Aquafin Green Finance Framework

April 2020

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1. Introduction

1.1. Company Profile

Clean watercourses for successive generations and a living environment in harmony with water, that is what we work for every day at Aquafin.

Aquafin, 100% owned by the Flemish Region, is an expert in waste water collection and treatment. Aquafin is responsible for the financing, operation and expansion of the household waste water treatment infrastructure in Flanders, Belgium. All of Aquafin's activities are directly or indirectly linked to waste water treatment.

At the start of Aquafin in 1990, barely 30% of all domestic waste water in Flanders was treated. The Flemish Region gave us the task to rapidly eliminate this large backlog compared to neighbouring countries and to make sure that Flanders complies with the urban waste water treatment directive (UWWTD). Since 2012, Flanders is compliant with the UWWTD. Today, we treat about 84% of household waste water before it flows back into a stream or river. As a result, the quality of our watercourses has improved significantly, which has had strong beneficial effects on biodiversity.

Aquafin is a many-faceted partner for all the actors involved in the implementation of an integrated water policy in Flanders. Our strength lies unmistakably in the combination of vision, ongoing expansion and professional management of the waste water treatment infrastructure. This was acknowledged by the Flemish Government which instructed Aquafin to take on a coordinating role between the regional and local levels.

LEGAL STRUCTURE

Flemish Region

↓ 100%[1]

Flemish Environmental Holding NV[2]

↓ 100%

Aquafin

↓ 99%

Aquaplus

REGULATORY FRAMEWORK

- **European Urban Wastewater directive (1991)**
- **European Water framework regulation (2000)**

↓

- **Flemish Regulation on Environmental Permit (VLAREM)**
- **Flemish Decree on Integral Water Policy (2003)**

↓ Decision to establish Aquafin NV (1990) and to draw up the Management Agreement (1993)

Aquafin

ECONOMIC & ECOLOGICAL REGULATOR

Flemish Environmental Agency[2]

↓ Economic and Ecological regulator

Aquafin

1 Foreseen by decree: the Flemish Region will at all time (directly or indirectly) own more than 50% of all Aquafin shares.
2 Changes are possible, in view of the new Flemish Agreement.

1.2. Aquafin's business activities

1.2.1. COLLECTION AND TREATMENT OF WASTE WATER

Aquafin collects household waste water of municipal sewers in collectors. These collectors carry the water to the treatment plants, where it is treated in accordance with European and Flemish standards. The water is treated so it can flow to creeks and brooks nearby, not endangering life in those waters.

Every day, Aquafin treats up to two billions litres of waste water, after skilfully transporting it through more than 6.000 kilometres of collectors. The actual treatment work is done by billions of micro-organisms that live in our waste water treatment plants, under close supervision of our technical operators.

1.2.2. RELATED ACTIVITIES

Separate rain water from waste water

Due to climate change, Flanders is increasingly threatened by temporal variability and hydrological extremes causing floods or droughts. Keeping rain water separate from waste water can be a smart way to prevent water nuisance and to prevent the soil from drying out.

Support Flemish cities and municipalities

Flemish towns, cities and municipalities are responsible for collecting and transporting domestic waste water from households in municipal sewers, where Aquafin's collector sewers take over to continue the transportation to the waste water treatment plant. Through its knowhow and experience in this area, Aquafin supports local authorities.

Asset Management

The waste water treatment infrastructure Aquafin builds and manages for the Flemish Region must be reliable and do what it is made for, now and in the future. Aquafin closely monitors the state and functioning of its infrastructure and, with an ISO 55001 certified asset management system, responds quickly in the event of any or potential shortcomings. At the same time, Aquafin proactively looks for process improvements and optimisations of the sewage system that provide added value, economically, socially and ecologically. Aquafin ensures that solutions in the short and long term are attuned to each other.

Aquafin applies its experience in asset management for the Flemish Region also to more than one hundred municipalities at local level. This makes Aquafin the ideal party to take on a coordinating role between the regional and local levels, as the Flemish Government requested recently. The Flemish Environmental Agency, as Aquafin's economic and ecological regulator, and the municipalities each determine their policy independently, but Aquafin is the perfect matchmaker between the two to develop an integrated vision and to come up with the best ecological results as well as the right investment proposals.

Storm water plans

A living environment in harmony with water demands a smart approach towards rain water. Several measures can be taken by every single one of us. However, for waterproof cities and municipalities, most efforts are to be realised on the public domain. At request of municipalities, Aquafin produces storm water plans fully tailored to the specific local situation. We expect this activity to grow significantly in the coming years.

Resource recovery

Aquafin has realised and is engaged in several new projects to recover resources like raw materials, energy and water.

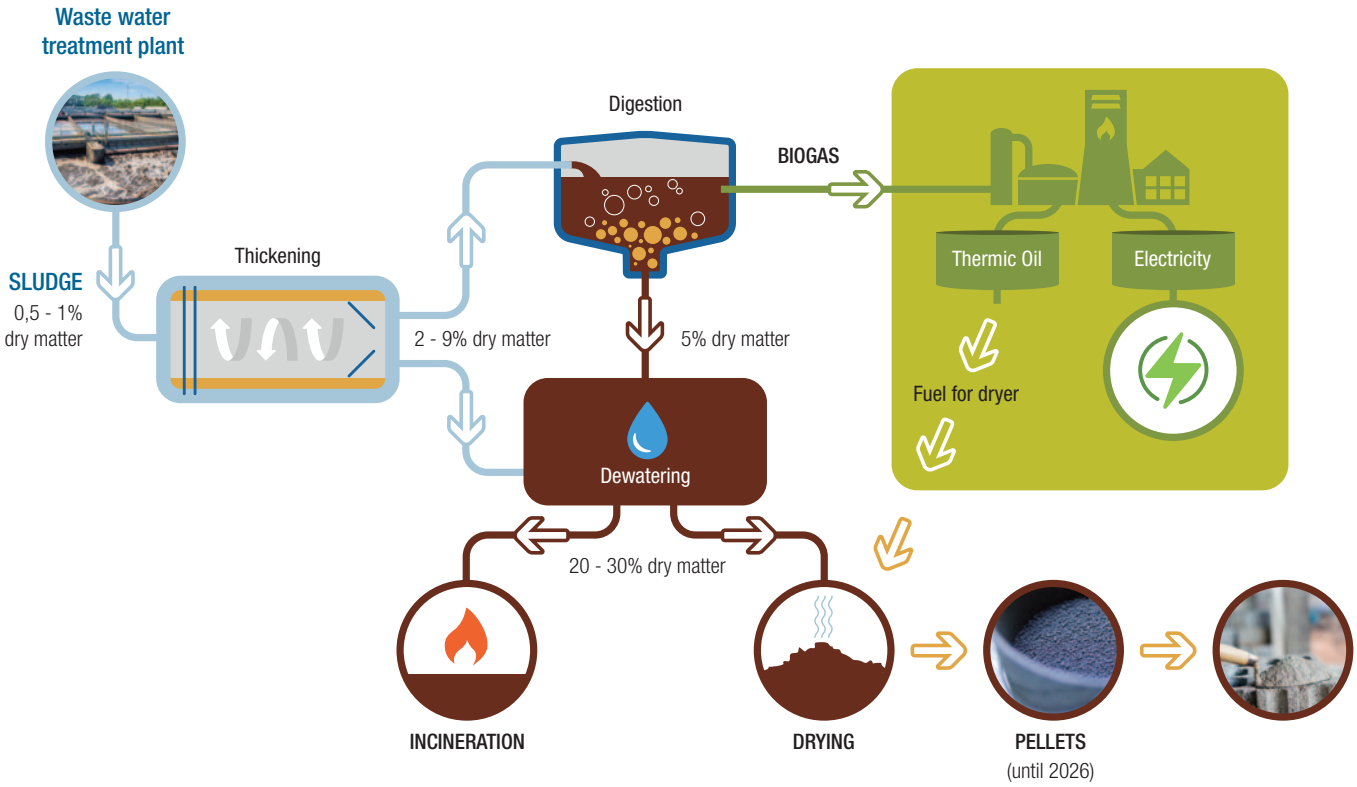
Waste water contains raw materials such as phosphorus and cellulose. As natural reserves are diminishing, recovery of useful substances is high on Aquafin's research agenda.

Another project is the recovery of heat out of sewerage water. Waste water contains a lot of thermal energy, as households discharge warm water into the sewer system every day. At some of our waste water treatment plants heat pumps have already been installed to heat the associated buildings. Several studies are now focusing on the feasibility of heat recovery from the sewer pipes to provide heat to local heat networks.

Treated effluent can also be reused for applications that don't require drinking water quality, such as cleaning water or cooling water. Flanders in particular is a water deficient region and decreasing ground water levels are already becoming problematic in certain areas. Aquafin has a contract with several companies for the delivery of effluent. Additionally, the effluent made available by Aquafin is a well appreciated alternative water source for irrigation in agriculture during periods of drought.

Sludge pellets are used as a co-fuel in the cement industry.

Resource recovery at Aquafin



Sludge treatment

Sewage sludge is a residual product of the water treatment process that needs to be disposed of. One of Aquafin's priorities is to limit the production of sludge as much as possible. After the water treatment process, the resulting sludge consists mainly of water and only 0,5% - 1% of dry matter (organic material, microorganisms, micro pollutants, sand, ...). After various treatments (thickening, digestion and dewatering), this is increased to +/- 25% of dry matter. The digestion process results in the production of biogas that is used to generate electricity or used as fuel for one of Aquafin's dryers.

The dewatered sludge is treated in different ways. One third of it is dried in one of our drying installations. The result of this process are pellets with a dry matter content of 90% that are used as co-fuel by the cement industry. These pellets have a calorific value equal to that of brown coal. The remaining two thirds are incinerated, either in one of our own auto thermal mono-incineration plants or in co-incineration with municipal and industrial solid waste.

Aquafin's objective is to incinerate all of our dewatered sludge as from 2026, mostly in mono-incineration, with a focus on the production of energy and warmth and the recuperation of phosphorus.

Aquafin wants to produce 45 GWh of renewable electricity by 2030.

Energy Projects

In addition to maximum recovery and reuse of treated waste water and sludge, Aquafin aims to keep its ecological footprint in the treatment process as small as possible. For example, online control of the process ensures that no more energy is consumed than necessary to achieve the desired water quality. Several service buildings are already heated by recuperation heat from sludge, converted via a heat exchanger or heat pump.

We target to reduce our electricity usage with 50 GWh by 2030, by investing in more energy efficient hardware and better software and steering algorithms. Next to that, our aim is to produce 45 GWh of renewable electricity by 2030 by increasing the number of on-site solar parks, investing in medium and full size wind turbines and by increasing our biogas production.

1.3. Sustainability at Aquafin

At Aquafin, we respect nature, our employees and our environment. Our sustainability policy is built on the following three pillars:

To act green

→ Our goal is to make a sustainable contribution to the environment. We strive for a greater biodiversity, have a lot of attention for energy and mobility and we apply circular thinking in all our processes.

Create opportunities for our employees

→ As we operate in a continuously changing environment, work life balance, job rotation and job creation are central pillars in our HR and CSR policy.

Positive impact on our environment

→ At Aquafin, we cooperate intensely with partners who share the same standards and values. We don't work next to each other but with each other.

As Aquafin's sustainability approach evolves and targets and focus points are regularly updated, we refer to our website for the latest version of our approach.

A

safe working environment and maximum opportunities for development are our priority.

1.4. Rationale for this Green Finance Framework

Every year, Aquafin invests tens of millions of euros in assets that contribute to its mission "Clean watercourses for successive generations and a living environment in harmony with water". To finance these sustainable investments and expenditures, Aquafin wants to issue various Green Finance Instruments. This Green Finance Framework has been designed to increase the transparency and integrity of these issuances. Aquafin believes that it will help to broaden its investor base by attracting investors that seek to focus their investments towards sustainable projects.

2. Aquafin Green Finance Framework

Aquafin's Green Finance Framework ("the Framework") is based on the Green Bond Principles (ICMA, 2018) and the Green Loan Principles (LMA/APLMA, 2018). These voluntary process guidelines are developed in multi-stakeholder processes involving issuers, investors, financial institutions and NGOs, with a view to promoting the development and integrity of the green finance market. The Framework takes into account the core components of the Green Bond Principles and the Green Loan Principles:

1. Use of Proceeds
2. Process for Project Evaluation and Selection
3. Management of Proceeds
4. Reporting
5. External review

This Framework defines the Green Assets, eligible to be funded by the proceeds of Green Finance Instruments issued by Aquafin including, but not limited to, bonds, loans, private placements and Namensschuldverschreibung. In addition, the Framework outlines the process used to select and report on eligible assets and the organisation of the management of proceeds of Green Finance Instruments. We refer to the terms and conditions contained in the underlying documentation for each issued Green Finance Instrument which specify the actual terms of the specific instrument.

As both the Green Bond Principles, Green Loan Principles and the green financing market overall are evolving rapidly, this Green Finance Framework shall be monitored, updated or expanded in the future. Any future updated version of this Framework will either keep or improve the current levels of transparency and reporting disclosures.

2.1. Use of Proceeds

Within the ICMA Green Bond Principles 2018 categories and the LMA Green Loan Principles 2018, Aquafin's business activities, as described above, are focused on the Eligible Green category **"Sustainable water and waste water management".**

The proceeds from the issuance of each Green Finance Instrument will be used to finance or refinance the total portfolio of Aquafin's green assets on the balance sheet relating to 'Sustainable water and waste water management'. All of the proceeds will be invested in the Flemish Region.

See table 1 for a detailed overview.

2.2. Process for Project Evaluation and Selection

Every project at Aquafin is directly or indirectly related to our primary activity "Sustainable water and waste water management". As such, Aquafin can be considered a pure-player in the category of "Sustainable water and waste water management", with over 90% of the company's balance sheet dedicated to these activities. Therefore we have chosen to organise our Green Finance Process (project selection, management of proceeds and reporting) on a balance sheet and company level instead of on a project level. For the sake of transparency, a clear distinction between green and non-green assets has been made for each of our balance sheet items (see table 2).

Aquafin ensures that all Eligible Green Assets comply with official national and European environmental and social standards and local laws and regulations on a best efforts basis. Aquafin applies core minimum environmental and social requirements for many of its activities, including those financed with the proceeds of the Green Finance Instruments.

All major water treatment and sewer system projects carried out by Aquafin are assigned to it by the Flemish Environmental Agency after going through a thorough selection process.

Aquafin has established a dedicated Green Finance Committee. The committee consists of:

- Aquafin's CFO,
- A member of Aquafin's Finance/Treasury Team,
- Aquafin's CSR Coordinator,
- Aquafin's head of the Environmental Department.

The Green Finance Committee will, on a yearly basis:

- validate the Green Balance Sheet and calculate the Green Buffer, taking into account new Green Assets and new Green Liabilities (see further: "Management of Proceeds");
- validate the annual allocation and impact reporting (see further: "Reporting");
- validate any future updates to the Framework, including modifications to the list of Eligible Green Assets and Liabilities.

TABLE 1: USE OF PROCEEDS

ICMA GBP CATEGORY: SUSTAINABLE WATER AND WASTE WATER MANAGEMENT

Eligible Green Assets	Description	EU Taxonomy Objective & EU Economic Activities	UN SDG
Infrastructure for the transportation of waste water 1	• Building new sewer systems and pumping stations • Maintenance & optimisation of the existing sewer system and pumping stations (asset management)	EU Taxonomy Objective: • Climate Change Mitigation • Climate Change Adaptation	
Infrastructure for the treatment of waste water 2	• Building new Waste Water Treatment Plants ("WWTP") • Maintenance & optimisation of the existing WWTP's (asset management)	Economic Activities: • Water collection, treatment and supply • Centralized wastewater treatment systems • Water Supply; sewerage, waste management and remediation activities	
Infrastructure for Sewage sludge treatment 3	• Building new sewage sludge treatment infrastructure • Maintenance & optimisation of the existing sewage sludge treatment infrastructure (asset management) • Waste water sludge to pellets	EU Taxonomy Objective: • Climate Change Mitigation Economic Activities: • Anaerobic digestion of sewage sludge	
Infrastructure to cleanly and efficiently power Sustainable Water and Waste Water Management Infrastructure (Energy projects) 4	• Investments in production of renewable energy: electricity, warmth and bio methane for own use and sale • Investments to increase energy efficiency and to decrease own usage of fossil fuels	EU Taxonomy Objective: • Climate Change Mitigation Economic Activities: • Production of electricity	
Assets related to climate change adaptation projects 5	• Storm water plans • Separate rain water from waste water • Sanitation and dredging of waterbeds	EU Taxonomy Objective: • Climate Change Adaptation Economic Activities: • Water collection, treatment and supply	
Assets for resource recovery projects 6	• Recovering raw materials from waste water • Recovering warmth from waste water	EU Taxonomy Objective: • Climate Change Mitigation Economic Activities: • Material recovery from waste	

TABLE 2: GREEN AND NON-GREEN ASSETS

Total Assets	Green / Non-Green	Type of eligible Green Assets	Explanation
FIXED ASSETS			
TANGIBLE ASSETS			
22. Land and buildings	Green	2,3	Land and buildings from WWTP's, excluding headquarters
23. Plant, machinery and equipment			
Flemish Environmental Agency Assets purchased	Green	2	Waste water treatment infrastructure, acquired from the Flemish Environmental Agency.
Hydronaut	Non-Green		Studies concerning sewer systems (*)
Investments in HQ & Operations	Non-Green		Several assets in Aquafin's headquarters (*)
Waste Water Treatment Infrastructure	Green	1,2,3,4,5,6	WWTP's, sewer systems, pumping stations, …
Municipal	Green	1	Municipal sewer systems
Energy projects	Green	4,6	Solar panels, …
24. Furniture and vehicles	Non-Green		Furniture at WWTP's and headquarters + vehicles (*)
25. Leasing	Non-Green		Not applicable. Aquafin has no assets under leasing.
26. Other Tangible Assets	Non-Green		Equipment of the head office (*)
27. Assets under construction and advance payments	Green	1,2,3,4,5,6	WWTP's, sewer systems, pumping stations, … under construction
FINANCIAL FIXED ASSETS			
Total Financial Fixed Assets	Non-Green		The shares in our daughter company Aquaplus. (*)
CURRENT ASSETS			
Total Current Assets	Non-Green		Stocks, amounts receivable, cash, … (*)

(*) Most of our so-called Non-Green assets will still be necessary to carry out our green activities, but since they have no direct link with "waste water treatment", we chose to classify them as "Non-Green".

2.3. Management of Proceeds

Aquafin will allocate the proceeds from the Green Finance Instruments to finance its Green Assets in accordance with the use of proceeds criteria and evaluation and selection process presented above. The proceeds from the Green Finance Instruments will be managed by Aquafin's Finance team, using a balance sheet approach.

Aquafin intends to achieve a level of issuance where the amount of Green Finance Instruments does not exceed the amount of its Eligible Green Assets on the balance sheet. As such, Aquafin will at all times maintain a positive green buffer, defined as the Green Assets minus the Green Liabilities.

As such, all investors can at all times be sure that the proceeds of the Green Finance Instruments will only be used to finance Green Assets.

Whilst any Green Finance Instrument net proceeds remain unallocated, Aquafin will hold and/or invest, at its own discretion, in its treasury liquidity portfolio, in cash or other short term and liquid instruments or to pay back a portion of its outstanding indebtedness, the balance of net proceeds not yet allocated to the Eligible Green Assets.

2.4. Reporting

Aquafin has a general CSR reporting, available on its website.

The Green Bond Principles and Green Loan Principles require Aquafin to provide information on the allocation of proceeds. In addition to information related to the Green Assets and the Green Liabilities, the Green Bond Principles and Green Loan Principles recommend communicating on the expected impact of the Green Assets.

Both the allocation and impact reporting will be presented on an aggregated portfolio basis and will be published on Aquafin's website.

2.4.1. ALLOCATION REPORTING

On an annual basis, Aquafin will update its Green Balance Sheet comprised of Green Assets (calculated in accordance with the criteria described above) and Green Liabilities.

The allocation report will also contain the following information:

- an overview of the Green Finance Instruments issued under the Framework and the total amount outstanding (in EUR) of issued Green Finance Instruments;
- the total amount of investments and expenditures in the Eligible Green Assets on the balance sheet;
- the amount of unallocated proceeds, if any;

2.4.2. IMPACT REPORTING

Aquafin will align, on a best effort basis, the reporting with the portfolio approach described in "Green Bonds - working towards a Harmonized Framework for Impact Reporting (June 2019)" for the category "Waste water Treatment". The following metrics will be included in the Impact Reporting:

A. Annual volume of waste water treated

- **Metric 1:** the annual amount of waste water treated to appropriate standards (m^3 /year)

B. Treatment and disposal and/or reuse of sewage sludge

- **Metric 2:** the annual amount (in tonnes of dry solids p.a. and in %) of raw/untreated sewage sludge that is treated and disposed of (e.g. dewatering, sanitisation, composting, digestion without biogas extraction)
- **Metric 3:** the annual amount (in tonnes of dry solids p.a. and in %) of sludge that is reused (e.g. digestion with biogas recovery, phosphorous recovery, agriculture use, co-incineration)

C. Improved sanitation facilities that have been constructed

The increase in the share of the population connected to waste water collection and treatment systems helps in domestic water pollution abatement, and prevents long lasting environmental damage to the aquifers.

- **Metric 4:** percentage of Flemish households connected to a WWTP.

D. Other metrics: energy

Aquafin intends to report on other relevant metrics concerning its waste water treatment and other related activities on a best effort basis. These may include:

- **Metric 5.1:** Total yearly energy consumption,
- **Metric 5.2:** Total yearly production of renewable energy:
  - Biogas used in sludge dryers
  - Production of electricity by biogas
  - Electricity from solar panels and wind mills
  - Annual amount of sludge pellets sold
  - Annual amount of sludge pellets for own use

E. Other metrics: technical performance of the WWTP's

- **Metric 6.1:** Effluent: Removal of Nitrogen (minimum hurdle of 75%, imposed by Flemish and EU regulation),
- **Metric 6.2:** Effluent: Removal of Phoshorus (minimum hurdle of 75%, imposed by Flemish and EU regulation),
- **Metric 6.3:** Percentage of WWTP's compliant with Flemish and EU norms

Metric 4 and Metrics 6.1 and 6.2 are monitored by the Flemish Environmental Agency and reported to Aquafin.

3. External Review

This Aquafin Green Finance Framework has been reviewed by Sustainalytics who has issued a Second Party Opinion. The Second Party Opinion as well as the Green Finance Framework is available to investors on www.aquafin.be/en/green-finance.

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