

Foreword -

This is who we are

Highlights 2017

**Expectations for 2018** 

16-17





Governance, financial policy & risk management



# The power of true connection

Today's technology allows us to connect instantly with anyone, anywhere. According to the theory of 'six degrees of separation', every person in the world is separated from any other person by only six or fewer steps – and social media accelerate the whole process. These advances help us to be more efficient in our daily lives. We no longer need to wait before making a call; we can call from our car to say we'll be a little late or text our partner at the supermarket about a forgotten item. Ordinary examples we now take completely for granted.

Humans are social animals, so when we're online we also create networks to share everything with each other. We can even observe something of a return to social compartmentalisation: people seek out groups in which they feel at home and confident. For many this is a way of dealing with loneliness or even isolation: there are always like-minded people out there to be found.

The new communication technologies also turn out to be a positive development when it comes to sustainability, and especially in the economical management of raw materials. Take for instance the rental of your own car via *Snappcar*, or passing on your design clothing to someone else via Rewear, and of course the familiar classified ad site Marktplaats. These are actually not only good examples of sustainability, they're also just good business models.

But these digital connections also have a downside. Real human contact involves a lot more than a small app or a reaction on Facebook or Instagram. Who hasn't had the experience of having their contact completely misinterpret a text message? It was not for nothing that emoticons were invented! We humans communicate for the most part nonverbally; body language, tone of voice and facial expressions often say a lot more than words. If you want to establish a true connection, physical presence is vital.

This also applies to when we want to work together in establishing circular cycles. We can put down our ambitions on paper, test technologies, build business cases and write reports, but if we really want to establish sustainable cycles, we have to do it face to face. We have to meet each other, share our ambitions, but also our doubts and concerns. See and sense, both verbally and non-verbally, what our partners' take on the story is. Find out whether it's no more than words on a screen or on paper, or whether you really want to embark on the venture together. Only then can you truly – and sustainably – connect.

There is very good reason that one of our core values is 'joint pursuit of shared interest'. We do this by showing ourselves, by letting it be known that we want to take serious steps towards sustainability. And by simply doing it. Together.

Olaf van der Kolk Managing Director





# This is who we are

AquaMinerals looks for new destinations for the material streams that are generated by water treatment. We were first set up as a shared service centre (1991, Reststoffenunie) for all of the Dutch drinking water companies, but two years ago we also started collaborating with De Watergroep in Belgium. And since then we have also welcomed our first Dutch Water Authority to our participant group: a milestone we're particularly proud of.

It has been a long time since we considered residuals to be waste.
By acting in concert we have had a huge impact. The waste mountain that for decades represented a big burden and cost item, is now generating benefits; in the first place for the environment, but also benefits of the financial kind. The residuals' destinations and new applications have become steadily more valuable over time.

We have made great strides over the last few years. In many instances the materials are returned as raw materials to the water sector itself, thereby sparing the natural sources. After processing them, we can even use them as raw materials to make our surface water safer and our soils better. We are therefore more and more successful in closing loops. And we make a fine contribution to a circular economy.

# Staff

Number of staff members 10



Age 26-35 2

Age 36-45 5

Age 46-55 2

Age 56-65 1





pursuit ed interest

Our core values



Reliability

For and in the name of our participants, we:

- √ direct the chain
- √ procure logistical services
- √ sell the material streams
- √ innovate and valorise through joint research with participants, clients and Knowledge institutions
- √ manage the quality of the material streams
- √ arrange and maintain the required certificates and declarations
- √ monitor, lobby and advise in the areas of policy, and legal and regulatory frameworks
- √ provide transparency in financial and product streams
- √ offer requested and unrequested advice

# **Our participants**

All ten of the Dutch drinking water companies are shareholders in AquaMinerals. In addition, we have one Flemish shareholder: De Watergroep. The size of each shareholding is based on the volume of drinking water the participant produces annually.

Vitens N.V.	26.9 %
Brabant Water N.V.	18.8 %
Evides N.V.	11.9 %
De Watergroep (Belgium)	9.8 %
N.V. PWN Waterleidingbedrijf Noord-Holland	7.7 %
N.V. Waterleiding Maatschappij Limburg	5.9 %
Dunea N.V.	5.5 %
Waternet Foundation	5.0 %
N.V. Waterleidingbedrijf Groningen	3.4 %
Oasen N.V.	2.6 %
N.V. Waterleidingmaatschappij Drenthe	2.4 %

The total rounds out to 99.9%. As of 1 January 2018, the Aa and Maas Water Authority acceded to AquaMinerals. But since this date is not officially in the reporting period, the development is not included in the 33 overview.

# We can only succeed together. 'Joint pursuit of shared interest' is a core value that is deeply rooted in our daily work. We want to be an initiative-rich and reliable link in the chain.

# ... and now the Water Authorities as well

We are happy to welcome the Aa and Maas Water Authority as a new participant and hope more Water Authorities will follow suit. In this way, new sectors connect with each other, learn from each other and together seek out new sustainable solutions.

# ... the drinking water companies and their interests

We unite the common interests of the participants. From a formal point of view, the connection is set down in the participation and supply agreements and in the governance structure. Much more important is what really connects us: our shared goals and ambitions.

# AquaMinerals connects...

# ... supply and demand

We ensure that the material streams from the watercycle find their way from the water companies to the market. Literally, by arranging for the transport and stock management. But most of all by connecting the numerous players in the chain.

# ... ideas and results

We pioneer, initiate pilots and thus develop innovative applications. This requires connecting the water companies and the market with researchers and policy-makers. Whenever possible, we exert influence on the complex legal and regulatory framework governing 'raw and waste materials'.

# ... and closes loops

One creates the ultimate connection when one works circularly. By taking materials and products at the end of a lifecycle and reusing them at the start of the process, one literally closes the circle.

# Highlights 2017

# Accelerated growth

- A record tonnage of residuals found a new destination: 246,650 tonnes, compared to 208,500 tonnes in 2016.
   New streams and new source sites accounted for most of the growth.
- Turnover has also never been so high: € 7,216,400 (compared to € 5,105,800 in 2016). This is a result of bigger volumes, higher sales value and services for third parties.
- The net costs per tonne increased by € 1.00. This is due almost entirely to new services provided by AquaMinerals at the water production sites themselves.



Key Figures				
	2017	2016	2015	2014
Results				
Earnings	€ 7,216,400	€ 5,105,800	€ 4,989,100	€ 4,965,800
Non-shareholder turnover in %	4.0	4.1	2.9	2.7
Total disposal expenses	€ 4,563,500	€ 3,245,100	€ 3,290,300	€ 3,322,700
Gross margin in % of turnover	37	36	34	33
Net operating result	€ 74,800	€ 1,200	€ 18,200	€ 6,600
Net shareholder expenses per tonne <sup>1</sup>	€ 12,86	€ 11,86	€ 12,90	€ 14,41
Assets				
Balance sheet total	€ 2,864,400	€ 2,431,100	€ 1,822,700	€ 1,536,100
Shareholders' equity	€ 847,400	€ 787,500	€ 786,600	€ 692,700
Liquidity (quick ratio)	1.4	1.5	1.7	1.8
Materials figures				
Supply in tonnes	246,650	208,500	204,109	187,500
Recycle percentage*	83	87	81	81
Personnel				
Number of employees FTE at report-year end	8.5	7.7	7.2	7.1
Absenteeism in %	2	2	2	5
Average net sales value per FTE	€ 239,100	€ 178,200	€ 173,600	€ 185,000

<sup>&</sup>lt;sup>1</sup> incl. net operating result \* % residuals to recycling applications [= all exclusive of (infrastructural) works and landfill]

# New participant!

Over the last few years AquaMinerals and the Aa and Maas Water Authority have collaborated a lot and built up experience together. Both parties felt that it was time to officialise their collaboration, and thereby accelerate the valorisation and disposal of the material streams from municipal wastewater treatment. In 2017 we jointly explored the best form this collaboration could take.

We looked at how aspects such as sustainability, finances and innovation are worked out under different forms of collaboration. In the end, accession as a participant seemed to be the most favourable option for all parties. The general management of Aa and Maas and the shareholders of AquaMinerals voted in December 2017 for the accession of Aa and Maas to AquaMinerals as of 1 January 2018.

The Calcite Factory in operation

In April 2017 The Calcite Factory was inaugurated in Amsterdam. The factory dries, grinds, sieves and/or cleans calcite pellets generated by water softening reactors. The pure, sand-free pellets can be used in different sectors, but also as seeding material in the softening process itself: in other words, a circular application within drinking water produc-

tion! The factory was completed in early 2017 and is being operated by the British company Advanced Minerals in collaboration with AquaMinerals and Waternet.

# Joining the fight against plastic soup

Every year more than 5 million tonnes of plastic ends up in the oceans, presenting a huge threat to both animals and humans! Since the beginning of 2017 AquaMinerals has supported the Plastic Soup Foundation (PSF), both financially and with its expertise. This support has for instance helped PSF carry out the MERMAIDS Life+ project and develop the My Little Plastic Footprint app. MERMAIDS Life+ (www.life-mermaids.eu) researched ways of addressing the environmental impact of microplastics that are released by the washing of synthetic clothing. The My Little Plastic Footprint app (www.mylittleplasticfootprint.org) permits everyone, anywhere in the world, to fight against plastic soup.



# Over the borders

There has long been great interest over our borders in the way we work and collaborate in the water sector. We have after all demonstrated that the recovery and high-value use of material streams from wastewater and drinking water treatment processes works superbly. In November 2017, at the Aquatec Amsterdam trade exhibition, we signed a contract with Allied Waters and KWR for the introduction and implementation of the 'upcycling' concept in other countries. Allied Waters is rolling out the concept internationally and can draw on the AquaMinerals knowledge and experience.



# Making progress with five acceleration projects

In 2016, together with the drinking water companies, we drew up the collective Drinking Water Residuals Roadmap 2030. To advance towards realising our joint ambitions, in 2017 we selected five acceleration projects:

- reuse own materials in the water sector
- systematically increase aquafer dry-matter content and monitor it onsite
- produce flocculant from aguafer
- · recover humic and fulvic acids from brine
- build residuals knowledge platform

The projects encompass the entire chain, from treatment process right up to the client. About three times a year the different project groups report on their progress to each other. Depending on expectations and results, projects are started up, concluded or possibly stopped. What is new, is that the participants are intensively engaged in the Roadmap projects, which greatly improves knowledge levels and lead times.

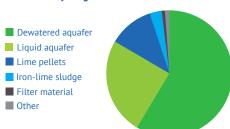
# Contributing to a sustainable world

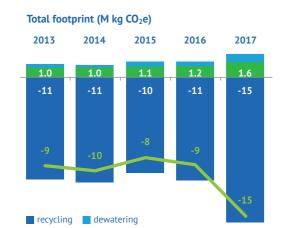
# Climate benefits and a smaller footprint

In 2017 significantly more material streams and by-products were disposed of, principally because of the reduction of old aquafer stocks at the drinking water company sites. The additional tonnage entails more transport, but also sizeable climate benefits at our clients, because the material streams replace primary raw materials and feedstock.

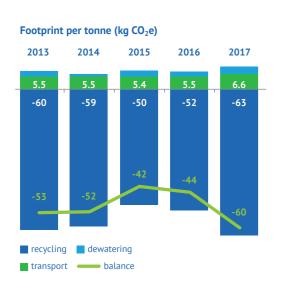
Every year, through life-cycle analysis (LCA), we determine the footprint of the residuals chain, from the production process up to and including application by the clients. The analysis shows that this footprint is negative – which, in this case, is a positive result! In other words, the climate benefit from recycling is much larger than the negative impact associated with the residuals' transport and dewatering. In fact, recycling the material streams compensates for about 5% of the CO<sub>2</sub> emissions from drinking water production. Thanks to the extra disposal of the aquafer for use as a sulphur-binding agent in biogas plants, the climate benefits in 2017 greatly exceeded those of previous years.

#### Share of recycling in climate benefits





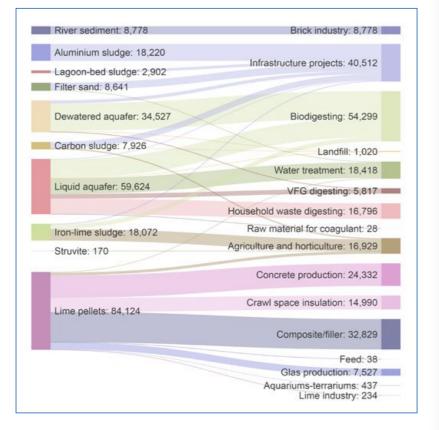
transport balance



# Even more climate benefits with Water Authorities

Since the first Water Authority became an AquaMinerals shareholder starting 1 January 2018, we have no results to report for 2017. However, earlier pilots and collaborations with various Water Authorities clearly show that large environmental benefits can be expected from this new development.

This Sankey diagram shows where the different material streams are applied (in tonnes). The width of the line indicates the volume of the particular stream.



# But also more transport

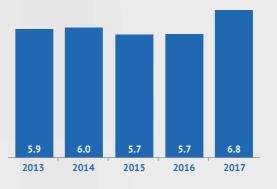
We limit the number of transport kilometres - and thus also the associated footprint whenever we can. We use modern trucks, we transport as much as possible by ship, we load the trucks as fully as possible, and we sell the residuals as close as possible to the production sites. Nevertheless, the transport footprint per tonne increased last year. Over the last few years we have tried to transport the liquid aquafer as much as possible directly from the drinking water company to the client. Unfortunately, however, in 2017 we again had to make more use of interim storage depots, where the aquafer could undergo further drying (see also page 13) to bring it up to client specifications. We also shipped more residuals abroad for instance, calcite pellets to England and dewatered aquafer to Germany. But the impact of this transport was easily compensated by the primary raw materials that were not used, and thus constituted a significant environmental benefit.



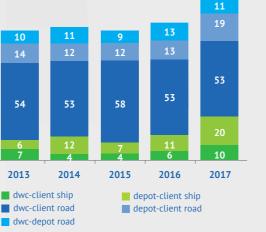
# Use of interim storage for liquid aquafer 30% 25% 20% 16% 16% 25% 25% 2013 2014 2015 2016 2017



% to depots









Purchasing and residuals are often still separate worlds in the water sector. On the front end, are the purchasers who are engaged in purchasing sustainably and, on the back end, others are busy working on the recycling the residuals and recovering raw materials. Wouldn't it be great to connect these two worlds?

AquaMinerals is working with the drinking water companies in identifying new possibilities for the reuse within the companies' own processes of the material streams generated by the companies and the treatment processes. In 2017 we launched the 'Circular Applications' project. We are also participating in the WiCE/STOWA 'Circular Water 2050' project. Some attractive examples already exist in practice and others are under development:

- Seeding material from calcite for the softening process at the drinking water companies (see page 11).
- Aquafer for phosphorus and sulphur binding in wastewater treatment (page 13).
- Flocculant from groundwater iron sludge for removal of suspended solids in surface water or wastewater treatment (page 15).
- Iron pellets from groundwater iron sludge for arsenic removal from drinking water (page 15).
- Iron pellets from groundwater iron sludge for phosphorus removal from surface water and sulphur removal from (WWTP) biogas (page 15).

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# Calcite pellets

# Upward trends: more tonnes, higher earnings

In 2017 84,677 tonnes of calcite pellets were sold, more than 7% more than in 2016. The increased volume reflects the addition of three softening sites (49 in 2016, 52 in 2017). Moreover, at some of the sites the water was softened a little more thoroughly.

The sales expenses incurred increased in proportion to the volume. We expect the trend to continue to increase slightly in the years ahead. The sales value again developed positively in 2017, rising by 20%. We managed to achieve favourable terms when signing new agreements or extending existing ones.

# Share of circular applications € 12.50 € 5.00 -

# Eight shiploads of pellets

Sometimes ship transport offers the best logistical solution. The size of the load per ship depends on the storage location and the route the vessel needs to take (draught, width, navigability). In 2017 we made eight shipments totalling 12,000 tonnes, which represents 14% of the total calcite pellet tonnage. The pellets were transported from the depot in Zolder (Belgium) for application in ground insulation, and from the port of Delfzijl for use as filler in composite in England.



# Stable deliveries to carpet producer

In 2014 carpet producer Tarkett (formerly Desso) started using ground softening calcite as backing for its carpet tiles. We have done better over time in ensuring that these deliveries meet the specifications required. Since 2017, we have been able to deliver the calcite from several drinking water sites and thereby increase the volume. This stability is reflected in the commercial agreements.



Seeding material from calcite for the softening process at the drinking water companies

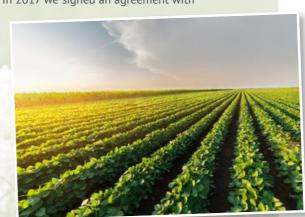
Reusing own materials in the water sector

In 2017 The Calcite Factory began operating (see also page 7). The factory processes calcite pellets for use in the water companies' own softening processes. Softening that uses a calcite seed instead of the traditional sand seed generates a purer – and thus more valuable – residual. We observe that more and more drinking water companies are making this seed transition, with the result that the volumes of sand-free calcite pellets are growing: in 2017 this amounted to no less than 31,500 tonnes, which was 37% of the total volume. Tests are planned for 2018 at several production sites, and we anticipate that this percentage will rise to more than 50%.

# Out of the water, into the ground

Softening calcite from drinking water production is perfectly suited to ensure the good condition of agricultural soil. What's more, the application is circular: we return what we've taken out of the water and the soil! In 2017 we signed an agreement with

Agrifirm Plant for the purchase of 4000 tonnes of calcite pellets annually. The pellets are used to regulate the pH of the soil. The hardness of the pellets is a major advantage because it means that they're taken up by the soil more slowly and only when needed. AQUAKAL is the fitting name the client has given the product.



# Calcite pellets in plate glass

Glass production requires calcite, but only calcite of very pure quality. Plate glass is used, among others, in residential and non-residential buildings, for instance in windows and doors, but also in solar panels. The calcite pellets from the IJzeren Kuilen site (WML) are very pure, partly because they have a low iron content, but also because calcite is used for seeding. Working with Omya, we have used these pellets in a durability test of about 1600 tonnes at a European plate glass manufacturer with positive initial results.



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# Aquafer - dewatered and liquid

# Volumes, expenses and earnings

#### Dewatered aquafer

The tonnage of dewatered aquafer sold in 2017 was double (100% more!) that of 2016, while the sales price remained stable. There was a small drop in expenses, despite the fact that a number of parties had to process the residual more to bring it to sale-quality levels.

#### Liquid aquafer

The volumes available in 2017 were practically the same as in 2016. Expenses rose by 8%; here, again, costs were incurred to bring the aquafer to specification; the dry-matter content was increased in depots.

# Healthier and cleaner water

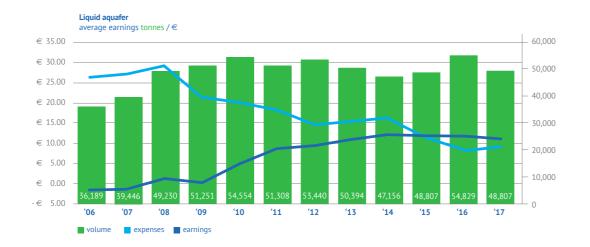


Removing arsenic and phosphorus from water with iron pellets. Read article at aquaminerals.com/nl/ijzerpellets-voor-gezonder-water/

# Twice as many shipments from the Juliana site (PWN)

PWN asked us to find destinations for significantly more aquafer than in previous years. A total of eight vessels were loaded at the Juliana site, for a total of 10,600 tonnes, compared to four vessels in 2016 (5200 tonnes).







# The drier, the better

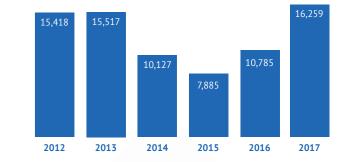
In many instances the liquid aquafer is taken first to a depot. Sometimes this is done to balance supply and demand, but more often because the aquafer's drymatter content does not yet meet the desired delivery specifications. We are aware of the importance the market gives to delivering a product of constant quality. Liquid aquafer is added to production processes and any quality fluctuations render process control more difficult. If the dry-matter content is not

high enough at the site of origin, then AguaMinerals organises an interim stage via depots. For our participants this means that they incur additional expenses whenever insufficient time or attention is devoted at the site of origin to directly delivering the quality called for. Incentives have been agreed with the external silo manager regarding the quality (and thus the dry-matter content) of the aquafer, which allows us to manage the costs better than previously.

## Volumes of liquid aquafer via depots

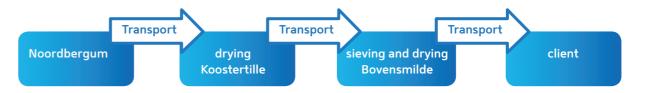
tonnes per year

tonnes per year



# Historical stock from Noodbergum (Vitens) processed

A historical stock of about 20,000 tonnes of dewatered aquafer at the Vitens Noodbergum site was taken to a depot for further processing. Its quality was not sufficient for a direct sale from its site of origin. The sale will take place in smaller batches over the course of several years:

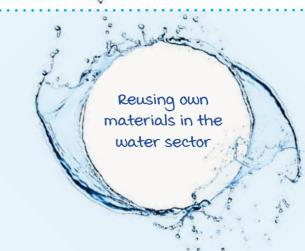


The load undergoes drying at the Kootstertille interim storage site; smaller volumes are then transported to Bovensmilde for sieving. It is then again dried, at which point the aquafer is ready for transport to the end-user for use in biogas plants. The sale will be spread over several years in smaller batches.



# Delivery of iron sludge to Agroindustry

Flocculant made from aquafer successfully upscaled and applied in the fertiliser processing sector. Read article at aquaminerals.com/nl/levering-ijzerslib-aan-agroindustrie/



# Aguafer for phosphorus and sulphur binding in wastewater treatment

Aquafer can (partly) replace the iron salts that are normally used for phosphorus and sulphur removal in wastewater treatment. A number of wastewater treatment plants have had years of positive experience with this process. If all iron salts were to be replaced by aquafer, the treatment process would reduce its climate footprint by no less than 10%.

# Other material streams

# From expenses to opportunities

Over the last few years we have identified many attractive applications for calcite pellets and aquafer. We were interested in limiting the remaining residual streams as much as possible, since it was of course complicated to find solutions for them. We are however increasingly discovering that big opportunities are also available for these materials. We agreed with our participants to jointly invest in research and applications in this area, and it has been a success.

# More volume, less expenses

In line with the total volume growth, the tonnage of other material streams has also grown.

The expenses per tonne decreased in 2017, from € 8.77 to € 6.98 per tonne. Initially we had budgeted for an even larger drop in expenses but, because of a revised agreement concerning filter gravel, we weren't able to achieve the projected decrease.

# Ferrous gravel for cleaner water

Ferrous gravel forms in the sand filters at drinking water production sites. The gravel can have ferrous accretions, and sometimes deliveries of the residual also contain unwanted sludge. Together with our partners, Koers, we can successfully separate these streams and now deliver a product of 2-8 mm in diameter containing only gravel and no sludge. This 'ferrous split' was used in 2017 in a water-rich new housing project in Blaricum to prevent algal bloom. The material will also be used in various works in 2018.

hoto: Projectbureau De Blaricummermeent, Municipality of Blaricum



Preventing algal bloom with ferrous split.

Read article at

aquaminerals.com/nl/jjzerzand-voor-helderesloten-in-nieuwe-wijk-blaricum/

# Carbon sludge against land subsidence

In 2017 we delivered carbon sludge to Topsurf Nederland. Topsurf is a product developed to compensate the land subsidence in the low peat-meadow areas in the Netherlands; the technique is based on the traditional Dutch *toemaken* land-level maintenance system. In this modern version, use is being made of a number of familiar local organic residual streams, such as dredging spoil and green waste. Carbon sludge is added to improve the material's structure and nutrient regime. A great application: material streams from the water sector that improve soil quality.

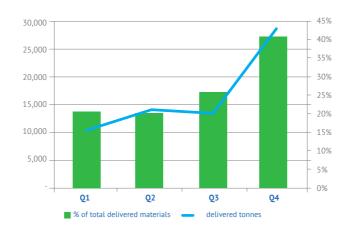
# Better spread over the year

In the past about 70% of other material streams were disposed of in the final quarter of the year. In 2017 the disposal was spread more evenly over the whole year, as shown in the chart. This makes their handling easier from an organisational and logistical perspective, which frees up more time and attention for other matters.

#### Annual spread of other material stream disposals

Total other material streams

■ Tonnes per vear



# AquaMinerals advises Phosphorus and Cellulose lead-groups

Following extensive study and analysis of five materials from the municipal wastewater chain, the Water Authorities have selected those that hold greatest promise for recovery and valorisation. In order to increase the materials' volumes and accelerate the process, so-called lead-groups have been formed for each material with representatives of the most

affected Water Authorities. AquaMinerals is closely involved in the lead-groups for Phosphorus and Cellulose – materials that are not new to us. We have been disposing of struvite for several Water Authorities for some time, and we previously explored the possibilities regarding cellulose for Aa and Maas. We provide advice about the market and also about any legal aspects that might arise.

# Arsenic removal with iron pellets

A pilot has demonstrated that iron pellets from our own aquafer can be successfully used to remove arsenic from drinking water. This is a sustainable alternative to removal techniques, such ion exchange, membranes or the dosing of ferric chloride and/or potassium permanganate, which consume large amounts of energy and chemicals.

Reusing own

materials in the

water sector

# Flocculant from aquafer for surface water or in wastewater treatment

Drinking water companies and WWTPs use large amounts of iron salts as a flocculant. They are needed to separate liquids from solids. We are developing with market players a flocculant made from groundwater iron sludge. The flocculant can then be used for coagulation of surface water or in wastewater treatment. A project has been launched by a broad group of stakeholders (producers, buyers, research organisations, market players) under the banner of HerCauWer [an acronym from the Dutch words for 'reusing coagulant from aquafer']. The project is co-financed by the TKI premium scheme and is one of the five acceleration projects of the Drinking Water Residuals Roadmap 2030.

# Phosphorus removal from surface water with iron pellets

The iron pellets have also been successfully used in removing phosphorus from surface water. The resulting phosphorus-saturated pellets can then be used as an agricultural fertiliser. Research also shows that the same pellets can remove sulphur from biogas. This iron also ultimately ends up with the digestate (digested organic 'pap') on the land as a fertiliser, thereby again closing the loop.

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# **Expectations for 2018**

# Rising turnover

Turnover in 2018 will continue to rise. First of all because of a greater supply; partly because of the autonomous growth of the current water companies and partly thanks to our new participant. In addition, AquaMinerals is providing more and more services that were not, or were hardly, demanded in the past. This refers primarily to support and implementation of activities at the production sites themselves; for instance, the dredging and dewatering of sludge lagoons. We also expect sales value to continue increasing, essentially because of the addition of value to the materials, for instance, through drying, sieving or pelletising.



# More and more value from 'other material streams'

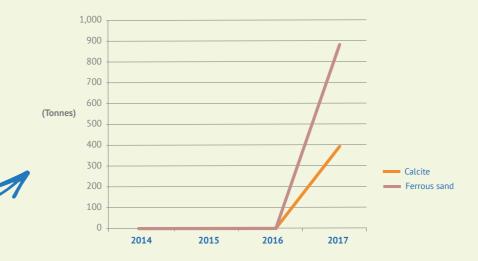
Since our establishment in 1995, most of our attention has focused on the valorisation and destination of calcite pellets and aquafer. The reason is pretty simple: these two streams account for about two-thirds of the total volume. Partly in response to requests by our participants, over the last two years we have paid more attention to the valorisation of the smaller streams, notably iron-lime sludge, aluminium

sludge, carbon sludge and filter gravel. New applications have been developed for these four streams, and a number of others are the subject of ongoing research. The deliveries for these new applications got underway in 2017, and we anticipate greater volumes and higher-value applications in 2018. This means a better financial performance as well as a more favourable sustainability profile for these streams.

# AquaMinerals as a supplier to water companies?

Over the last few years a great deal of research has been dedicated to the development of products from existing material streams for use by the water sector itself. Take, for example, the pellets from aquafer that are used in the removal of phosphorus and arsenic from water, and the calcite that is made to specification. These products were already being delivered in 2017, but only in modest volumes.

Now that we have seen how well they perform in their different applications, we anticipate a future upsurge in their delivery volumes. And it won't stop there. Think for example of the research on making flocculant from existing aquafer and aluminium sludge streams.



The sales of products made in-house have surged. We expect a further sharp increase in 2018.

# Societal role and CSR policy

During the last few years the AquaMinerals objectives have focused primarily on finances and transparency. Now that these are well controlled and secured, we note that our participants desire a more forceful pursuit of corporate social responsibility (CSR), particularly when it comes to sustainability criteria. In 2018 AquaMinerals will survey the participants' perceptions in this regard, as well as the goals they themselves pursue. The results will be incorporated into our CSR policy. We are also exploring what role AquaMinerals can play in education; teaching programmes are paying growing attention to the circular economy and practical examples are always more than welcome. Furthermore, we are examining the extent to which we can support policy-makers in fulfilling the ambitions of 'A Circular Economy in the Netherlands by 2050 Programme'.

# New participants

We expect that more water Authorities will join Aquaminerals and thereby together add value to their (recovered) raw materials and jointly enter the market. Our governance structure and accession procedure are designed in such a way that the new participations can proceed relatively quickly and efficiently.

# ... also mean new material streams

The accession of Water Authorities also means the marketing of other material streams. This process is of course perfectly suited to AquaMinerals, but it does mean that we will need (in part) to seek out new sales markets. Moreover, the materials are different in terms of their generation, nature and magnitude, which implies that we have to review internal procedures, such as sampling and storage. In instances where we lack the right knowledge or capacity to do this well, we will draw on 'external' sources, preferably people from the Water Authority world itself.

# New earnings model

The current earnings model of AquaMinerals dates back to 2011. It was established at the time with a view to more transparency in the chain and a fair distribution of costs and benefits among the participants, and to encourage all stakeholders to minimise expenses and maximise earnings. This model has however rendered the administrative

processes complex and timeconsuming, not least because since
then new delivery chains, which were
not taken into account in the original
agreements, have been developed.
In 2018 AquaMinerals will make
recommendations to modify a
number of elements in the earnings
model, while preserving the good ones
of course.



# Governance, financial policy & risk management

# Governance

According to the statutes of the AquaMinerals company, the most important powers are vested in the managing director and the Supervisory Board (SB). The Shareholders' General Meeting of Shareholders (GMS) appoints the SB members upon the recommendation of the SB; the SB appoints the managing director.

The managing director leads the company, is responsible for achieving its objectives, the strategy and associated risk profile, the financial results and societal aspects. In this regard, he is accountable to the SB in its role as supervisor, and to the GMS as the economic proprietors of the company. He provides both entities, in a timely manner, with all information they need to exercise their tasks.

AquaMinerals is not obligated to implement the principles and best practice provisions of the Dutch Corporate Governance Code. Nonetheless, the levels of transparency and responsibility established by the Code fit seamlessly with our objectives and operational management. To reflect in more detail the principles of the Governance Code, in 2011 various regulations and statutes were implemented or adjusted and, in 2012, the treasury statute was added.

# Financial policy

#### Treasury

In accordance with the treasury statute, the final dividend distribution test has been instituted. On this basis, the management will assess whether the company, following a distribution made to the shareholders, is able to continue paying its due debts. The positive cash flow from business operations was added to savings. In 2017 AquaMinerals had no deposits or investments, nor did it lend any funds to third parties.

## **Liquidity risk**

The current ratio per 31 December 2017 was 1.4; this is 0.1 lower than the figure at year-end 2016 but is still far above the standard of 1.2. The solvency ratio at the reporting date had dropped from 32% to 30%, which equals the standard. The average settlement period by clients rose from 46 days in 2016 to 49 days in 2017. The average settlement period of AquaMinerals rose by one day to 35 days.

#### Resilience

The resilience level of AquaMinerals is set at one annual salary of full-time employees, with a minimum of  $\leqslant$  100,000. Per 31 December 2017, this amounted to  $\leqslant$  828,000. Shareholders' equity at year-end 2017 amounted to  $\leqslant$  847,400.

# Risk management

Risk management forms part of AquaMinerals' management model. It was agreed with the SB that we would carry out a risk analysis every year, which would be placed on the agenda of the first SB meeting of the year. The most important risks are then addressed in the subsequent meetings and are listed in the annual report.

In 2017 we directed a lot of attention to improving the risk-inventory system. As a result we now have a better, more transparent and reproducible picture of the risks. In 2017 we identified the following three main operational risks.

# Risk 1.

# **Decreasing demand for material streams**The annual rise in the sales value – and thus

The annual rise in the sales value – and thus earnings for our participants – is important for the economic success of AquaMinerals. Lower demand inevitably results in lower earnings, whereby an important basis of our quality assurance and investments, for instance, would disappear. The impact of a drop in demand would be greatest in those segments where we depend on a limited number of clients. For this reason, we regularly conduct Product Market Combination (PMC) analyses to determine risk. In cases where our dependence is too concentrated we attempt to reduce it through targeted acquisitions in other sales markets.

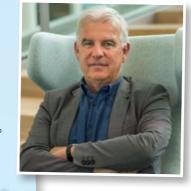
# Risk 2. Insufficient qualified staff at AquaMinerals

The AquaMinerals organisation is relatively small, consisting of only ten professionals, each with his or her expertise. The uniqueness of the activities involved means that it is not easy, in the case of (temporary) staff shortfall, to arrange for a replacement. Even the possibility of colleagues covering for each other is limited, given the specific knowledge and expertise the activities require. The risks of staff shortfalls therefore deserve close attention. At the same time, the organisation is growing and we need to be able to recruit sufficient qualified personnel. In 2017 we analysed the main bottlenecks, which led to the creation of a new position in sales. In addition, we are actively working on creating a flexible team for each area of expertise.

# **Supervisory Board**

The Supervisory Board (SB) oversees the policy of the managing director and provides him with advice. Its supervision mostly concerns the financial performance and developments, regulatory compliance and risk management.

'AquaMinerals took some major steps on the way to a circular economy in 2017. A connection was established with the Water Authorities, and the collective roadmap was realised with the drinking water companies. AquaMinerals is quickly developing into a key player in the water world on the path to a sustainable future.'



Roelof Kruize, Chairperson

# SB activities in 2017

The Supervisory Board met on four occasions in 2017 and addressed the following items:

- monitoring the results of the company in light of the budget and the Business Plan 2015-2018;
- procedure and subsequent reappointment of R. Kruize per 31 December 2017;
- establishment of a systematic risk assessment and determination of priority risks for 2017;
- strategic growth options;
- accession of the Aa and Maas Water Authority to AquaMinerals, and the (partial) modification of the governance structure to make this possible;
- determination of the 2016 annual figures and profit appropriation for that year;
- budget and annual plan for 2018;
- monitoring and testing of the international policy;
- making the current earnings model (more) future-proof and its administration simpler;
- organisation development in relation to growth in volume, turnover and activities;
- implementation of procedures concerning the Dutch Data Protection Act, such as data leaks and the management of data by third parties.

# SB composition on 31 December 2017

Mr R. Kruize (1956)	Chairperson, drinking water company profile
Mr P. Fransman (1962)	Vice-chairperson, financial profile
Mr J.E. Janssen (1969)	Member, legal profile
Ms M. Demmers (1967)	Member, business and innovation profile

# (Her)benoemingsrooster

	appointed	reappointed	resignation
R. Kruize	31 December 2014	31 December 2017	31 December 2020
P. Fransman	31 December 2012	31 December 2015	31 December 2018
J.E. Janssen	1 July 2016	(possible) 1 July 2019	-
M. Demmers	31 December 2016	(possible) 31 December 2019	-

# **GMS decisions in 2017**

The General Meeting of Shareholders was held twice in 2017, during which the following was decided:

- approval of the Annual Report and financial statements for 2016;
- discharge of the managing director and his management and members of the SB for their supervision during fiscal year 2016;
- profit appropriation for 2016;
- reappointment of Mr R. Kruize to the SB;
- approval of the reviewed statutes;
- approval of the accession of the Aa and Maas
   Water Authority to AquaMinerals and issuance of new shares in the name of this new participant;
- approval of the annual plan and budget for 2018.



From left to right: Jan Erik Janssen, Marjolein Demmers, Peter Fransman and Roelof Kruize



# **Explanatory notes on the Financial Statements**

# **Principles of evaluation**

AquaMinerals B.V. (with its registered office in Rijswijk ZH, Chamber of Commerce number 30130247) is domiciled at Nieuwegein, Groningenhaven 7, 3433 PE.

The company's most important activity is relieving the drinking water companies of the residuals generated by their production process.

The company has prepared its financial statements in accordance with the legal provisions of Title 9. Book 2 of the Dutch Civil Code.

#### **Comparative figures**

The comparative figures are only restated for comparative purposes.

#### Intangible fixed assets

The intangible fixed assets are valued at acquisition price minus depreciation.

The depreciation period is five years.

A legal reserve equivalent to the capitalised costs is included.

## Tangible fixed assets

The tangible fixed assets are valued at acquisition prices and depreciated straight-line on the basis of the expected operating life of the asset concerned. The rate of depreciation applied is 20%.

#### Cash and cash equivalents

The cash and cash equivalents are valued at nominal value. Unless otherwise indicated, these are freely available.

#### Other assets and liabilities

These are valued at nominal value.

#### Receivables

Receivables are stated initially at real value, including transaction expenses, and subsequently stated at the amortised cost price, less provisions for uncollectable debts.

The initially stated real value and the amortised cost price are equal to the nominal value, unless there is a question, in the initially stated value, of transaction expenses, premiums, or discounts, and other disparities between the real value and the nominal value.

# Principles for the determination of the result

Earnings, expenses and interest are attributed to the period with which they are associated. The earnings concern the passed-on disposal expenses plus the realised earnings (positive and negative) from clients and consulting services provided.

The direct disposal expenses concern outlays for extraction, transport, storage and analysis.

#### **Pension expenses**

The pension obligations towards employees fall under an industry pension fund. Payable pension contributions are incorporated into the profit and loss account in the year with which they are associated. Furthermore, an assessment is made as to whether, besides the premium, the employer has any other obligations related to the performance or insurance agreements, or to commitments to employees. In the event, a provision will be created. If the term of these obligations stretches over several years, the provision will be valued at cash value, calculated using an interest rate based on the average interest earned on high-grade corporate bonds.

Liabilities (other than premium settlements) related to the performance or insurance agreement, such as profit sharing and restitutions following a decision of the pension fund, will be included in the balance sheet only if their receipt is irrevocably established.

The coverage ratio of the pension fund (ABP), per 31 January 2018, was 106.7%.

The recovery plan aims to achieve a coverage ratio of 128% at the end of 2027. This will not require taking any drastic recovery measures.

# Corporate tax

As a consequence of a change in the law, AquaMinerals has been subject to corporate tax since 1.1.2016.

# **Balance Sheet per 31 December 2017**

(after profit appropriation following recommendation)

	31 Dec 2017	31 Dec 2016
	€	€
ASSETS		
Fixed assets		
Intangible fixed assets	30,000	40,000
Tangible fixed assets	8,051	7,474
Current assets		
Receivables and accrued income	2,026,581	1,485,041
Cash and cash equivalents	799,809	898,560
	2,864,441	2,431,075
LIABILITIES		
Shareholders' equity		
Issued and paid-up capital	475,202	475,202
Share discount	11,923-	11,923-
Share premium	35,055	35,055
Legal reserves	30,000	40,000
Other reserves	319,061	249,191
	847,395	787,525
Current liabilities		
Current liabilities and accrued liabilities	2,017,046	1,643,550
	2,864,441	2,431,075

# **Explanatory notes on the Balance Sheet**

	31 Dec 2017	31 Dec 2016		31-dec-2017	31-dec-2016
	€	€		€	€
ASSETS					
			Current assets		
Fixed assets					
			Receivables and accrued income		
Intangible fixed assets			Receivables	2,008,248	1,398,398
			Accrued income	18,333	86,643
Research and development costs	40.000	50.000			
Book value per 1 January	40,000	50,000		2,026,581	1,485,041
Plus: investments	40.000	-	0		
M. I	40,000	50,000	Receivables	2 000 240	4 700 700
Minus: depreciation fiscal year	10,000	10,000	Nominal value	2,008,248	1,398,398
Pookvalue per 71 December	30,000	40,000	Under the receivables position per 31.12.2017 there are		
Book value per 31 December		40,000	receivables from other legal entities and companies		
Tangible fixed assets			that participate in the legal entity or within which the legal		
rangible fixed assets			entity has a participation of $\leq 1,405,314$ .		
Inventory					
Book value per 1 January	7,474	9,365	Accrued income		
Plus: investments	3,758	1,588	Earnings yet to be received	-	6,000
	11,232	10,953	Pre-paid contract costs	25,133	32,343
Minus: depreciation fiscal year	3,181	3,479	Pre-netted water companies' earnings	6,800-	48,300
Book value per 31 December	8,051	7,474		18,333	86,643
			The maximum term of the repayments is one year.		
Total depreciation	11,227	8,046			
Decommissioned assets	1,985-	-	Cash and cash equivalents		
			Deutsche Bank, current account	130,815	229,904
Cumulative depreciation	9,242	8,046	Deutsche Bank, savings account	66,535	66,306
			ING payment account	216	33
			ING savings account	602,243	602,317
				799,809	898,560

In 2017 a bank guarantee of € 10,000 was issued with an expiration data of 31.5.2021.

Sale of own shares   Change in allocation of legal reserve R&D   10,000   10, 20   10, 20   10, 20   10, 20   20, 20   20, 20, 20   20, 20, 20   20, 20, 20, 20, 20, 20, 20, 20, 20, 20,		31 Dec 2017	31 Dec 2016		31 Dec 2017	31 Dec 2016
Status per 1 January   Sale of own shares   Sale		€	€		€	€
Sale of one shares   Sale	LIABILITIES			Other reserves		
Change in allocation of legal reserve R&D   10,000   10, Pus; profit allocation   10,000   10, Pus; profit allocation   59,870   538,70				Status per 1 January	249,191	238,271
Status per 1 January   Status per 31 December   Status per 31 Decembe	Shareholders' equity			Sale of own shares	-	-
Status per 1 January (issued) 475,202 475,202 - Status per 31 December 319,061 249.  Status per 31 December (issued) 475,202 475,202 Current liabilities  In 2014, this amount was adjusted in connection with the purchase of share in 2003.  The 2014 purchase of share in 2003.  The 2014 purchase of share in 2003.  The 2014 purchase of share capital amounts to € 910,000 divided into 20,000 shares of a nominal value of € 45.50.  Other debt and accrued liabilities  1,774,823 1,455, Agables 11,311 138, Other debt and accrued liabilities  1,645, Department of 45,000 shares of a nominal value of € 45.50.  Other debt and accrued liabilities 161,311 138, O				Change in allocation of legal reserve R&D	10,000	10,000
Status per 31 December (issued)  A75,202  A75,202  Current liabilities  In 2014, this amount was adjusted in connection with the purchase of shares in 2005.  In 2014, this amount was adjusted in connection with the purchase of shares in 2005.  In 2015, De Marcypea acquired 1028 shares in Aquabilinerias B.V. for € 75,680.  The authorised share capital amounts to € 910,000 divided into 2000, shares of a nominal value of € 45.50.  Of this amount € 475,202 is paid up.  Share premium  Status per 31 December  35,055  Status per 1 January  Acquired 1028 shares in 2015, with a premium of € 4.95 per share, and 1028 shares in 2011, with a premium of € 4.95 per share, and 1028 shares in 2011, with a premium of € 28.12 per share  Share discount  The change of 1015 was the result of the sale of: 25.02 with a december of € 21.00 per share  Acquired expenses  Research and development reserve  Acquisition value  50,000  Addition to reserve  Collective Labour Agreement obligations  51,774,823  1,774,823  1,774,823  1,774,823  1,774,823  1,774,823  1,774,823  1,774,823  1,774,823  1,774,823  1,774,823  1,774,823  1,774,823  1,774,823  1,774,823  1,755, 7,500  Taxes and national insurance contributions  80,912  51,000  5	Issued and paid-up capital			Plus: profit allocation	59,870	920
Status per 31 December (issued)  10 2014, this amount was adjusted in connection with the purchase of shares in 2005.  10 2015, De Watergroep acquired 1028 shares in Aqualificate Sk (10 of 7 6,560.)  The authorised share capital amounts to € 910,000 of whice of non-minal value of € 45.50.  The authorised share capital amounts to € 910,000 of white of 10 0,000 shares of a non-minal value of € 45.50.  The authorised share capital amounts to € 910,000 of whice of non-minal value of € 45.50.  The authorised share capital amounts to € 910,000 of whice of non-minal value of € 45.50.  The authorised share capital amounts to € 910,000 of this amount € 479,202 is paid up.  Share premium  Status per 1 January  35,055	Status per 1 January (issued)	475,202	475,202			
In 2014, this amount was adjusted in connection with the purchase of shares in 2003.  **In 2015, De Watergroep acquired 1028 shares in 2003.  The authorised share capital amounts to € 910,000 divided into 20,000 shares of a nominal value of € 4550.  The authorised share capital amounts to € 910,000 divided into 20,000 shares of a nominal value of € 4550.  The authorised share capital amounts to € 910,000 divided into 20,000 shares of a nominal value of € 4550.  The authorised share capital amounts to € 910,000 divided into 20,000 shares of a nominal value of € 4550.  The authorised share capital amounts to € 910,000 divided into 20,000 shares of a nominal value of € 4550.  The authorised share capital amounts to € 910,000 divided into 20,000 shares of a nominal value of € 4550.  The duthorised share capital amounts to € 910,000 divided into 20,000 shares of a nominal value of € 4550.  The authorised share capital amounts to € 910,000 divided into 20,000 shares of a nominal value of € 4550.  The duthorised share capital amounts to € 910,000 divided into 20,000 shares of a nominal value of € 4550.  The duthorised share capital amounts to € 910,000 divided into 20,000 shares of a nominal value of € 4550.  The duthorised share capital amounts to € 910,000 divided into 20,000 shares in 20,100 share	Share issue*	-	-	Status per 31 December	319,061	249,191
the purchase of shares in 2003.  **Payables** 1,774,823 1,455, 171 2015, De Watergroep acquired 1028 shares in 2005.  **Payables** 1,774,823 1,455, 172 2015 and national sinuarance contributions** 80,912 51, 1838, 1	Status per 31 December (issued)	475,202	475,202	Current liabilities		
Fayables	In 2014, this amount was adjusted in connection with			Current liabilities and accrued liabilities		
Taxes and national insurance contributions  80,912 51, Other debt and accrued liabilities  161,311 138, The authorised share capital amounts to € 910,000 divided into 20,000 shares of a nominal value of € 45,50. Of this amount € 475,202 is paid up.  Under the payables position per 31,12,2017 there are payables to other legal entities and companies that participate in the legal entity or within which the legal entity or withi	·			Pavables	1.774.823	1,453,661
The authorised share capital amounts to € 910,000 divided into 20,000 shares of a nominal value of € 45.50.         Under the payables position per 31.12.2017 there are payables to other legal entities and companies that participate in the legal entities and companies that participate in the legal entity or within which the legal entity has a participation or € 822,821.           Status per 31 December         35,055         35,055         35,055         Value added tax         25,728         11, 49,67           The change in 2015 was the result of the sale of:         25,728         11, 49,67         13, 49,67         14,967         14,967         14,967         14,967         14,967         16,242         13, 20,21         13, 20,21         13, 20,21         13, 20,21         13, 20,21         14,967         14,967         15, 20,21         13, 20,21         13, 20,21         13, 20,21         13, 20,21         13, 20,21         13, 20,21         13, 20,21         13, 20,21         13, 20,21         13, 20,21         13, 20,21         14, 20,21         13, 20,21         14, 20,21<					, ,	51,887
The authorised share capital amounts to € 910,000 divided into 2,000 share of a nominal value of € 45.50. Of this amount € 475,202 is paid up.    Under the payables position per 31.12.2017 there are payables to other legal entities and companies that participate in the legal entities and companies that participate in the legal entity as a participation of € 822,821.    Change during fiscal year	Aquai-iiiiei ats 0.4.101 € 75,000.					138,002
Of this amount € 475,202 is paid up.       2,017,046       1,645.         Share premium       35,055       35,055       35,055       1,645.         Change during fiscal year       -<					,- ,-	
Share premium         35,055         35,055         35,055         35,055         4 payables to other legal entities and companies that participate in the legal entity or within which the legal entity has a participation of € 822,821.         25,728         11, companies that participate in the legal entity or within which the legal entity has a participation of € 822,821.         12,728         11, companies that participate in the legal entity or within which the legal entity has a participation of € 822,821.         12,728         11, companies that participate in the legal entity or within which the legal entity or within which the legal entity has a participation of € 822,821.         12,728         11, companies that participate in the legal entity or within which the legal entity has a participatio					2,017,046	1,643,550
Share premium  Status per 1 January  Change during fiscal year  Taxes and national insurance contributions  Status per 31 December  35,055  35,055  35,055  35,055  Taxes and national insurance contributions  Status per 31 December  35,055  36,055  36,091  36,091  36,091  36,092  37,097  36,092  37,091  37,09	Of this amount € 475,202 is paid up.				. ,	
Status per 1 January  Change during fiscal year  Taxes and national insurance contributions  Status per 31 December  35,055  35,055  Value added tax  25,728  11,  Corporate tax  14,967  Tension contributions  9,242  13,  Pension contributions  9,242  13,  Payroll tax and national insurance contributions  9,242  13,  Payroll tax and national insurance contributions  9,242  13,  Payroll tax and national insurance contributions  50,975  26,  Share discount  This item arose through the sale of 568 shares with a discount of € 21.00 per share  Cother debt and accrued liabilities  Accrued expenses  Revenues received in advance on depots  88,912  51,  Research and development reserve  Received in advance in connection with future  9,754  6,  Acquisition value  50,000  50,000  REACH registration  Addition to reserve  7,221  5,  Collective Labour Agreement obligations  36,983  33,	Share premium					
Taxes and national insurance contributions  Status per 31 December  Status per 31 December  35,055  35,055  Value added tax  Corporate tax  14,967  Pension contributions 9,242 13, 1242 shares in 2011, with a premium of € 4,95 per share, and 1028 shares in 2015, with a premium of € 28.12 per share  Share discount This item arose through the sale of 568 shares with a discount of € 21.00 per share  Cher debt and accrued liabilities  Accrued expenses Accrued expenses Sa,021 Revenues received in advance on depots Sa,000 26, Research and development reserve Acquisition value So,000 So,000 REACH registration Addition to reserve  Withdrawal from reserve Collective Labour Agreement obligations 36,983 33,		35,055	35,055			
Status per 31 December  35,055  35,055  35,055  Value added tax  25,728  11,  Corporate tax  Pension contributions  9,242  13,  1242 shares in 2011, with a premium of € 4.95 per share, and 1028 shares in 2015, with a premium of € 28.12 per share  Share discount  This item arose through the sale of 568 shares with a discount of € 21.00 per share  Cother debt and accrued liabilities  Accrued expenses  Research and development reserve  Acquisition value  Acquisition value  Addition to reserve  20,000-  10,000-  10,000-  Holidays  Collective Labour Agreement obligations  35,055  Value added tax  25,728  11,  44,967  Pension contributions  9,242  13,  20,975  26,  80,912  51,  80,912  61,912		-	-	tegat entity has a participation of C 022,022.		
Corporate tax The change in 2015 was the result of the sale of: 1242 shares in 2011, with a premium of € 4.95 per share, and 1028 shares in 2015, with a premium of € 28.12 per share  Share discount This item arose through the sale of 568 shares with a discount of € 21.00 per share  Cother debt and accrued liabilities  Accrued expenses  Revenues received in advance on depots  Research and development reserve  Acquisition value  Acquisition value  Addition to reserve  Addition to reserve  20,000- 10,000- 10,000- 10,000- Holiday pay reserve  Corporate tax  14,967  Pension contributions 9,242 13, 26,  80,912 51,  80,912 51,  49, Revenues received liabilities  Accrued expenses 8,300 26, Research and development reserve 9,754 6, Acquisition value Addition to reserve 7,221 5, Collective Labour Agreement obligations 36,983 33,	3 3 ,			Taxes and national insurance contributions		
The change in 2015 was the result of the sale of: 1242 shares in 2011, with a premium of € 4.95 per share.  Share discount This item arose through the sale of 568 shares with a discount of € 21.00 per share  Cheer debt and accrued liabilities  Accrued expenses Accrued expenses Research and development reserve  Acquisition value  Acquisition value  Addition to reserve  Addition to reserve  20,000-  Withdrawal from reserve  20,000-  Pension contributions  9,242 13, Payroll tax and national insurance contributions 30,975 26,  Cheer debt and accrued liabilities  Accrued expenses Accrued expenses  Received in advance on depots 38,000 26, Received in advance in connection with future 9,754 6, Acquisition value Addition to reserve  Acquisition value Addition to reserve  10,000- 10,000- 10,000- Holiday pay reserve 7,221 5, Collective Labour Agreement obligations 36,983 33,	Status per 31 December	35,055	35,055	Value added tax	25,728	11,763
Payroll tax and national insurance contributions  30,975  26,  Share discount  This item arose through the sale of 568 shares with a discount of € 21.00 per share  Other debt and accrued liabilities  Accrued expenses  Revenues received in advance on depots  Research and development reserve  Acquisition value  Acquisition value  Addition to reserve  Withdrawal from reserve  20,000-  10,000-  Payroll tax and national insurance contributions  30,975  26,  Payroll tax and national insurance contributions  30,975  26,  80,912  51,  75,  75,021  49,  Revenues received in advance on depots  Received in advance in connection with future  9,754  6,  Acquisition value  Addition to reserve  40,000-  40,000	•			Corporate tax	14,967	230
Share discount This item arose through the sale of 568 shares with a discount of € 21.00 per share  Other debt and accrued liabilities  Accrued expenses Accrued expenses Sesearch and development reserve Acquisition value Addition to reserve Addition to reserve Acdition reserve Acquisition reserve Acquisi				Pension contributions	9,242	13,524
Share discount  This item arose through the sale of 568 shares with a discount of € 21.00 per share  Other debt and accrued liabilities  Accrued expenses Accrued expenses Revenues received in advance on depots Research and development reserve Acquisition value Acquisition value Addition to reserve  Acdition to reserve  Withdrawal from reserve  20,000- 10,				Payroll tax and national insurance contributions	30,975	26,370
This item arose through the sale of 568 shares with a discount of € 21.00 per share  Other debt and accrued liabilities  Accrued expenses Accrued expenses Revenues received in advance on depots Research and development reserve  Acquisition value  Acquisition value  Addition to reserve  20,000-  This item arose through the sale of 568 shares with a discount of € 21.00 per share  Other debt and accrued liabilities  Accrued expenses Accrued expenses  Revenues received in advance on depots Received in advance in connection with future  9,754 6, Acquisition value  Addition to reserve  10,000- Holidays 16,332 15, Collective Labour Agreement obligations 36,983 33,	1028 shares in 2015, with a premium of € 28.12 per share					
This item arose through the sale of 568 shares with a discount of € 21.00 per share  Other debt and accrued liabilities  Accrued expenses Accrued expenses Revenues received in advance on depots Research and development reserve  Acquisition value Addition to reserve  Addition to reserve  20,000-  10,000-  Tholiday pay reserve  Collective Labour Agreement obligations  Other debt and accrued liabilities  Accrued expenses  53,021  49,  Revenues received in advance on depots Received in advance in connection with future 9,754 6,  REACH registration  16,332 15,  Collective Labour Agreement obligations 36,983 33,	Share discount				80,912	51,887
Accrued expenses 53,021 49,  Legal reserves Research and development reserve Received in advance in connection with future 9,754 6,  Acquisition value 50,000 50,000 REACH registration  Addition to reserve 10,000- Holidays 16,332 15,  Withdrawal from reserve 20,000- 10,000- Holiday pay reserve 7,221 5,  Collective Labour Agreement obligations 36,983 33,						
Legal reservesRevenues received in advance on depots38,00026,000Research and development reserveReceived in advance in connection with future9,7546,000Acquisition value50,00050,000REACH registrationAddition to reserve-Holidays16,33215,000Withdrawal from reserve20,000-10,000-Holiday pay reserve7,2215,000Collective Labour Agreement obligations36,98333,000	discount of € 21.00 per share			Other debt and accrued liabilities		
Research and development reserve Acquisition value  So,000 Acquisition to reserve  Addition to reserve  Personance in connection with future or p,754  Received in advance in connection with future or p,754  REACH registration  Holidays  16,332 15, Withdrawal from reserve  20,000- Holiday pay reserve  Collective Labour Agreement obligations  36,983 33,				Accrued expenses	53,021	49,674
Acquisition value 50,000 50,000 REACH registration  Addition to reserve - Holidays 16,332 15,  Withdrawal from reserve 20,000- 10,000- Holiday pay reserve 7,221 5,  Collective Labour Agreement obligations 36,983 33,	Legal reserves			Revenues received in advance on depots	38,000	26,000
Addition to reserve - Holidays 16,332 15, Withdrawal from reserve 20,000- 10,000- Holiday pay reserve 7,221 5, Collective Labour Agreement obligations 36,983 33,	Research and development reserve			Received in advance in connection with future	9,754	6,701
Withdrawal from reserve 20,000- 10,000- Holiday pay reserve 7,221 5, Collective Labour Agreement obligations 36,983 33,	Acquisition value	50,000	50,000	REACH registration		
Collective Labour Agreement obligations 36,983 33,	Addition to reserve	-	-	Holidays	16,332	15,862
	Withdrawal from reserve	20,000-	10,000-	Holiday pay reserve	7,221	5,796
Status per 31 December 30,000 40,000 ———————————————————————————				Collective Labour Agreement obligations	36,983	33,969
161,311 138,	Status per 31 December	30,000	40,000		161 311	138,002

#### Off-balance-sheet items

AquaMinerals has signed a rental contract for its premises for 7.5 years, and contracts for lease cars. Obligations for less than 1 year amount to  $\leq$  80,000, for 1-5 years to  $\leq$  177,000, and for more than 5 years to  $\leq$  0.0.

#### Events post balance-sheet date

In 2018 the Aa and Maas Water Authority will accede to AquaMinerals which will lead to the issuance of shares. In 2018 a new bank guarantee will be requested for the amount of € 143,000 to replace the guarantee issued in 2017.

# **Profit and Loss Account for 2017**

	2017	2016
	€	€
Earnings		
Turnover residuals	7,148,592	5,065,788
Consulting	67,844	41,798
	7,216,436	5,107,586
Shareholders' annual contribution	1,039,700	919,900
Total earnings	8,256,136	6,027,486
Operating expenses		
Direct disposal expenses	3,970,029	2,722,383
Acceptance expenses	593,454	522,753
Earnings distributed to shareholders	2,269,447	1,558,557
	6,832,930	4,803,693
Gross turnover result	1,423,206	1,223,793
Operating expenses		
Personnel	822,889	748,245
Depreciation	13,181	13,479
Cost of sales and PR	93,654	91,098
Research and consulting costs	220,722	200,552
Premises	43,313	43,215
Supervisory Board	36,000	20,367
Other operating expenses	118,928	108,185
	1,348,687	1,225,141
Total expenses	8,181,617	6,028,834
Operating result before interest	74,519	1,348-
Interest income	318	2,498
Pre-tax result	74,837	1,150
Corporate tax	14,967	230
Result	59,870	920

# **Explanatory notes on the Profit and Loss Account**

	2017	2016
	€	€
Earnings		
Turnover residuals		
Settled disposal/acceptance expenses shareholders	4,384,588	3,072,794
Settled disposal expenses non-shareholders	97,979	48,619
Earnings (post)sale residuals shareholders	2,540,931	1,824,367
Earnings (post)sale residuals non-shareholders	125,094	120,008
	7,148,592	5,065,788
Consulting		
Consulting for non-shareholders	67,844	41,798
	7,216,436	5,107,586
Direct disposal and acceptance expenses	4,563,483	3,245,136
Turnover of non-shareholders of AquaMinerals B.V.	290,917	210,425
Idem in percentage	4.0%	4.1%

	2017	2016
	€	€
Operating expenses		
Personnel		
Direct salary expenses	602,851	546,232
National insurance contributions	98,212	92,507
Pension contributions	78,987	64,237
Indirect salary expenses	20,211	20,927
Short-term staff	22,628	24,342
5.10.10 10.11.1 500.1	22,020	
	822,889	748,245
The remuneration of manager(s) and supervisors (including		
pension premiums) for 2017 amounted to € 157,000		
Staff		
In 2017 there were ten staff members,		
all of whom held permanent positions.		
In 2016 there were nine.		
Cost of sales		
Travel and accommodation costs	50,696	54,009
Contributions	8,324	8,309
PR	34,634	28,780
	93,654	91,098
Research and Consulting costs		
Perspective: Financial	52,292	25,660
Perspective: Client	78,850	62,031
Perspective: Internal processes	15,040	10,842
Perspective: Innovation/learning	74,540	102,019
	,	
	220,722	200,552
	, ,	

# Other information

# Statutory profit appropriation

Article 27 of the company statutes establishes the following provisions regarding the profitappropriation:

- 1 The profit shall be at the free disposal of the General Meeting of Shareholders. The General Meeting of Shareholders may reserve an amount from the profit established in the financial statements that it has approved.
- 2 The company may only make distributions to the extent that its shareholders' equity exceeds the amount of the issued and called-up part of the paid-up capital, plus the reserves to be maintained in accordance with the law.
- 3 Profit distribution shall only be made after the adoption of the financial statement from which it appears that such distribution is allowed
- 4 Shares or certificates held by the company, or shares and certificates in which the company has right of usufruct, shall not be included in the profit appropriation calculation.
- 5 The General Meeting of Shareholders may decide to make interim distributions. The decision to pay an interim dividend from profits during the fiscal year in course can also be taken by management. Distributions referred to in this item may only be made if the provisions of item 2 of this article are met.
- 6 Unless the General Meeting of Shareholders establishes otherwise, the dividends shall be paid within 30 days after being approved.
- 7 The General Meeting of Shareholders may decide to pay dividends, in part or in whole, in a form other than cash.
- 8 A shortfall may only be settled through the reserves established by law inasmuch and to the extent that the law permits.
- 9 In the event that the total amount of the issued and called-up part of the capital, plus the reserves to be maintained in accordance with the law, is less than the most recently established legal minimum capital level, the company must maintain a reserve equal to the difference between the amounts.

# Appropriation of 2017 result

In anticipation of the decision to be taken in this regard by the General Meeting of Shareholders, the 2017 result has been added to other reserves.

This decision, which has yet to be taken, has already been incorporated into the 2017 financial statements.

**Audit Report** 





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#### INDEPENDENT AUDITOR'S REPORT

To: The Shareholders of AquaMinerals B.V.

#### A. Report on the audit of the financial statements 2017 included in the annual report

#### Our opinion

We have audited the financial statements 2017 of AquaMinerals B.V., based in Nieuwegein

In our opinion the accompanying financial statements give a true and fair view of the financial position of AquaMinerals B.V., as at 31 December 2017, and of its result for 2017 in accordance with Part 9 of Book 2 of the Dutch Civil Code.

The financial statements comprise:

- 1 the balance sheet as at 31 December 2017:
- 2 the profit and loss account for 2017; and
- 3 the notes comprising a summary of the accounting policies and other explanatory information.

#### Basis for our opinion

We conducted our audit in accordance with Dutch law, including the Dutch Standards on Auditing. Our responsibilities under those standards are further described in the 'Our responsibilities for the audit of the financial statements' section of our report

We are independent of AquaMinerals B.V., in accordance with the Wet toezicht accountantsorganisaties (Wta, Audit firms supervision act), the Verordening inzake de onafhankelijkheid van accountants bij assurance-opdrachten (ViO, Code of Ethics for Professional Accountants, a regulation with respect to independence) and other relevant independence regulations in the Netherlands. Furthermore, we have complied with the Verordening gedrags- en beroepsregels accountants (VGBA, Dutch Code of Ethics).

We believe the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

#### B. Report on the other information included in the annual report

In addition to the financial statements and our auditor's report thereon, the annual report contains other information that consists of the other information. Based on the following procedures performed, we conclude that the other information:

- is consistent with the financial statements and does not contain material misstatements.
- contains the information as required by Part 9 of Book 2 of the Dutch Civil Code.

We have read the other information. Based on our knowledge and understanding obtained through our audit of the financial statements or otherwise, we have considered whether the other information contains material misstatements.

By performing these procedures, we comply with the requirements of Part 9 of Book 2 of the Dutch Civil Code and the Dutch Standard 720. The scope of the procedures performed is substantially less than the scope of those performed in our audit of

C. Description of responsibilities regarding the financial statements

#### Responsibilities of management for the financial statements

Book 2 of the Dutch Civil Code.

The board is responsible for the preparation and fair presentation of the financial statements in accordance with Part 9 of Book 2 of the Dutch Civil Code, Furthermore, management is responsible for such internal control as management determines is necessary to enable the preparation of the financial statements that are free from material misstatement. whether due to fraud or error.

the financial statements. Management is responsible for the preparation of the other information as required by Part 9 of

As part of the preparation of the financial statements, management is responsible for assessing the company's ability to continue as a going concern. Based on the financial reporting framework mentioned, management should prepare the financial statements using the going concern basis of accounting unless management either intends to liquidate the company or to cease operations, or has no realistic alternative but to do so.

#### Our responsibilities for the audit of the financial statements

Our objective is to plan and perform the audit engagement in a manner that allows us to obtain sufficient and appropriate audit evidence for our opinion.

Our audit has been performed with a high, but not absolute, level of assurance, which means we may not detect all material errors and fraud during our audit.

Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements. The materiality affects the nature, timing and extent of our audit procedures and the evaluation of the effect of identified misstatements on our opinion.

We have exercised professional judgement and have maintained professional scepticism throughout the audit, in accordance with Dutch Standards on Auditing, ethical requirements and independence requirements. Our audit included among others:

- identifying and assessing the risks of material misstatement of the financial statements, whether due to fraud or error, designing and performing audit procedures responsive to those risks, and obtaining audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control;
- obtaining an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the
- evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management;
- concluding on the appropriateness of management's use of the going concern basis of accounting, and based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such

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disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause a company to cease to continue as a going concern;

- evaluating the overall presentation, structure and content of the financial statements, including the disclosures; and
- evaluating whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant findings in internal control that we identify during our audit.

Lelystad, June 5 2018 mth accountants & adviseurs b.v.

Was signed

drs. B.M. Tinge RA



# Colophon

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