

# UN GLOBAL COMPACT

## COMMUNICATION ON PROGRESS 2016



- Human rights & labour
- Environment
- Anti-corruption
- Code of Conduct for service providers

# MISSION

To develop reliable waste water and stormwater management, tailored to our customers' requirements, with respect for those around us and the environment.



## ABOUT AQUAFIN

**M**ore than 1,000 employees work for Aquafin to help ensure clean watercourses and a living environment in harmony with water. Since its establishment by the Flemish Region in 1990, the company has raised the treatment level in Flanders from just 30% to 83%.

Aquafin collects the domestic waste water from the municipal sewers in collector sewers and transports it to waste water treatment plants, where it is processed in accordance with EU and Flemish standards. It is Aquafin's responsibility to ensure the optimum operation and maintenance of the infrastructure in which the region has invested. Aquafin also offers the same services for the municipal sewer system.

We want to create real added value for society and the living environment. Accordingly, we also help the communities deal with stormwater differently, by making more space for it and integrating it into public areas. Starting with the design, we pay attention to the entire lifecycle of the infrastructure, continuing to keep a close eye on its operation once it is up and running. Smart energy consumption, recovery of raw materials from waste water and reducing emissions in the water treatment process and discharge of untreated waste water are central to our activities. Based on our expertise and experience, Aquafin has become a much sought-after partner in research projects aimed amongst other objectives at implementing the EU Water Framework Directive, both in Belgium and abroad.



# INTRODUCTION



When I joined Aquafin as CEO, it was clear from the start that I would be part of a 'warm' company with a strong focus on people. This is expressed in various ways: from how you are received as a new colleague to the many spontaneous initiatives to support social projects, locally and internationally.

This caring approach also translates into aiming for the highest safety standards for our employees and their colleagues from our partner firms. The circumstances in which they work on a daily basis aren't always easy. With the recent flooding along the coast still fresh in my mind, I automatically think of the emergency intervention that sometimes has to be carried out at any time of the day or night as well as underground work on our infrastructure.

Last year, we have therefore focussed intensely on raising awareness of safety and tightening up our safety instructions. We need to continue and even expand these efforts in future, since we believe that every accident can be prevented with the right attitude to safety.

Sustainability, not just in how we deal with people, but also in the use of energy and raw materials, has been part of our operations for a long time. A prime example is the constantly increasing generation of green electricity by the fermentation of biomass produced in our water treatment processes.

A need has gradually arisen for consistent leadership with a vision of what 'corporate social responsibility' actually means for Aquafin. In living out this vision, we are partly inspired by the United Nations' 'Sustainable development goals'. We're convinced that by what we do and how we do it, we can help ensure these goals are achieved.

Alongside our core business, collecting and treating domestic waste water, we also want to add value to society in other areas. By drawing up stormwater plans, for example, with which we help municipalities defend themselves against the effects of climate change. We do this by adapting buffer and soakaway technology so that the risk of flooding in case of heavy rainfall is considerably reduced. This also tops up groundwater levels. Absolutely vital since, despite rising water bills, thanks to its high population density, Flanders is one of the areas with the most vulnerable water supply in Europe.

We all experienced this during a lengthy period of extreme drought this year. In the press, we launched the proposal to use treated waste water for a range of specific applications in agriculture and industry. This met with an enthusiastic response and also led to further discussions with a view to the systematic purchasing of treated waste water. Along with the recovery of raw materials, energy and heat in the water treatment process, this is a further opportunity for Aquafin to contribute to the circular economy.

Jan Goossens  
general manager



# AQUAFIN AND THE 10 PRINCIPLES OF THE UN GLOBAL COMPACT

## Human rights & labour

- **Principle 1:** Businesses should support and respect the protection of internationally proclaimed human rights.
- **Principle 2:** Businesses should make sure that they are not complicit in human rights abuses.
- **Principle 4:** Businesses should uphold the elimination of all forms of forced and compulsory labour.
- **Principle 5:** Businesses should uphold the effective abolition of child labour.

As a company incorporated under Belgian law, Aquafin is subject to Belgian social legislation. Protecting human rights, banning forced and child labour - these are fundamental principles of Belgian and European social legislation. In complying with Belgian legislation, Aquafin respects these 4 principles.

### FOCUS ON SAFETY

Safety is a basic right under European and Belgian legislation. Our own employees and everyone who carries out work on our infrastructure are exposed to specific risks. Aquafin wants all of these people to be able to go home safely after work, which is why we place such emphasis on safety. The company supplies the necessary information and tools for this through various channels including posters, leaflets, training courses, e-learning, guidelines, ergotools, personal protective equipment, etc.

In 2016, Aquafin outlined a programme for raising awareness of safety among our own employees and contractors. For example, at the end of 2016, Aquafin introduced the STOP principle. This authorises everyone at one of the company's sites or plants to stop working if the work cannot be carried out safely, until the unsafe situation has been eliminated.

The company organised an internal survey about the safety culture. Based on the results, further work was carried out around strong leadership and taking responsibility at all levels.

In the first half of 2017, Aquafin also tightened up the rules for wearing personal protective equipment and descending into enclosed spaces and communicated them to all concerned. Even if this is not acted on, the STOP principle should be invoked here.

In 2016, we recorded 22 lost time accidents, with a lower severity than in previous years. All efforts relating to safe working are designed to lead to no more occupational accidents happening at Aquafin's sites and plants.



→ **Principle 3:** Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining.

As prescribed by Belgian law, Aquafin has a Works Council and a Health and Safety Committee with equal representation. The employee representatives represent the various categories of employees: white collar, executives and young workers (no one has blue-collar status at Aquafin). Employees are free to decide which trade union to join, if any. Both the Works Council and the Health and Safety Committee meet on a regular basis. The minutes of these meetings are accessible to all employees.

In 2016, the Works Council met 11 times and the Health and Safety Committee also met 10 times.

→ **Principle 6:** Businesses should uphold the elimination of discrimination in respect of employment and occupation.

As required by Belgian law, Aquafin does not discriminate between people on the basis of ethnic or social origin, gender, age, sexual orientation, political or religious beliefs or whether or not they are members of a trade union.

In view of the high engineering content of the company's activities, most applicants to Aquafin remain male. Nevertheless, for senior technical profiles, the number of men and women remains very evenly balanced. In 2016 the ratio (expressed in FTE) was 813 men to 148 women.

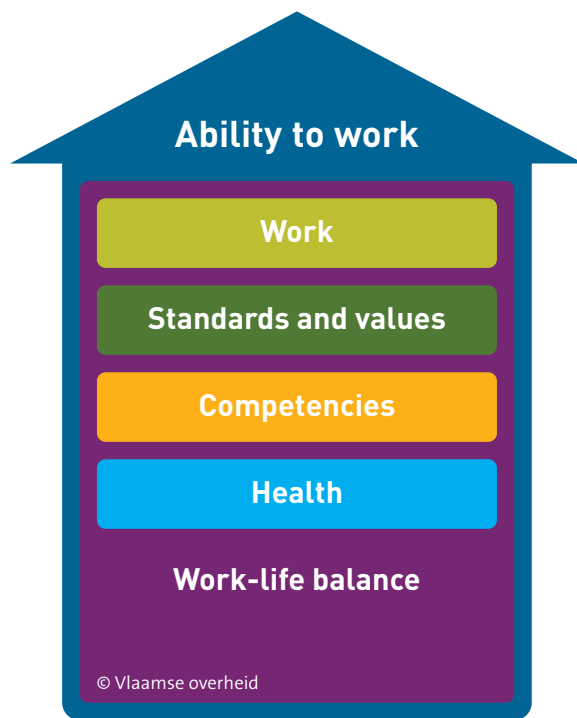
Under Belgian law, companies with more than 20 employees are required to draw up an employment plan designed to maintain or increase the number of employees aged 45 or older. Aquafin has drawn up such a plan in conjunction with the social partners. This plan is reviewed and updated on an annual basis. However, due to the low staff turnover, the average age of our employees is constantly rising. To maintain a healthy mix of age bands, we make a special effort to attract young employees as well.

Aquafin views a diversified workforce as a definite asset. All employees, regardless of qualifications, position and seniority, are classed as white-collar workers.



## HOME OF ABILITY TO WORK

The “home of ability to work” is the metaphor that Aquafin uses for its HR policy. It comprises all the elements needed to feel good about work. The company engaged in specific campaigns based on each of these elements.



- Competencies: Encouraging personal development through job rotation, job crafting, career planning, informal learning, knowledge sharing, etc.
- Health: Physical workability and a psychosocial well-being policy
- Work-life balance: Working independently of location and time within a clear agreement framework

Regarding the “Work” element, in 2016, Aquafin began a review of its remuneration policy in close consultation with the trade union partners. This exercise continues in 2017.

We also formulated clear company goals in the Strategic Aquafin Management Plan (SAMP), which were communicated across the whole organisation. These goals were then translated into team goals and goals at an individual level. In this way, everyone is clear about how their work contributes to the company’s results.

### Why work for Aquafin?

- Clean watercourses and a living environment in harmony with water? You see the results of your work right away!
- Here, you share ideas with management and take the initiative.
- Do you want to develop further in your job or would you rather change roles? You’re in the driving seat of your career.
- You belong to a warm company, with a family atmosphere and strong team spirit.





## Environment

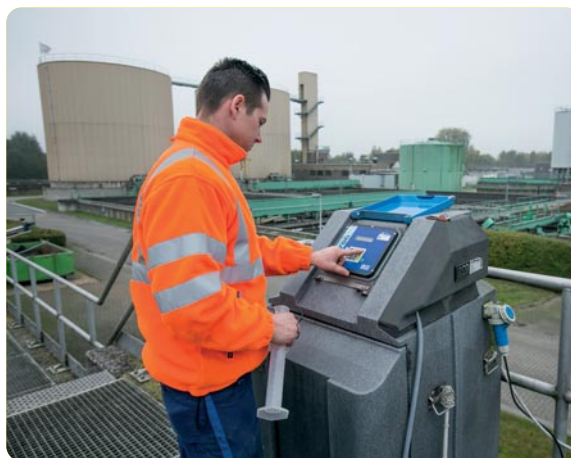
→ **Principle 7:** Businesses should support a precautionary approach to environmental challenges.

AquaFin is responsible for the development and management of the regional infrastructure for the treatment of domestic waste water in Flanders. We also offer the same services for the municipal sewer system. The water we discharge into a watercourse following treatment must comply with Flemish standards, which are even stricter than European ones. In 2016, 98.99% of waste water treatment plants complied with all applicable standards. That's an excellent result, the best for years. However, the situation didn't look so good after the first half of the year - all down to a very wet spring. Dilution of the waste water with connected rainwater has a major impact on the meeting of standards. In periods of heavy rainfall, concentrations of substances to be removed are often already below the treatment standard. In order to still comply with the removal percentages, in the past, expensive chemicals often had to be added to the treatment process, despite the excellent quality of the treated waste water. In 2016, AquaFin and its Ecological Regulator at the Flemish Environment Agency reached agreement on a different way of calculating the removal percentages, which reduces the impact of dilution on treatment results. The fact that fewer chemicals have to be added now is good news for the environment too.

All critical elements of AquaFin's waste water treatment plants and pumping stations are monitored constantly by alarms. Online controls enable the treatment process to be adjusted very quickly if required.

Even with close monitoring, incidents can happen. In accordance with the Management Agreement with the Flemish Region, AquaFin must report every incident in which untreated waste water spills into a watercourse and/or the meeting of standards is in jeopardy to the Flemish Environment Agency. Of the 547 reports we made to the Flemish Environment Agency last year, 359 had an ecological impact. In total, we lost 9,865 population equivalents of pollution load, 15% more than in 2015.

Both the total number of incidents and the number of incidents with an ecological impact are significantly higher than the previous year, also due to the wet spring. In case of excessive rain, the probability of washing away of clay and blocking of pumps increases.



But incidents can also be caused by factors such as technical problems, power failures, illegal discharges into the sewer system by external parties, etc.

We follow up all alerts very closely and are able to keep intervention times very short. Every quarter, we also analyse reported incidents internally to learn from them and formulate actions.

→ **Principle 8:** Businesses should undertake initiatives to promote greater environmental responsibility.

AquaFin's infrastructure works inevitably cause disruption to local residents, retailers and passing traffic. They often fail to make the connection with the positive outcome for the environment. So we inform them in detail about why our works are necessary and listen to their concerns and requirements. Our Contact Centre is the first point of contact for citizens with questions and reports. Before the launch of a project with an impact on the surrounding area, we organise an information evening during which, together with the project partners, we explain the purpose of the works and outline how the works will progress and which diversions will be set up.

AquaFin wants to present its mission and vision to people who aren't affected by our infrastructure works too, so that they are familiar with the purpose of our works. In 2016, 627 group tours took place of several of our waste water treatment plants equipped for this purpose. We invite local residents to come and take a look at new waste water treatment plants and take a tour to learn about the treatment process. In 2016, we organised nine neighbourhood tours.



To make the general public even more aware of the importance of good water quality, we also work with Natuurpunt. In the summer of 2017, we invited people to play “bingo by the stream”. They could tick off the animals and plants they spotted on a scorecard. The perfect opportunity to find out about aquatic life and the need for clean watercourses.



Specially for primary schools, Aquafin joined up with MOS (Milieuzorg op School) to mark World Toilet Day (19 November) by organising a competition in which they could win a makeover of their toilets. In this way, we rewarded schools that make sustainability and education about rational use of water central factors in the design of their toilets.



## MAKING ROOM FOR WATER HIGHLIGHTED AT CHAP'EAU

For the third year in a row, Aquafin organised “Chap’eau”, together with the municipalities, the Flemish Environment Agency, the Flemish Region, technical partners and other organisations that help to ensure clean watercourses. Chap’eau is a freely accessible event at which we celebrate progress in water quality at a different location each year. In 2016 it was the turn of Overijse, where water is also given its proper place in public spaces. After all it’s not just good water quality that’s a challenge.



A changing climate means that we are increasingly faced with problems to do with water quantity. Overijse commissioned Aquafin to draw up a stormwater plan to ensure that stormwater flowing down a hillside could no longer cause flooding in the centre. The municipality had already opened up the Ilse again in the centre and created a pond, which serves as a storage basin.

Aquafin took great care to make the event itself sustainable (vegetarian offering, green children’s entertainment, waste policy, etc.). We entered for OVAM’s GroenEvent (green event) award and were a finalist in that competition.

## RECYCLING TREATED WASTE WATER TO TACKLE DROUGHT

Due to the changing climate, we won’t only have to protect ourselves against flooding resulting from increasingly intensive downpours. Climatologists are also predicting lengthy periods of drought during which water resources will come under pressure. In addition, Flanders is one of the most sensitive regions to water stress in Europe, partly due to high population density and dramatically low groundwater levels in some areas. During the extreme drought in June 2017, Aquafin strongly made the case of the recycling of treated waste water in the press. It is actually perfectly usable for applications not requiring drinking water quality and can be upgraded to any quality. Many farmers and other businesses gratefully took up Aquafin’s offer. Demand was particularly high in West Flanders, where a ban on collecting surface water applied for a while. Together with municipalities and provincial councils, Aquafin will now investigate how treated waste water can become a systematic alternative to other water sources.

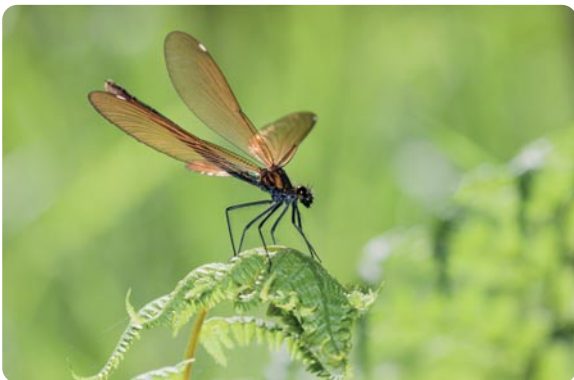
### Raising awareness through support for water projects in developing countries

Our passion for clean watercourses extends beyond national borders. We want to help improve access to clean drinking water and hygienic sanitation for all. Every year, our shareholder makes a budget available to support water projects in developing countries. One of the criteria for supporting a project financially is that our own employees get the opportunity to volunteer for the project. And the project owners receive free professional advice into the bargain. Or extra helping hands such as in the project in Kenya (photo), where several colleagues laid the necessary drainage pipes together with non-profit organisation Kitanda, for example. We also work with the ngo Protos and the non-profit organisation Young Water Solutions, for example.



### GREATER BIODIVERSITY ON OUR OPERATING SITES

Aquafin runs more than 300 waste water treatment plants. Through sustainable grounds management and creation of flower meadows and amphibian ponds, we try to increase biodiversity on our operating sites. A master's degree student is currently designing a biodiversity plan for our plant at Lokeren as an internship assignment. This plan will advise us about how we can raise the nature value of this location even further.



Aquafin has also joined in with the “Lean and green” project in which we commit to reduce our CO<sub>2</sub> emissions by 20% in five years through more sustainable mobility.

Thanks to satellite offices and flexible workplaces, Aquafin aims to reduce the number of kilometres travelled to and from work and on business. In 2016, we decided to move our satellite office in Ghent to a different location which is more energy-efficient and more accessible by public transport.



### WORKING TOWARDS GREENER MOBILITY

Through all kinds of initiatives, Aquafin aims to encourage as many employees as possible to move around in as environmentally friendly a manner as possible while travelling to and from work and during working hours. Throughout 2016, on average, 160 employees cycled to and from work on a regular basis. The company has acquired two e-bikes for short journeys out of head office and an LNG car and an electric car for longer journeys. Employees for whom a company car forms part of their salary package can now opt for an environmentally friendly car and are incentivised to do so via a higher budget.

→ **Principle 9:** Businesses should encourage the development and diffusion of environmentally friendly technologies.

### REDUCING ENERGY CONSUMPTION

Water treatment is an energy-intensive process. The energy bill for Aquafin's treatment activities accounts for around a quarter of our total operating costs.

In 2011, Aquafin's Management Committee and Board of Directors approved the energy policy statement, aimed at cutting primary energy consumption.

In line with the European climate objectives and the commitment of Belgium, Aquafin aims to achieve the following energy-related goals by 2020, compared with the reference year of 2010:

1. Reduce consumption of primary energy by 20%
2. Generate 13% of green electricity
3. Reduce transportation by 20%

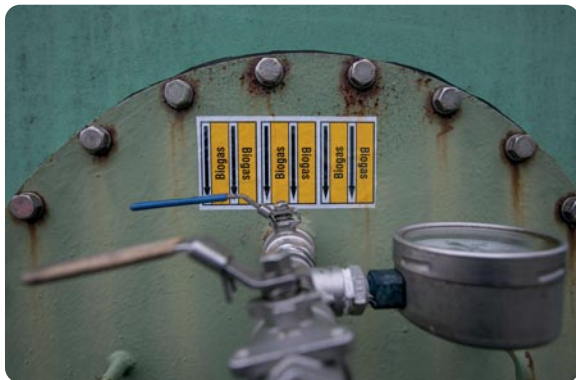
#### 1. 20% less primary energy

Once again in 2016, Aquafin carried out a number of projects leading to a reduction in the energy consumption of our waste water treatment plants. For example, we systematically replaced our old aeration systems with new, low-energy fine bubble aeration. We also formulated further campaigns to reduce consumption.

Aquafin reached an agreement with the Flemish Region about establishing an Energy Fund. This fund's resources are invested in projects aimed at saving energy. This may include more efficient devices or processes that can reduce our energy consumption or investments enabling us to generate energy ourselves. The only condition is that the payback period must not be longer than 9 years. In 2017, we aim to replace several energy-intensive blowers in aeration basins with lower energy models. In future, the energy savings we make ourselves will be able to top up the Energy Fund. More major modifications of the infrastructure have to be included in the Optimisation Programme awarded to Aquafin each year by the Flemish Region.

#### 2. Generate 13% of green electricity

Through the digestion of sludge, a by-product of water treatment, Aquafin can generate its own green electricity. This proportion is rising year by year and exceeded 132 GWH, total electricity consumption, in 2016. The company is investigating how the yield from sludge digestion can be increased further.



In 2015, 36% of the non-digested sludge and the sludge that remains after the sludge digestion process was dried in our own sludge drying plants in Deurne, Houthalen or Leuven. We supply the dried sludge to the cement industry in the form of granules or pellets for co-incineration in cement furnaces, to replace fossil fuels.

#### 3. Reduce transportation by 20%

In order for the excess sludge produced during the treatment process to be processed, it needs to be transported to centralised processing plants. The less water the sludge contains, the lower the volume and therefore the less transportation is required. Aquafin therefore does all it can to reduce the dry solids content of the sludge. In 2016, the liquid sludge content increased further to 4.89%, from 4.07% in 2010. The number of kilometres driven with liquid sludge is 560,000 km lower than in 2010, for the same quantity of sludge.

The efforts we make to reduce our energy consumption not only have a financial impact but also help to reduce our ecological footprint. The following estimate was made of the CO<sub>2</sub> emissions of our business based on three scopes or sources:

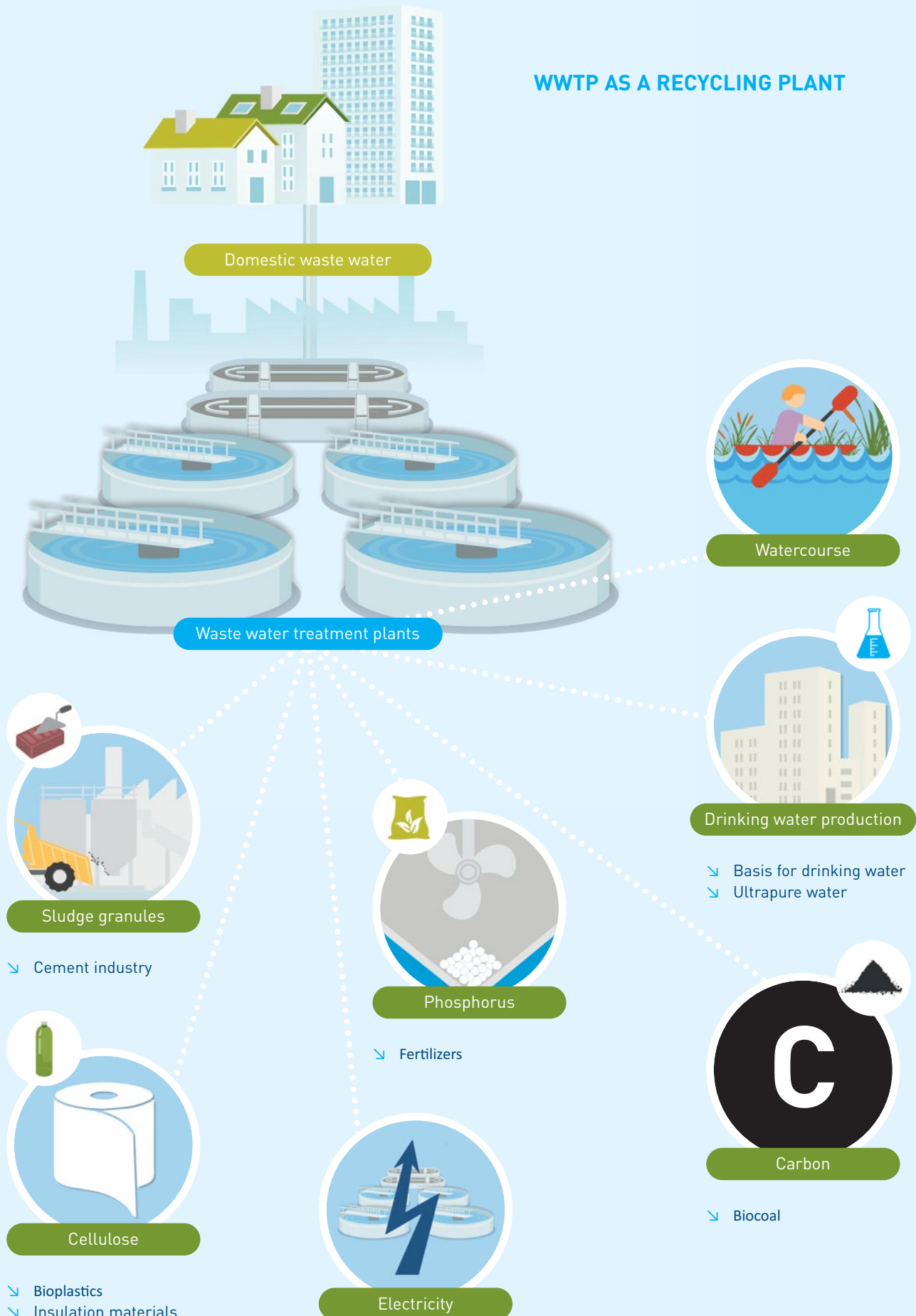
- **Scope 1:** direct discharge, for which Aquafin itself is responsible.
- **Scope 2:** indirect emissions from purchased electricity.
- **Scope 3:** all other indirect emissions from sources beyond the control of Aquafin

SOURCES	TONNE CO <sub>2</sub> -EQ	
	2015	2016
<b>Scope 1</b>		
Natural gas	6,820	6,681
Heating oil	538	452
Fuel for company vehicles	2,312	2,533
CH <sub>4</sub> -emission*	48,026	54,211
N <sub>2</sub> O-emission*	75,811	70,188
<b>Scope 2</b>		
Electricity	40,610	32,220
<b>Scope 3</b>		
Fuel for transportation of sludge	2,535	2,667
Use of chemicals	9,566	14,832

\* Flat rate based on loads processed



## WWTP AS A RECYCLING PLANT







## RECOVERY OF RAW MATERIALS

Scarcity of natural resources and the continuing quest for renewable energy are without a doubt among the greatest challenges of the 21st century. Heat from waste water and the residue of materials found in it turn a waste water treatment plant into a potential recycling plant. Aquafin is a partner in many projects designed to test techniques for recovering raw materials and energy from the water treatment process. For instance, phosphorus is a mineral of which natural reserves are under severe threat. It is abundantly present in urine and could therefore be recovered via the treatment process. Together with European partners, we are investigating various ways: from the sludge mass, from sludge water and even from the ashes of incinerated sludge.

The organic matter in waste water also has potential for creating raw materials. For instance, it is possible to ferment domestic waste water and water treatment sludge to form volatile fatty acids. These are then used to produce bioplastic, omega 3 fatty acids for the food industry and microbial oils. Aquafin is involved in the European research project “Volatile” around this theme.

The toilet paper we flush away leaves its trace in water treatment too. The cellulose left behind makes a perfect ingredient for insulation materials and bioplastic. We have a test set-up for the recovery of cellulose and are looking into possible outlets with the Dutch water boards.

Following a positive feasibility study, we began a detailed study in conjunction with the City of Antwerp and energy grid operator Eandis to heat a new district of Antwerp with heat from the sewage which Aquafin collects and treats at the plant in Deurne. When the system is fully operational, up to 4,000 tonnes of CO<sub>2</sub> will be prevented.

## Anti-corruption

→ **Principle 10:** Businesses should work against corruption in all its forms, including extortion and bribery.

Corruption, extortion and bribery are prohibited under Belgian law, which we respect at Aquafin.

The internal auditor, external auditor and the financial regulator for the Flemish Region all supervise the company. The internal auditor carries out quality audits on the procedures followed within the company. Ernst & Young Assurance Services have been appointed as external auditors of the financial statements. The financial regulator for the Flemish Region checks the invoices falling under the Management Agreement with the Flemish Region.

Aquafin has produced a supplement to the terms of employment on the subject of conflicts of interest. During the past year, an integrity policy has also been developed and will be introduced in the company during 2017.



## Code of Conduct for service providers

The company is obviously fully in control of compliance with the 10 principles of the UN Global Compact as far as Aquafin itself is concerned. Since we also expect service providers with which we work to apply these principles, we incorporate a Code of Conduct into each set of specifications. This contains the basic requirements to be fulfilled by service providers with respect to their responsibility to stakeholders and the environment. Aquafin reserves the right to request a self-assessment or to carry out checks at any time. The Code of Conduct comprises the following rules:

1. Compliance with the law
2. Ban on corruption and bribery
3. Respect for employees' basic human rights
4. Ban on child labour
5. Employees' health and safety
6. Protection of the environment
7. Endeavour to ensure compliance with the Code of Conduct within their own supply chain and non-discrimination in the selection and treatment of their own suppliers

Aquafin's Corporate Governance Charter is available at [www.aquafin.be](http://www.aquafin.be).

## CIRCULAR PURCHASING WITH GREEN DEAL

Aquafin has joined Vlaanderen Circulair's "Green Deal Circular Purchasing" programme aimed at maximum cooperation to close cycles. Together with all actors in the life-cycle of a product, we aim to find dynamic, flexible solutions which meet consumers' constantly changing and often temporary requirements. The ultimate aim is to throw away less while aiming for maximum retention of product value, components and materials. Initially, Aquafin will design two purchasing accounts around this concept.

## SUSTAINABLE WORK CLOTHING

Twenty colleagues who themselves wear work clothing are helping design the new work clothing currently being developed. The clothing not only has to be attractive and practical, we are also determined to go for the most sustainable option. Durability and avoiding micro-plastics are already major criteria. We are also investigating the possibility of recycling the current clothing, which is being discarded, to make insulation materials, for example, instead of destroying it.

### A new lease of life for ICT equipment

In 2016, Aquafin donated old ICT equipment to Out of Use, which recycles it in a sustainable manner into new raw materials. For each laptop or PC, Natuurpunt purchases 1m<sup>2</sup> of land and plants a tree on it. With the equipment we donated in 2016, our employees were able to plant 110 trees in November.



After the purchase of new laptops in the spring of 2017, Aquafin donated the old equipment partly to Close The Gap and partly to Flemish schools.



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subsequent generations  
and a living environment  
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