new divisions.

Ammonia is one of the raw materials of fertilizer production, which is produced from natural gas, therefore the cost of it is a decisive factor within material costs.

Natural gas is purchased from West Europe, which is a more favourable environment in terms of competition. This enables the Group to retain its competitiveness and enhance its competitive advantages against its regional competitors.

The cost of electricity needed for operation as well as the cost of packaging materials are also significant within material costs.

2016 operations resulted in HUF 5,322 million profit for the period.

## ■ Our investment activities

In 2016 substantial investment and renovation activities were carried out at the parent company, while smaller investments were made at the other consolidated companies, with the exception of Nitropét Slovakia Kft.

We firmly believe that by investing you build the future. Accordingly, in line with the approved development concept, the investments previously started continued, and in some cases ended, in 2016.

- By the end of the year the acid plant with a capacity of 1,150 tonnes/day was completed by the general contractor TKIS AG. On 24 January 2017, in possession of a final utilisation permit, the commissioning of the plant with its world-class technology began. We expect the plant to start operating in the first half of 2017, fulfilling the strict requirements for material and energy consumers as well as environmental emissions. Our nitric acid production will be the highest in the region!
- In October 2016 we commissioned the Granulation2 plant, which has a nominal capacity of 1,960 tonnes/day for Pétişó, or 1,550 tonnes/day of ammonium nitrate granulated fertilizer. The Granulation2 plant is the largest of the fertilizer plants working with "pugmill" granulation technology in the world. The modern German technology more than doubles the capacity of the plant producing granulated fertilizer. The quality of the produced fertilizer is world-class.
- In connection with the Granulation2 plant, Goodtech AS from Norway delivered a modern pack-

aging unit for the big-bag packaging of produced fertilizer, which is the most important part of the new packaging plant; the big-bags are filled by a robot. During the packaging plant investment, new ribbon bridges, external storage facilities, roads, and a roadside system for unloading bulk fertilizer was built. The packaging plant is located outside the technological area, and so it is fast and easy to access.

- The investments related to expanding the capacity of the ammonia plant to 1,400 tonnes per day, comprising the modernisation of the Carsol system, the synthesis loop gas drying system, a new parallel air compressor and the replacement of a few technology devices, were capitalised in November 2016. The investment boosted our ammonia production capacity by more than 15%, and we also achieved significant energy savings in plant operations. This means annual savings in natural gas consumption of 25 million m<sup>3</sup>.
- At the end of November 2016, Siemens steam turbine generator turbo machinery along with the associated new electrical network were capitalised; this is suitable for producing electricity by utilising the high-pressure and high-temperature excess steam generated by the technology. This equipment reduces the company's external electric energy requirement and cost significantly, to around half of its previous value.

- The production of solid fertilizer in the Pétişó plant was shut down in May 2016. Planning work on capacity expansions and reconstructions began during the production period, which included preparing basic plans and implementation plans for the technology after the capacity expansion, electrical/device planning, and planning the conversion of the drainage system. Contracts for supplying the

new equipment were concluded, based on which it was delivered to our premises in 2016. The structural works required for the capacity expansion and reconstruction began after the plant shut down, along with building the paths for electric and device cables and constructing the location for the new electric fuse cabinet.





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